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THE CANADA EDUCATIONAL MONTHLY.

THE CANADA
EDUCATIONAL
MONTHLY

AND

SCHOOL CHRONICLE.

EDITED BY G. MERCER ADAM,

Editor, "The Canadian Monthly," etc.

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THE CANADA
EDUCATIONAL MONTHLY
AND SCHOOL CHRONICLE.

JANUARY, 1881.

OUR OWN BLUNDERS.

DAVID BOYLE, ELORA.

TAKING it for granted that everybody is prepared to admit the prime necessity which exists for those who call themselves educated persons to aim at the attainment of the very purest diction, and the choicest phraseology, it must appear evident to all that the class above every other, before whom this object should be kept in view, is the one to which we belong. As Teachers, it is our bounden duty to be speech-models to our pupils.

Perhaps the greater number of us have had few advantages when young in the way of mingling with those whose language was superior to our own—even the teachers some of us had may have been no whit better than ourselves, but this is only an additional reason for much care on our part now. That many of us are still several removes from perfect sanctification in our "walk and conversation" is too painfully clear.

The paltry plea is sometimes offered

by grievous grammatical sinners, that, "one can't be always on the look-out," and that "even the Rev'd. So-and-so makes mistakes now and again." The answer to the first part of this excuse is, simply, that the habitually correct speaker does not need to be constantly upon his guard; and to the second, that there is no necessary connection between orthodox theology and orthodox phraseology. Only a few days ago, two "divines" of different denominations were discussing a point, one of whom declared that he "*done*" something, and, the other, that "such things as *that was* wrong."

As the teacher cannot urge any want of connection between the performance of his duties and his turns of expression, the miserable excuse is frequently offered that, "when a person hears all the people in his section saying this or that, it is very hard to avoid a repetition of the vulgarisms." Difficult as such may be, and perhaps, *sometimes* is, the plea is worth nothing

at all when we call to mind the position the teacher occupies, and what his example *ought* to be in the presence of either young or old. There are probably few sections in the whole Dominion without one or more tolerably well-educated persons resident in them, the respect of whom a teacher's vulgarity must necessarily forfeit, whilst no gain can accrue on the other side.

Reversing the order of importance it may be said there are three principal sources of error on our part (omitting slang), viz :

1st. Accent—in its widest sense.

2nd. Pronunciation.

3rd. Phraseology.

Space will only permit of glancing at each of these briefly.

With reference to *accent*, the assertion may be ventured that every teacher should be so free from it that, judged by his tongue, his nationality might not be easily settled. As already remarked, this may be regarded as of less consequence than pronunciation and phraseology, and does not materially unfit a teacher for the discharge of his duties; but there is probably no one labouring under this difficulty who will deny that it is a difficulty. Here and there you may meet with an individual—never, so far as I have known, a lady—who takes a foolish pride in the retention of that peculiar and indescribable twang or brogue, which unmistakably points him out as a John Bull, a Bannockburn Scot, or an exile from the “furst gim av the say.” A man with such a pride should never attempt to teach English, however well qualified he may be in other respects.

Passing to *pronunciation*, which is often intimately associated with *accent*, it will be the purpose of this paper to treat of it as being totally distinct. In so far as geographical names are concerned, there is a certain amount of latitude; but we find many of the pro-

fession who appear to act upon the assumption that a good deal of longitude may also be allowed. There cannot, for instance, be any valid reason why we should insist on calling our Dominion *Canadā*, instead of *Canadă*; neither should we say *Ontari* for Ontario, or *Quee-bec* instead of, shortly, *Quebec*, or *Kebec*. *Moun-treal* is not at all uncommon; *Cape Brëton* is as frequently given as the right way, no doubt, by those who prefer *prëtty* to *pretty*, but always say *git* in place of *get*. The old-fashioned, and formerly correct *Rooshia* and *Prooshia*, we hear now and again, and, once in a while *Garmany*. *Päris* for *Paris*, *Vienna* for *Vienna*, *Afghanis'tan* for *Afghanistan*, *Beloochis'tan* for *Beloochistan*, and even *New West-min-i-ster* are not far to seek. Perhaps worse than any of these is *Ītalian* for *Italian*. Some years ago the standard pronunciation of teachers gave us *constitoot*, *institoot*, *redooce*, *noose* (for *news*), and others “of that ilk;” but, more recently, these have been relegated to the limbo of the unconfirmed. Some of us insist on speaking of the *tea-kettle*; this belongs to the same class as *pretty* and *get*, already referred to. *Once-t* is rarer, but survives, so does *across-t* and a few more of the same stamp, which it is eminently desirable we should banish immediately and forever from our vocabulary. But one would suppose no difficulty likely to arise with the names of studies pursued in the school-room; yet, how frequently we hear *jometry*, *jography*, *arethmetic*, and *pronounciation*, as if these were according to authority. A very common error consists in dropping the sound indicated by “g” at the end of present participles, and this word participle itself is often half blinded; the same is true of nominative. In mere pronunciation there is hardly anything more objectionable to an English ear than giving to the

indefinite article, as we used to name it, the same sound we connect with the letter as a symbol. "A man, on a horse, went for a doctor," is American, not English.

Whilst most of the foregoing may be traced to pure neglect, either in usage or, by acceptance, there are others that arise from the abomination of affectation. In the former case, Festus-like, we "care for none of these things"—in the latter, we flee to the embrace and adoption of every new-fangled word or novelty in expression that comes up, from, nobody knows where. Some, and in this case they are not gentlemen, profess the utmost abhorrence to the trill of the letter "r"—others cultivate what they fondly imagine to be a pretty little lisp; a few make themselves believe that the broad sound of "a" in *call* is better than that it has in *balm*; whilst a smaller number still, composed, one might think, of persons on the verge of idiocy, take kindly to all of these affectations, and deliver themselves of their inanities in the most languid of lackadaisical simperings, *à la* Dundreary. It is quite needless to say that the letter "r" is really a necessity, and that although it is sometimes a little overdone by Scotchmen and Irishmen, this abuse is infinitely preferable to utter annihilation.

Fawther and *rawther*, for "father" and "rather" are good examples of the second kind of affectation referred to above, and as a few, very young, and equally unsophisticated misses give these words *fawtha* and *rawtha*, they illustrate the first kind as well. There are no such words in our language, and no person, from an Archbishop to a stevedore, has any right to employ them, and call them good English. In the teacher their use is wholly inexcusable, and it is his (or, rather, in this case, her) duty to teach the language as it is, and not as it isn't, or as he, or she, would like it to be.

Until within a comparatively few years the good old words "either" and "neither" were thought to answer every purpose admirably. It is quite true that they themselves had formerly been *ayther* and *nayther* as we hear from the mouths of the Irish at the present day. It is also a fact that *either* and *neither* only gained a footing after a hardly-fought battle with their other selves, and if we take etymology for our basis, we find both forms or sounds in close approximation to the old Saxon words, *neither* of which contained a symbol which by the greatest stretch of the imagination could be supposed to yield the open sound of "i." The name of the person who first used *either* and *neither* will probably never be known, and except for purposes of execration, is of very little moment. In all human probability he was one to whom his native *ayther* and *nayther* were a bug-a-boo, and could only find safety in the opposite extreme. He, at all events, has succeeded in saddling the language with a monstrosity, for it would be vain to deny that *either* and *neither* have struggled into respectability, even as some men have done, who, had they received their due, would, long ago, have been fit subjects for the public executioner.

When tomatoes became a daily article of food everybody called them *tomatoes*; but now, unless you would be voted "vulgar," you must designate them *tomatoes*—by-and-by, the "nice" people will take the word under their *fawtherly* protection, nurse it a little, and then we shall have *tomawtoes*, just as those same "nice" people rejected *Manitoba*, took hold of *Manitoba*, and finally produced *Manitob-aw*. The same tendency is strikingly manifested in the word "vase"—good, pure English, which we have nearly all forsaken for "vāse;" also a good word, if a little Gallicised, but now many of us say *varvase*.

Pope's lines in this connection are *apropos* :

"In words as fashions the same rule will hold,
Alike fantastic, if too new or old—
Be not the first by whom the new are tried,
Nor yet the last to lay the old aside."

Proceeding to the last division, *phraseology*, we are perhaps worse sinners here than in either *accent* or *pronunciation*. A common error is our substitution of transitive for intransitive verbs, and *vice versa*. The abuse of *lie* and *lay* has been so persistently attacked that it may be passed without more than a mere mention. We still hear teachers speak of "standing" a boy in a corner, for example, or, as they put it, "I *stood* him in the corner." This is just as wrong as it would be to say, when speaking of providing a guest with a bed, "I *slept* my friend at our house." Improper also, because now wholly obsolete, is the substitution of *learn* for *teach*. Long ago these two verbs were interchangeable—more recently a very happy distinction has been made in their application—a distinction it is unnecessary to do more than allude to. Another obsolete form, more prevalent than *learn* for *teach*, and one that no teacher should retain a single day, is the inserting of "for" before infinitives. "I asked him *for* to give a reason," "He said he wanted *for* to take up book-keeping," although structurally correct, are vulgarisms. Sometimes one may hear a teacher address his pupils thus: "You've got to take and reduce it." In such a case the words "got," "take," and "and," are wholly redundant. Some one in the profession has been heard of who was in the habit of telling his scholars to "take and take" and do so-and-so; but surely he is like "Uncle Ned" in the old song, "dead, dead, dead, long ago"—at least, let us hope that is so.

When those whose special province is *not* the imparting of that knowledge

by means of which children are taught how "to speak and write the English language with propriety" commit venial, or even gross linguistic sins, it is not impossible to find some palliation for the offence; but where those belonging to our own ranks are implicated no mercy should be shewn to the culprits.

The teacher, for instance, who does not hesitate to describe a beautiful picture as "awfully nice," or to say he feels "awful glad," should be indicted for philological high treason, and he or she who uses two negatives instead of one, deserves nothing short of being placed at the bar of the Queen's English, charged with positive regicide. "I won't go to Toronto next week, I don't think," "It doesn't look like rain to-day, I don't think," are heard daily from the lips of teachers.

Every word we utter in the school-room ought to be a model for imitation by the pupils. No sentence should pass our lips in violation of good usage. Aside from this practice it is as vain to teach what we call grammar, with the object of making scholars acquainted with our noble tongue, as would be the efforts of him who should attempt to teach the art of swimming in a skating rink.

Language, written or spoken, from the very nature of things, is, and must always be, the chief medium by means of which thought may be interchanged, and our knowledge of any subject made at all valuable to ourselves or any one else.

The moment a person begins to speak in our presence, that instant (perhaps unconsciously) we begin to form our opinion, either as to his knowledge of the topic under discussion, or as to his general culture; and it not unfrequently avails the speaker but little that his acquaintance with the subject is of the profoundest, should he, in his delivery, muddle his

sentences and mangle his words. Even when he is a clear thinker and can express himself felicitously, the value of his utterances may be very materially lessened to educated listeners by the perpetration of the various kinds of blunders to which reference has been made. A minister may in this way thunder the terrors of the law, and only raise a smile where he intended to raise the hair! Who, for instance, could sit unmoved to hear, as the writer once did, a good old south of Scotland preacher declare to his congregation with great earnestness, "Aksap ye repant, ye shall all likewise parish" In like manner, when a clever young medical student attempted (for he never got past the first verse) to recite Cowper's "Soliloquy of Alexander Selkirk," the enjoyment of his audience was totally different in kind, but more than equal in quantity, to what he purposed, as may be imagined when he proceeded:

"I'm manarch av all I sorrow,
Me roight there is noane to dispute,
Fram the cintre all rround to the say,
I'm lard av the fcowl an' the brraute."

Whilst urging, therefore, the propriety of divesting ourselves as much as possible of provincialisms, mispronunciation, and vulgarity of every kind, the young teacher should be warned against falling into the opposite and no less objectionable error of becoming too precise. In truth, *extreme* nicety is only another form of affectation. The clerical precisian says evil, dev-il, gos-pel, iss-ue, and Mos-es, betraying as much ignorance of the *genius* of our language as one might expect from Hodge, who never attended school a day in his life.

Long, long ago, the pedagogic precisian made himself so objectionable a creature that a word was coined for his special behoof—"pedant." The pedant takes infinite delight in turning all his sentences in such a way as to

get in "to whom," "for whom," and "by whom;" he is very careful to sound two d's in "Wednesday"—never says "I did so-and-so," but "It was I who did it." He is forever on the alert to catch you tripping, and either directly airs his superior knowledge by informing you that you have committed a mistake, or he makes himself positively disagreeable by means of the miserable carping little artifices he employs to make you conscious of your errors.

Much may be done for mutual improvement by a solemn compact being entered into between two or three neighbouring teachers, binding each to give and take criticism in a fraternal manner. Persistent consultation of a dictionary and close attention to good speakers will enable one to accomplish much in the way of improving his diction.

That far too much laxity exists in our use of the "parts of speech" is beyond dispute, and to us is committed the very important trust of cultivating in all its purity the richest, most highly practical, and widely-spoken language in the whole world. May we at least aim at being true to our trust, and labour heartily for the realization of the sentiment contained in the following lines, read at a reunion of the Boston Latin School a short time ago:

"I'll give you a toast, and you'll drink it I know,
Both you whose thin tresses are white as the snow
And you, whose young hearts, it is fair to assume,
Like our stocks and our statesmen are all on the 'boom:'
'Tis our great Public Schools, may their influence spread
Until statesmen use grammar and dunces are dead—
Until no one dare say in this land of the free,
'He done,' for 'he did;' or 'it's her,' for 'it's she.'"

REMINISCENCES OF CHARTERHOUSE—II.

BY AN OLD CARTHUSIAN.

*Being a series of Short Sketches descriptive of Public School Life in England.**(Continued from page 501, Vol. II.)*

I SLEPT soundly until half-past seven the next morning, and could have slept on all day, I think, had not my companions chosen that particular hour to wake themselves. I was dozing in a delicious, semi-conscious state when the death knell of departed sleep sounded, Bang! Crash! I started up to see my water bottle lying in atoms upon the floor, and the soaking sponge that had done the mischief drenching my pillow through and through.

"Go it," said one of my companions; "that's good! breaking your water-bottle the first morning. I don't mind betting you will be swished."

"Humbug," I replied, angrily, "you did it, you fool!"

"By jove, you're festive,* young fellow; I see you want something else at your head. Just you get out of bed, clean up that mess you have made, and give me back my sponge—and" he added, looking at his watch—"I should advise you to get up, or you will be late. I suppose you know you have to be down by eight?"

I told him I did not know it.

"What!" he answered, in well feigned astonishment, "did not L— tell you?"

"No," I replied, "he did not."

"Then you may thank me for taking the trouble to wake you, and saving you from getting into a jolly good row!"

I knew well enough that he was trying to "green" me—that a new boy was not expected to be down earlier than an old boy—so I made no further answer, but having by this time picked up the broken glass, I jumped into bed again.

"What! into bed again? It takes a good deal to wake you, more cold water is about the only thing to do it, I suppose."

I told him I had no intention of getting up until he did.

"Well, mind," he replied, "you do not forget to say I woke you when L— has you up for being late."

At nine prayers were read, "adsum" being first called over; all boys who were not present to answer to their names were afterwards told that they might look forward to an extra hour in school on the following half holiday.

Breakfast over, we went up to chapel; all the old boys were scattered about the cloisters meeting their old school-fellows and discussing with them their holidays and their prospects for the coming quarter, amusing themselves too frequently at the expense of the new boys. Those who were dressed in any but the regular fashion came in for the greatest amount of "teasing" *i.e.*, those who wore Scotch caps, or light coloured ties and coats, it being the custom at all English public schools to wear round or top hats and black ties and coats only.

It was weary work answering over

* "Festive," Carthusian for "cheeky."

and over again the same set of questions that had been put to me the night before; it made me, moreover, feel sad and friendless, being treated as a rank outsider, knowing nobody, receiving more "kicks than halfpence," while all the old boys seemed so happy with their old school-fellows.

I must not pass over the first Saturday night of the quarter without briefly describing the manner in which it was spent at that time. We had no work to do on the last night of the week, consequently it was not surprising that the old boys should, in the absence of any regular employment, seize that opportunity of getting some fun out of the new boys.

During tea the programme for the evening was usually discussed, some of the boys gloating over the pleasure they intended deriving from the torturing of their victims. Some, too, in a hurry for the entertainment to begin, would try to make a new boy sing a song during tea, but these premature attempts were always cried down by the rest, the anticipation, I imagine, being pleasanter than the reality. I am certain that half the boys in their hearts disliked bullying the new fellows, and only did it because it was the custom, or rather because it *had been* the custom at the old school in London. I think it was chiefly the expression of a feeling, which, rankling in the hearts of all the boys who had been at the old school, was ever ready to find vent—the feeling I mean which made them believe it to be their duty to uphold all the customs of the old place—no matter how obnoxious they might be—through the violent revolution that the school was then passing. I know that the endeavours of the Head Master to reform the evils of bullying and fagging were a perpetual source of ill-feeling between himself and the boys, who clung more doggedly to each old custom as it was being wrenched from their grasp.

Had any boy on the first Saturday night attempted to stop the old boys from bullying the new ones by urging that it was a shameful and unmanly action to do so, he would, I have no hesitation in saying, have been hooted as a traitor to his school-fellows, and his position would have been more uncomfortable than even that of the new boy. I need scarcely add that time has blotted out the stains which darkened for so many years the glorious name of that grand old school.

No longer will a boy be subject to bullying or be cried down for shewing a manly spirit.

The thanks of all Carthusians are due to the Head Master of Charterhouse for his untiring zeal in raising the tone of the school to a higher and grander level.

I would not have it thought that a boy will find his way perfectly smooth at Charterhouse; to make a map of a boy he must be made subject to strict discipline and be taught to clearly understand that he cannot be allowed his own way in everything.

But bullying is not discipline—where the one exists the other cannot! However, to return to Saturday night. No sooner was tea over than care was taken to see that no new boy had hidden himself away. The fun usually began with "jumping the cupboards."

Fixed against the walls all round the room were cupboards standing about ten feet high. Each boy had one of these in which to keep his books, etc. All the new boys were obliged to get up on to the top of these and to jump down on to the floor. From the ceiling to the top of the cupboards there was scarcely room in which a boy might even crouch. Except for those conjurors who are in the habit of enclosing themselves in boxes a foot square, it was most difficult to squeeze oneself into a space sufficiently small to permit of fitting in between cup-

board and ceiling. To jump when in this cramped position was impossible. The only chance a boy had was to wriggle off the edge and trust to luck to escape without broken bones. I do not think any boy ever performed the feat without bumping his head against the ceiling in endeavouring to make a spring, or without hurting himself otherwise in his fall. If a boy could make the leap without any appearance of concern he was not asked to repeat the performance, as pleasure was only derived from seeing the timid boys who, pale with fear, were in terror for their very lives—"the brutal delight of the strong over the weak."

As soon as the fun experienced from this amusement had been thoroughly exhausted, boxing gloves were generally produced, and two new boys would be forced to fight with one another. Each would be urged on by the most unearthly shouts until he had fairly lost his temper, when the fight of course would become real earnest. The applause which greeted the pugilists at every successful stroke tended to increase their ardour and excite them the more. The amusement of the spectators depended upon the ferocity displayed by the fighters.

My readers may wonder why boxing gloves were not dispensed with and bare fists used, but gloves were worn for the reason that fights without leave from the head monitor were strictly forbidden, the culprits when discovered invariably receiving a flogging. If two boys quarrelled and considered that their respective dignities could only be upheld by fighting, it was the rule that they should ask leave of the monitor for the week, who decided whether the case warranted their fighting. Leave was almost invariably granted, when notice of the fight would be given, and the whole school would assemble to witness it. This fighting in public tended to de-

crease the number of fights wonderfully; but more of this anon.

Often a new boy would be made to fight with some old boy, who, though smaller, would nevertheless be more skilful than himself. The new and bigger boy could not hit the smaller in return; all he could do was to defend himself as well as he might, and take the blows of his more skilful antagonist, if possible, in good part. The new boy never received any applause; although some no doubt coveted it, but this they dared not give, though the old fellow was always loudly cheered. It makes a great difference to your chance of success if you have plenty of friends at your back urging you on! Any one who has had many fights will bear me out in this.

Single-stick fights were also very popular. Here also the combatants always lost their tempers. Stick after stick would they break over each other's legs, the fight generally lasting until both were so exhausted as to be unable any longer to direct their blows with any accuracy of aim. It was usually nine o'clock by the time the fighting was over; if however there was any time left before prayers, the new boys had to stand upon a table one by one and sing a song or tell a story.

It was difficult for a new boy standing conspicuous upon a table not to feel shy and nervous, and unless prepared with a song it was hard for him to remember one all in a moment. Hesitation, however, was not long permitted; "two minutes to recollect a song, or a dozen books at your head!"

It was often a case of the "dozen books" which I must say seemed to help the singer to recall something. I remember a boy once with this "help" began a hymn. Whether it was that he felt bound to sing this, perhaps the only song he had ever

learnt, or that he hoped thereby to soften the feelings of his hearers towards himself, I know not; if it was the latter he signally failed, for it brought such ridicule and so many books upon his head that he was forced to jump down and make speedy escape from his tormentors.

Some popular song with a noisy chorus, which all knew, was what the

boys wanted, and if a new fellow could hit upon one of this description and sing it well, he would rise in the favour of the old boys and be "encored" again and again. The singing was invariably kept up by the boys when in bed until a late hour, or until the house-master could no longer put up with the noise.

(To be continued.)

THE HERO OF THE ÆNEID.

An Unfinished Sketch in Water-colours.

BY F. BLAKE CROFTON, B.A., TRURO, N.S.

THE circumstance that Virgil wrote nineteen hundred years ago does not exempt him from praise and should not relieve him from blame. It is luck enough for him to have escaped the reviewers for seventeen or eighteen centuries, and then for a century or two more to have his faults mainly charged to his translators. A mixed chorus of free and servile choristers has unceasingly chanted the beauty of his similes, the grace of his episodes, the music of his numbers. His shade—may it never grow less!—can well afford to condone a few irreverent observations upon one of his creations.

The First Book of the Æneid, it will be remembered, describes a storm at sea; the shipwreck of Æneas on the coast of Africa; the apparition of his mother, Venus, who leads him in a mist into the presence of Dido, Queen of Carthage; the hospitable reception of the Trojans by that lady, who, after dinner, requests Æneas to relate his past adventures. It was during the storm that the hero uttered his first recorded groan (verse 93) and,

stretching his hands to the stars, lamented that he had not fallen like a soldier beneath the high walls of Troy. He uttered this sentiment "*with his voice*," the poet states expressly, apparently for fear we should conceive that the pious hero with his outstretched hands was talking on his fingers to the constellations in that supreme moment. After the shipwreck (verse 221) he more unselfishly bemoaned his comrades, believed to have perished. In verse 459, he wept when he beheld his countrymen's deeds depicted on the frieze of a Carthaginian temple. On this occasion his emotion was violent: "he groaned many times and bedewed his face with a copious flood" (v. 465). He burst out afresh (v. 470) when he saw a picture of some tents. At the representation of Hector dragged round the walls of Troy his groaning, we are told, was "immense." It is not hard to guess why we have no portraits of distinguished Trojans—the tears of two or three pious heroes of this kind would have mildewed a myriad albums.

In Book II. Æneas recounts the stratagem of the wooden horse and the taking of Troy. At the start he expresses his opinion that the cruellest of the conquerors could not refrain from tears at the recital; but possibly the tender demi-god overrated his own eloquence or the sympathetic nature of his foes. The tale by which the deceitful Sinon lures the Trojans to harbour the fatal horse is irrigated with an average amount of tears and groans. But the traitor's tears attained their object and saved his life; while the hero's tears, if they did not actually cause his own death (*vide ad finem*), must surely have shortened the days of some condoling friends and admirers.

Hector, who, in a dream, warned Æneas not to resist, himself seemed to shed copious tears (v. 271), and, a few lines further on, heaved deep sighs. Assuredly the fiery Hector of the glistening helm had grown less Homeric and more Virgilian since his decease. His apparition furnished an excellent occasion for weeping, which, it is needless to observe, Æneas promptly embraced, besides throwing in a dolorous exclamation every now and then.

Roused from his sleep, Æneas was seized with a fine spasm of valour: he burned, as he informs us in verse 315, to get into the citadel with his adherents. Frenzy made him rash, he tells us (316), and, in verse 337, he rushed into fire and arms! Soon after he called upon his followers to make up their minds to die, for, as he urges in an often-quoted line, "the only safety for the conquered is to hope for none." Still warmed by the flame of valour, he and his partisans, disguise themselves in the armour of some Greeks they had surprised. He gets into the beleaguered palace by a secret door and launches a tower upon the besiegers.

This seems to have ended his spurt, and he looked on very philosophical-

ly at the slaughter of the venerable Priam. Dread horror bewildered him, he explains; he thought of his own old father and his wife, and—longed to be with them. This affectionate anxiety, however, did not prevent his stopping on the way and yielding to a fierce, but perfectly safe, impulse of patriotic indignation. He saw Helen hiding herself (v. 567) and resolved to slay her. "Fires flamed in my soul," he nobly says; "wrath prompts me to avenge my falling country and exact the penalty of sin. Shall she, unscathed, see Sparta and her native Mycenæ, and walk a queen in the triumph she has won? Shall she see her husband and her home, her parents and her children, attended by a retinue of Trojan ladies and Phrygian slaves? Shall Priam have fallen by the sword, Troy have been consumed by fire, the Dardan shore have sweated so many times with blood—and unavenged? It shall not be; for, although to conquer and chastize a woman is not thought particularly glorious, yet I shall be credited with killing a monster of iniquity and inflicting a well-earned punishment, and it will be sweet to wreak my vengeance and satisfy the ashes of my countrymen." And he was rushing at her, undauntedly, when his mother suddenly appeared and persuaded him to go home.

Arrived there he finds Father Anchises quite determined never to leave the old homestead. At this fatal resolution, Æneas, refusing to escape without the old man, indulges in some generous declamation, and calls for weapons, and begs to be let loose at the Greeks again (v. 669). But his timorous spouse, Creusa, held his legs (v. 673) and put the little Julus into his arms, and filled the whole house (v. 679) with her screaming. The family entanglement was ended by a lucky omen, at which Father Anchises braced up and agreed to fly.

We are informed in a few dozen passages—sometimes by the modest hero himself—that *Æneas* was “pious,” that is, possessed of filial affection; and we now learn that he earned this epithet by carrying his father on his back out of the burning city. I am not of those who believe that he was actuated in this conduct by any ignoble consideration that his venerable sire might serve as a shield against the darts of the victorious Greeks; or that he instructed his wife to “follow his footsteps in the distance” (v. 711) in the hope that her capture might retard his pursuers and gain time for his escape. Appearances are not always to be trusted.

As a matter of fact, however, *Creusa* soon was lost, and her husband went after her in a homicidal and suicidal frame of mind, during which, however, no Greek ventured to molest him, and he molested no Greek, but vented his “noble longings for the strife” in hallooing for his wife. The sight of her ghost presently calmed him. By her advice he abandoned the rampage, went back to his father, and gave the old man another hoist. She had entreated him to wipe his tears (784); but, nevertheless, she left him weeping still (790). Indeed, he displayed more fondness for her on this occasion than he displayed when she was alive. He tried to kiss her, and, finding it impossible to embrace a ghost, he renewed the vain but flattering attention again and again (792-794).

“Who could equal the trials of that night with his tears?” *Æneas* asked, still thinking of his favourite subject, in line 362. It must have been modesty, it cannot have been ignorance, that prevented him from telling us the answer to this enigma.

The Third Book completes *Æneas*' narrative; but it is, perhaps, prudent to stop here at present and not approach too closely to the Fourth Book,

which recounts the love and suicide of the deceived *Dido*. Some hearts are too tender to bathe, without melting, in the flood of tears with which the pious and magnanimous hero, presumably, mourns his own desertion of his benefactress.

This plaintive son of a goddess is prone to other emotions besides tearful sympathy, ineffectual rage, and love tempered by desertion. He often feels bewilderment and fear. While covered with the cloud, he and his trusty *Achates* experienced both sensations (B. I., vv. 513-514). He was one of those who “fled bloodless” from the serpents assailing *Laocoon* (B. II., v. 212). He was terrified again and passive at the death of *Priam* (559). He shivered at the silence when he was looking for *Creusa* (755). He was still more frightened at her apparition: “I was astounded,” he says, “and my hair stood on end and my voice stuck in my throat.” He uses the same words soon afterwards to describe the way he was startled by an enchanted tree (B. III., v. 48). A little earlier his terror at the same object was more pitiable: “A cold shivering shakes my limbs and my chilled blood congeals with dread” (29-30).

The *Æneid* closes with a parting groan; and its abrupt ending has been ingeniously attributed to the probability that the pious hero wept so much over his slain enemy, *Turnus*, that he was drowned in his own tears, and changed by *Venus* into a fountain of salt water—an improvement which very likely suggested one of the lost *Metamorphoses* of *Ovid*.

Unlike the present Laureate, *Virgil* shows no sympathy for “idle tears”—his hero's tears are industrious and persistent. The figure of the demigod towers a head and shoulders over his followers; and his moral eminence is as great. No dozen men of these degenerate days could match—his water-power.

SOME THOUGHTS UPON EDUCATION AND NATIONAL PROSPERITY—II.*

BY REV. WALTER M. ROGER, M.A., ASHBURN.

(Continued from page 543, Vol. II.)

THERE is still room for improvement in regard to the physical as well as moral culture of our youth. The importance of the *mens sana in corpore sano*, the sound mind in the sound body, was recognized by the wisest of the ancients, and the experience of modern times all goes to confirm their view. Still it is only in recent years that this conviction has been producing its legitimate effect upon our educational systems. The gymnastics, calisthenics, and military drill, now so common in the best schools and colleges of the old and new world, were unknown in the days of our fathers. I trust the reform will never cease till provision is made for the systematic culture of physical strength and health in every educational institution in the land. This is of importance even in connection with, and as an aid to, the development of the mental powers and, through them, the attainment of knowledge and wisdom. The history of the great men of every age who have been eminent for their learning, and especially those who have been conspicuous as leaders of thought and progress, will amply bear this out. "The greatness of our great men," remarks an able writer in the *Times*, "is as much a bodily affair as a mental one." The truth of this is seen in the career of such men as Brougham, Lyndhurst,

Palmerston, and the late Earl Derby, who have, one after another, gone to their graves full of years and crowned with a nation's highest honours, after long lives of almost incredible toil. Or take the present Premier of Great Britain—what else than great physical strength, matured and sedulously maintained by an abundance of open-air exercise, could sustain such a man as Gladstone under his prodigious labours? Is it too much to say that the victories of this foremost man of our day, at the hustings, in parliament, and in the cabinet councils of his sovereign, were really fought out and secured, axe in hand, under the oaks of Hawarden? The body is the servant of the nobler part, the master-mind—the instrument to carry out its plans and purposes. The more perfectly that servant is trained to prompt obedience, accurate execution, and hardy endurance, the more effectually will the mind wield its power in the sphere of its influence.

We must remember, too, that physical culture is important not only for the happiness, but for the usefulness of all, the humble as well as the great. The body is the home of the soul, and if that home be a puny, rickety, unstable structure, shaken by every fitful motion of the external world, there can be but little of comfort to that of which it is the tenement.

The mere fact that in the first six months' exercise in a gymnasium a growing lad will gain three inches in

* This paper was recently read before the Teachers' Association of the County of Ontario, and is now published by request.

girth of chest is in itself a powerful argument for physical education; and when we remember how much more room will be thereby given for the free play of the lungs, and how much new vigour must at once be imparted to the circulation of the blood, and so to the working of the brain and mind as well as the rest of the nervous muscular system, need there be another word urged on the subject?

Now, we all know that we would not to-day enjoy the comforts and privileges we do if it had not been for the physical vigour of our forefathers amid the pioneer work of this noble land; but they make a grand mistake who imagine that because the circumstances of the country and the arena of its conflicts have changed, physical hardihood is no longer an essential factor in the problem of life. Without it our children would dwindle and fail, and our nation go backward, instead of *onward* and *upward*, as it has been doing, among the most prosperous and influential nations of the time. To secure a continuance of this we must not only foster in our young people a love of open-air exercise, but give them systematic physical training *outside* the school, and *inside* it systematic instruction in at least the outlines of physiology and hygiene. When we deliberately consider the matter, is it not a monstrous educational error that our young people should grow up better acquainted with the structure of Horace's odes, or even Euclid's problems, than with the structure of their own bodies? Side by side with the maps on the wall, let there be hung such charts of physiology as will familiarize them with the manner in which we have been so "fearfully and wonderfully made" by our great Creator, and let all receive such rudimentary instruction as will facilitate the after and more extended private prosecution of similar researches, to their salvation from a thousand terrible

evils which afflict mature manhood, as well as many which are ever preying upon the rising generation.

So much for the moral and physical parts of the subject. And now a few remarks as to the need of a more practical turn being given to the more distinctly mental education of the day, that our youth might be trained with a view to the position that a large proportion of them must occupy in the future, as dependent for their success in life upon their ability to develop the material resources which lie around them, waiting only the application of skilled enterprise to yield a generous reward. And I submit that it is extremely desirable that this class should be increased, to the relief of the over-crowded professional and mercantile walks of life. Indeed for all, such an education as would distinctly aim at teaching youth to use the knowledge acquired, and training the mind to seek in every direction fresh acquisitions, would prove extremely valuable. In order to this the motto of the ancients must be revived and enforced *non multa, sed multum*—not many things, but much—or, in other words, choose well what shall be taught, and see that that be thoroughly mastered. Of course the three R's must form the basis of procedure. These fairly acquired, let them be followed by such a course as shall join with the study of the youth's own language, and the geography and history of his own country, such an outline of natural philosophy and the natural sciences as shall give him some knowledge of what is going on in the material world around him and fill him with the desire to know more, and put him in the way of making endless conquests in the new world thus opened up to him. Upon the back of this let there be a system of options, wisely followed out, which would give courses of scientific agriculture, mechanics, engineering, chem-

istry, etc., to those intended to pursue these various callings. We do not need to follow the rule in vogue in Prussia, of teaching some trade to every youth whatever his station and prospects in life, but such a course as indicated would go far to prepare all for the sudden changes which may come at any moment. Thus trained he would, though flung by some rude stroke of misfortune from the bosom of a luxurious home, like a cat thrown from a window, light upon his feet, ready for the race of life. At all events, it would enable every one of ordinary powers of mind to maintain some intelligent acquaintance with the wonderful contributions the arts and sciences are constantly making to our modern civilization. Particularly, in the case of all who expect to get their living by working with their hands, is it important that they should be enabled to bring intelligence to bear upon their work, as the following remarks by Dr. Lyon Playfair admirably illustrate:—

“The educational principle of Continental nations is to link on primary schools to secondary improvement schools. The links are always composed of higher subjects, the three R's being in all cases the basis of instruction; elementary science, and even some of its applications, is uniformly encouraged and generally enforced. No armourplate of knowledge is given to our future artisan but a mere veneer of the three R's, so thin as to rub off completely in three or four years of the wear and tear of life. Under our present system of elementary teaching, no knowledge whatever, bearing on the life-work of a people, reaches them by our system of State education. The air they breathe, the water they drink, the tools they use, the plants that grow, the mines they excavate, might all be made the subjects of surpassing interest and importance to them during their whole life; yet of these they learn not one fact. Yet we are surprised at the consequences of their ignorance. A thousand men perish yearly in our coal-mines, but no schoolmaster tells the poor miner the nature of the explosive gas which scorches him, or of the after-damp which chokes him. Boilers and steam-engines blow up so continually that a committee of the House of Commons

is now engaged in trying to diminish their alarming frequency; but the poor stokers who are scalded to death, or blown to pieces, were never instructed in the nature and properties of them. In Great Britain alone more than one hundred thousand people perish annually, and at least five times as many sicken grievously, out of pure ignorance of the laws of health, which are never taught them at school. The present system is truly ignoble, for it sends the working man into the world in gross ignorance of everything that he has to do in it. The utilitarian system is noble in so far as it treats him as an intelligent being who ought to understand the nature of his occupation, and the principles involved in it. The great advantage of directing education towards the pursuits and occupations of the people, instead of wasting it on dismal verbalism, is that, while it elevates the individual, it at the same time gives security for the future prosperity of the nation.”

A striking illustration of this last remark is afforded by the career of the late Thomas Kingsford, whose name is a household word wherever that useful domestic commodity, Oswego starch, has come. Born in England, he received a fair blue-coat school education; apprenticed to a baker at the age of sixteen, afterward engaged to work in a chemical manufactory, his observant and experimentative faculties seem to have received a decided practical stimulus. In 1830 he came to New York seeking a living, poor, but industrious and enterprising.

From a reliable source we learn the following facts:

“He was introduced in the way of business to Wm. Colgate, and by him was employed in his starch factory. They became attached friends. A strange providence placed the thread in his hand which, followed, led him on to good fortune and position. The importation of a large quantity of French starch glutted the market. It was essential that a cheaper starch be made, or that failure be endured. Mr. Kingsford, after many experiments, discovered a manner of separating the fecula from maize in a rapid and economical manner, it having been suggested to him that the Dutch inhabitants of Long Island, when they cooked their sweet corn, dried for winter use, boiled it first in lye to separate the hull.

“On this hint Mr. Kingsford prepared a

pail of white lye, by putting wood ashes in water, and then turned the clear lye into the pail containing the pulverized corn. He was surprised at its immediately assuming a yellow hue, and concluding that it was spoiled, he left it for the night. We can imagine his surprise, however, in the morning, on examining his compound, to find the starch settled to a firm white body at the bottom of the pail, and the hull and woody fibre floating on the top of the liquid. Having poured this off, he carefully dried the new made starch, and packed it in the usual papers.

“One evening soon after his discovery, he left Jersey city to visit Mr. Colgate, with a small package under his arm. At the termination of his interview, and before leaving, he begged to shew Mr. Colgate the contents of the package. Mr. Colgate pronounced it an excellent quality of starch, and was surprised to hear that it was made from corn. He inquired how much could probably be produced from a bushel of corn. ‘If you can produce thirteen pounds per bushel,’ said he, ‘we can undersell the French.’ Mr. Kingsford gave him the comforting assurance that he could probably produce twenty. ‘But,’ said he, ‘I shall want some new machinery, as this starch is made in a different manner from the other.’ ‘I can afford no money for new machinery or experiments,’ said Mr. Colgate, and the interview terminated. Mr. Kingsford saw that his discovery must produce a revolution in starch-making, and having made his preparations, he withdrew from Mr. Colgate and commenced the manufacture of starch in a small way for himself.

“In 1848 he came to Oswego, and laid the foundation of the works which have grown into such gigantic proportions.”

There is no doubt such men would be more common were our system amended, as already indicated, and further supplemented with schools of technology at the principal centres, such as already exist in Germany, Great Britain, and some of the States of the neighbouring union, and an experiment in the direction of which has already been made in Toronto. What is mainly needed is more liberal endowment, and, considering the importance of the object and the condition of the Province, there should not be much difficulty in obtaining this. In the meantime, much may be done by the dissemination of sounder views as to the nature of education, as a gradual

process of development and culture to be carried on through the advancing years of life as well as in the earlier days of youth—not a high pressure, hot-house forcing of a few brief scholastic terms, pervaded by incessant cramming, as injurious to the mind as a like treatment is to the body. It is true, youthful school-days are unspeakably precious, but the common idea that “education is finished” when school is forsaken involves an error of the most grave character. Under this delusion that precious season of ripening vigour which follows boyhood and girlhood, when the structure for which the foundation has been laid at school should be steadily rising, through useful reading and thoughtful study, is too commonly wasted, or worse than wasted, in the frivolities of gossip, novel-reading, tavern or street loafing, or still more baneful dissipation. That many precious hours might be redeemed, even from the toilsome life of comparative poverty, none will deny who are familiar with the lives of such men as Benjamin Franklin, Elihu Burritt, and Abraham Lincoln, in America; and Hugh Miller, Prof. Faraday, and Dr. Livingstone, in Great Britain. We have some such amongst us already, it is pleasant to think, though they may never be so well known to fame, and why should we not have more?

This brings us to the one point more to be touched upon in this paper, viz., how we may, and ought to, combine recreation and healthful physical exercise with the acquirement of useful knowledge and valuable mental training. Give the Natural Sciences and Mechanical Philosophy a more prominent place in our schools and encourage our boys and girls outside of them to use practically what they learn inside. Furnish them with a few simple tools in the garden and play-house, or rather workshop, as it

would now become, with odds and ends of raw material to work up into such little articles of use or ornament as indoor instructions had already described, with such original improvements, or at least variations, as fancy or budding ingenuity might suggest. The slight cost of providing these facilities and directing these pursuits would be amply repaid in the utilization of much of that youthful energy and restless activity which now finds expression in the mischief-working so common to irrepressible boyhood and so trying to anxious parents—to say nothing of the formation of valuable habits for a future career of practical readiness of resource, and perhaps of eminence as inventors or philosophers. The value of such early pursuits is most interestingly illustrated in the case of the great astronomer, Ferguson, as foreshadowed in the bright-eyed herd boy among the hills, cleverly carving with his pocket-knife toy spinning-wheels and rude star-measuring instruments from bits of wood and thread. "Though comparatively a dull scholar, when a boy, Sir Isaac Newton was most assiduous in the use of his saw, hammer and hatchet—knocking and hammering in his lodging-room—making models of wind-mills, carriages, and machines of all sorts; and as he grew older he took delight in making little tables and cupboards for his friends. Smeaton, Watt, and Stephenson were equally handy with tools when mere boys; and but for such kind of self-culture in their youth it is doubtful whether they would ever have accomplished so much in their manhood."

As for the girls, they might find practical application of their school-taught Natural Philosophy and Natural Science in the more intelligent, and consequently more thorough and successful discharge of necessary domestic duties. I put it to the common sense of every one, if they

would not make the better housekeepers for having learned the philosophy of heat and cold, the principles of ventilation, the chemistry of baking, preserving, and cooking of food, etc. But not to keep them too much indoors, they might be associated with the boys in a manner at once pleasant and profitable, in which there would be room for all the innocent flirtation that nature might ask and propriety consent to, in such occupations as gardening and botanizing. The garden and the pic-nic grounds would be turned into schools of practical science, relieving the drudgery of the one and utilizing the delights of the other. Dr. Livingstone's account of the botanical and geological excursions which varied and relieved his arduous self-imposed tasks when labouring at home and at intervals between spinning and weaving to qualify himself for entrance at college upon his medical studies, gives us some idea of how his habits in early life laid the foundation of that great physical endurance, self-reliance and readiness of resource which in later years did so much to bring him successfully through his unparalleled hardships. He says:—

"In recognizing the plants pointed out in my first medical work, that extraordinary old work on astrological medicine, Culpepper's 'Herbal,' I had the guidance of a book on the plants of Lanarkshire, by Patrick. Limited as my time was, I found opportunities to scour the whole country side collecting simples. . . . These excursions, often in company with brothers, one now in Canada and the other a clergyman in the United States, gratified my intense love of nature; and though we generally returned, so unmercifully hungry and fatigued that the embryo pastor shed tears, yet we discovered, to us, so many new and interesting things that he was always as eager to join us next

time as he was the last." (Dr. Livingstone's Autobiography, p. 7.)

Who that has been privileged with such passages in his or her education will ever forget the hours thus spent,

"In the days when our spirits were young,
And youth went a May-ing with faith, hope
and poesy."

And we realized the happiness of

. . . "those to whom
Some viewless teacher brings
The secret love of rural things."

In thus advocating modification and extension in a practical direction, it must not be supposed that a liberal education is undervalued. For that very fair provision happily is already in existence—a provision so generous and wise that it is the fault of the youth himself (we can hardly yet say

herself) if he does not gain such a training in professional lore as will qualify him to do honour to himself, as well as good service to his country and his God in such spheres of usefulness as abound in a young and rising country like our own Dominion. Our position, natural resources, climate, and racial characteristics, give us rare advantages. Combine with these our educational system, at once liberally endowed and wisely adapted to our special exigencies, and it is not easy to see why, with the blessing of the Almighty, we should not attain to such intelligence, culture, self-reliance, and force of character, as would give us a first place among the nations of the earth, envied by many, respected by all, and esteemed by those whose friendship is worth possessing. For this let us unitedly labour and pray.

INDIREC'TION.

BY RICHARD REALF.

Fair are the flowers and the children, but their subtle suggestion is fairer ;
Rare is the rose burst of dawn, but the secret that clasps it is rarer ;
Sweet the exultance of song, but the strain that precedes it is sweeter ;
And never was poem yet writ, but the meaning outmastered the metre.

Never a daisy that grows, but a mystery guideth the growing ;
Never a river that flows, but a majesty scepters the flowing !
Never a Shakespeare that soared, but a stronger than he did enfold him ;
Nor ever a prophet foretells, but a mightier seer has foretold him.

Back of the canvas that throbs, the painter is hinted and hidden ;
Into the statue that breathes the soul of the sculptor is bidden ;
Under the joy that is felt, lie the infinite issues of feeling ;
Crowning the glory revealed, is the glory that crowns the revealing.

Great are the symbols of being, but that which is symbolized is greater ;
Vast the create and beheld, but vaster the inward Creator ;
Back of the sound broods the silence ; back of the gift stands the giving ;
Back of the hand that receives, thrill the sensitive nerves of receiving.

Space is as nothing to spirit, the deed is outdone by the doing ;
The heart of the wood is warm, but warmer the heart of the wooing ;
And up from the pits where these shiver, and up from the heights where those shine,
Twin voices and shadows swim starward, and the essence of life is divine.

HORÆ HORATIANÆ—I.

BY GEORGE MURRAY, B.A. (OXON), SENIOR CLASSICAL MASTER, HIGH SCHOOL.
MONTREAL.

HORACE—BOOK I., ODE IX.

See, dazzling with untrodden snow
Soracte stands: the straining woods
Bend with their burden, and the floods
Curbed by keen frost have ceased to flow.

Pile logs upon the hearth, afar
To drive, O Thaliarch, the cold,
And draw the vintage, four years old,
With lavish hand from Sabine jar.

Resign all else to Jove's high will:
When once he lulls the winds asleep
That battle on the boiling deep,
Cypress, and ancient ash, are still.

Seek not to-morrow's fate to know,
Set down as gain whatever chance
To-day brings forth, nor scorn the dance,
Or youthful love's delicious glow.

Age soon will blight thy manhood's flower:
Park and parade should claim thee now,
And thou shouldst murmur passion's vow
At dusky twilight's trysting hour:

Or track the low, sweet laugh that tells
Where some coy maid conceals her charms,
And snatch a forfeit from her arms,
Or hand, that tenderly repels.

BOOK I., ODE XXII.

Fuscus, the man whose life is pure,
And clear from crime, may live secure:
No Moorish darts or bow he needs,
No quiver stored with venom'd reeds:

Whether on Afric's burning sands,
Or savage Caucasus he stands.

Or where with legend-haunted tide
The waters of Hydaspes glide.

For, while in Sabine glades, alone,
Singing of Lalage, my own,
I roamed light-hearted and unarmed,
A wolf that faced me fled—alarmed.

No monster so portentous roves
Through gallant Daunia's broad oak-groves,
Nor e'en in Juba's thirsty land,
That suckles lions 'mid the sand.

Set me on lifeless deserts, where
No tree is fanned by summer's air,
That zone of earth, which mist and cloud
With sullen atmosphere enshroud;

Set me in houseless realms afar,
Beneath the sun's too neighbouring car,
E'en there sweet-smiling Lalage,
Sweet-speaking maid beloved shall be.

BOOK I., ODE XXXIII.

Thou shun'st me, Chloe, like a fawn,
That on some trackless mountain lawn,
Scared idly by the woods and wind,
Seeks her shy dam to find.

If the first breath of Spring but chance
To quiver on the leaves that dance,
Or the green lizards stir the brakes,
In heart and knees she quakes.

I chase, but not to crush thee, child,
Like lion grim, or tiger wild:
Then, cease to haunt thy mother's side,
Now fit to be a bride.

ARTS DEPARTMENT.

ARCHIBALD MACMURCHY, M.A., MATHEMATICAL EDITOR, C. E. M.

Our correspondents will please bear in mind, that the arranging of the matter for the printer is greatly facilitated when they kindly write out their contributions, intended for insertion, on one side of the paper ONLY, or so that each distinct answer or subject may admit of an easy separation from other matter without the necessity of having it re-written.

SOLUTIONS

Of Cambridge Papers—Tripos, 1880, (see September number)—by ANGUS MACMURCHY, U. C.

2. (1) Resolve into its component factors
 $(a^3 + b^3 + c^3)xyz$
 $+ (b^3c + c^3a + a^3b)(y^2z + z^2x + x^2y)$
 $+ (bc^3 + ca^3 + ab^3)(yz^2 + zx^2 + xy^2)$
 $+ (x^3 + y^3 + z^3)abc + 3abcxyz.$

Above expression

$$= (ax + by + cz)(bx + cy + az)(cx + ay + bz).$$

(2) Shew also that if $x + y + z + w = 0$, then
 $wx(w+x)^2 + yz(w-x)^2 + wy(w+y)^2$
 $+ zx(w-y)^2 + wz(w+z)^2 + xy(w-z)^2$
 $+ 4xyzw = 0.$

Proposed identity holds, if

$$wx(y+z)^2 + yz(w-x)^2 + wy(x+z)^2$$

$$+ zx(w-y)^2 + wz(x+y)^2 + xy(w-z)^2$$

$$+ 4xyzw = 0$$

if

$$w(yz^2 + y^2z + \dots) + w^2(yz + zx + xy)$$

$$+ xyz(x + y + z) + 4xyzw = 0.$$

Substituting $-w = x + y + z$ and dividing through by w , this becomes

$$(yz^2 + y^2z + \dots) - (x + y + z)(yz + zx + xy)$$

$$+ 3xyz = 0.$$

or $0 = 0$.

3. Solve the equations :

$$(ii.) \quad x^3 + y^3 = b^3 \quad (1)$$

$$xy + a(x + y) = ab \quad (2)$$

From (1) $(x + y)\{(x + y)^2 - 3xy\} = b^3 \quad (3)$

substituting value of xy from (2) in (3), and putting $x + y = X$

$$X^3 - b^3 + 3aX^2 - 3abX = 0,$$

$$\text{or } (X - b)(X^2 + (3a + b)X + b^2) = 0.$$

$$\therefore X = b \text{ or } \frac{\pm \sqrt{9a^2 + 6ab - 3b^2} - 3a - b}{2}$$

From (2) $x + y = b$
 $xy = 0$
 $\therefore x - y = \pm b$
 $\therefore x = b \text{ or } 0, y = 0 \text{ or } b,$

and other roots may be obtained similarly.

$$(iii.) \quad x + y + z = x^3 + y^3 + z^3$$

$$= \frac{1}{2}(x^3 + y^3 + z^3) = 3.$$

$$(x + y + z)^2 = 27 = x^2 + \dots$$

$$+ 3(y + z)(x + x)(x + y).$$

$$\therefore 27 = 6 + 3(3 - x)(3 - y)(3 - z).$$

$$7 = 27 - 9(x + y + z) + 3(yz + \dots) - xyz.$$

$$\therefore xyz = 2.$$

$$yz + zx + xy = 3.$$

$$\therefore z(x + y) + \frac{2}{z} = 3.$$

$$z(3 - z) + \frac{2}{z} = 3.$$

$$z^3 - 3z^2 + 3z - 2 = 0.$$

$$z_1^3 - 1 = 0, \text{ if } z_1 = z - 1.$$

Roots of last equation are 1 and $\frac{-1 \pm \sqrt{-3}}{2}$

&c.

5. If $x_1 = \log_{x_2} x_2, x_2 = \log_{x_3} x_3, \dots,$

$$x_n = \log_{x_{n-2}} x_{n-1}, x_1 = \log_{x_{n-1}} x_n,$$

$$x_2 = \log_{x_n} x_1,$$

then $x_1 x_2 \dots x_n = 1.$

Per question

$$\begin{aligned}x_1^{x_3} &= x_3, x_2^{x_4} = x_4, \therefore x_1^{x_3 x_4} = x_3. \\&\&c = \&c; \\ \therefore x_1^{x_3 x_4 \dots x_n x_1 x_2} &= x_1, \\ \therefore x_1 x_2 x_3 \dots x_n &= 1.\end{aligned}$$

xi. Shew that

$$a^2 \cos 2(B-C) = b^2 \cos 2B + c^2 \cos 2C + 2bc \cos (B-C).$$

$$\text{Using the equations } \frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c},$$

this becomes

$$\sin^2 A \cos 2(B-C) = \sin^2 B \cos 2B + \sin^2 C \cos 2C + 2 \sin B \sin C \cos (B-C).$$

$$\begin{aligned}\text{or } (1 - \cos 2A) \cos 2(B-C) & \\ = (1 - \cos 2B) \cos 2B + (1 - \cos 2C) \cos 2C & \\ + \sin 2B \sin 2C + (1 - \cos 2B)(1 \cos 2C); &\end{aligned}$$

writing $\cos 2(B+C)$ for $\cos 2A$, and simplifying, this becomes

$$\cos 2(B-C) \cos 2(B+C) = \cos^2 2B - \sin^2 2C,$$

a well-known identity.

xii. If D, E, F are the points of contact of the inscribed circle with the sides BC, CA, AB respectively, shew that if the squares of AD, BE, CF are in arithmetical progression, then the sides of the triangle are in harmonical progression.

$$AD = s - a \quad \&c = \&c.$$

The relation

$$(s-a)^2 + (s-c)^2 = 2(s-b)^2$$

when simplified becomes

$$2ac = ab + bc$$

$$\text{or } b = \frac{2ac}{a+c}.$$

$\therefore a, b, c$ are in harmonical progression.

Solutions by FRANK BOULTBEE, U.C.
(See October number.)

$$16. \text{ If } a^2 x^2 + b^2 y^2 + c^2 z^2 = 0, \quad (1)$$

$$a^2 x^3 + b^2 y^3 + c^2 z^3 = 0, \quad (2)$$

$$\text{and } \frac{1}{x} - a^2 = \frac{1}{y} - b^2 = \frac{1}{z} - c^2, \quad (3)$$

prove that $a^4 x^3 + b^4 y^3 + c^4 z^3 = 0,$

$$\text{and } a^6 x^3 + b^6 y^3 + c^6 z^3 = a^4 x^2 + b^4 y^2 + c^4 z^2.$$

$$\text{Multiply } a^2 x^3 \text{ by } \frac{1}{x} - a^2,$$

$$'' \quad b^2 y^3 \text{ by } \frac{1}{y} - b^2,$$

&c., &c.

and we get

$$a^2 x^2 - a^4 x^3 + b^2 y^2 - b^4 y^3 + c^2 z^2 - c^4 z^3 = 0,$$

but $a^2 x^2 + b^2 y^2 + c^2 z^2 = 0,$

$$\therefore a^4 x^3 + b^4 y^3 + c^4 z^3 = 0, \quad (4)$$

Treating (4) by (3) as we did (2) by (3), we get

$$a^6 x^3 + b^6 y^3 + c^6 z^3 = a^4 x^2 + b^4 y^2 + c^4 z^2.$$

18. If A, B, C are the angles of a triangle $\cos A + \cos B + \cos C$ is greater than 1 and not greater than $\frac{3}{2}$.

$$\begin{aligned}\cos A + \cos B + \cos C & \\ = 1 + 4 \sin \frac{A}{2} \sin \frac{B}{2} \sin \frac{C}{2}.\end{aligned}$$

Now $4 \sin \frac{A}{2} \sin \frac{B}{2} \sin \frac{C}{2}$ is positive,

$$\therefore \cos A + \cos B + \cos C > 1.$$

To prove

$$\sin \frac{A}{2} \sin \frac{B}{2} \sin \frac{C}{2} \text{ not } > \frac{1}{8}.$$

If the triangle is equilateral, we have

$$\sin \frac{A}{2} \sin \frac{B}{2} \sin \frac{C}{2} = \frac{1}{8}.$$

And it is easily seen that if we alter the angles of the triangle we always get smaller

$$\text{values for } \sin \frac{A}{2} \sin \frac{B}{2} \sin \frac{C}{2},$$

$$\therefore \cos A + \cos B + \cos C \text{ not } > \frac{3}{2}.$$

Solution by ANGUS MACMURCHY.

17. If a_1, a_2, \dots, a_n be n real quantities and $(a_1^2 + a_2^2 + \dots + a_{n-1}^2)(a_2^2 + a_3^2 + \dots + a_n^2)$ be equal to $(a_1 a_2 + a_2 a_3 + \dots + a_{n-1} a_n)^2$, then a_1, a_2, \dots, a_n are in geometrical progression.

Simplifying

$$\{a_2^4 + a_1^2 a_3^2 - 2a_1 a_2^2 a_3\} + \dots = 0$$

$$\text{i.e. } (a_2^2 - a_1 a_3)^2 + \dots = 0$$

$$\therefore a_2^2 = a_1 a_3, a_3^2 = a_2 a_4, \&c = \&c.$$

Solutions by D. F. H. WILKINS, B.A.,
Mathl. Master, High School, Chatham.

163. If

$$\left. \begin{aligned} cx + by - lxy &= 0 \\ ay + cz - myz &= 0 \\ bz + ax - nzx &= 0 \end{aligned} \right\},$$

then $l^2acx + m^2bay + n^2cbz = 0$, where l, m, n are the roots of the equation $f^3 + g = 0$.

Given $\frac{c}{y} + \frac{b}{x} = l,$

$$\frac{a}{z} + \frac{c}{y} = m,$$

$$\frac{b}{x} + \frac{a}{z} = n,$$

adding $2\left(\frac{b}{x} + \frac{c}{y} + \frac{a}{z}\right) = l + m + n,$

$$\therefore \frac{b}{x} = \frac{l - m + n}{2}, \text{ \&c.}$$

Now $l^2cax + m^2aby + n^2bcz$

$$= abc\left(l^2\frac{x}{b} + m^2\frac{y}{c} + n^2\frac{z}{a}\right)$$

$$= 2abc\left(\frac{l}{l - m + n} + \dots\right),$$

$$= 2abc\left(\frac{2(l^3n + \dots - l^4 - \dots)}{(l - m + n)(l + m - n)(-l + m + n)}\right),$$

$$= 0 \text{ if } 2(l^3n + \dots) - l^4 - \dots = 0.$$

Now $2(l^3m^2 + \dots) - l^4 - \dots$

$$= (l + m + n)(l + m - n)(l - m + n) = 0,$$

$$\therefore l + m + n = 0.$$

For, l, m, n being roots of the $=nf^3 + g = 0$

$$l + m + n = 0, \text{ (1) } lm + mn + nl + 0. \text{ (2)}$$

$$\text{and } l^3m^2 + \dots = \{(lm + \dots)^2 - 2lmn(l + \dots)\} = 0$$

$$\therefore -l^4 - m^4 - n^4 = 0.$$

and $2(l^3n + m^3n + n^3l) = 0.$

For it equals $2lmn\left(\frac{l^3}{m} + \frac{m^2}{n} + \frac{n^2}{l}\right)$

Finding values of l and m from (1) and (2) in terms of n , we have

$$l = -\frac{n}{2}(1 \pm \sqrt{-3}), \quad m = -\frac{n}{2}(1 \pm \sqrt{-3})$$

$$\therefore \frac{l^3}{m} = n, \quad \frac{m^2}{n} = -\frac{n}{2}(1 \pm \sqrt{-3}),$$

$$\frac{n^2}{l} = -\frac{n}{2}(1 \mp \sqrt{-3})$$

and their sum = 0.

$$\therefore l^2cax + m^2aby + n^2bcz = 0.$$

169. Prove that

$$\begin{aligned} 50\{x - y\}^7 + \{y - z\}^7 + \{z - x\}^7 &= 2 \\ = 49\{x - y\}^4 + \dots + \{x - y\}^6 + \dots &^2 \end{aligned}$$

If $a + b + c = 0$, there are the following easily proved relations :-

$$a^2 + b^2 + c^2 + 2(bc + ca + ab) = 0 \text{ (1).}$$

$$a^3 + b^3 + c^3 - 3abc = 0 \text{ (2).}$$

$$a^4 + b^4 + c^4 + (bc + \dots)(a^2 + \dots) = 0 \text{ (3).}$$

$$a^5 + b^5 + c^5 + (bc + \dots)(a^3 + \dots) - abc(a^2 + \dots) = 0 \text{ (4).}$$

$$a^7 + b^7 + c^7 + (bc + \dots)(a^5 + \dots) - abc(a^4 + \dots) = 0 \text{ (5).}$$

From (1) $bc + ca + ab = -\frac{a^2 + b^2 + c^2}{2}.$

" (2) $abc = \frac{a^3 + b^3 + c^3}{3}.$

" (3) $a^4 + b^4 + c^4 = \frac{(a^2 + b^2 + c^2)^2}{2}$ (6)

\therefore (4) becomes

$$\begin{aligned} a^5 + b^5 + c^5 &= \frac{a^2 + b^2 + c^2}{2}(a^3 + \dots) \\ &\quad + \frac{a^2 + b^2 + c^2}{3}(a^3 + \dots) \end{aligned}$$

$$\therefore \frac{a^5 + b^5 + c^5}{5} = \frac{a^2 + b^2 + c^2}{2} \cdot \frac{a^3 + b^3 + c^3}{3}. \text{ (7)}$$

From (5) $a^7 + b^7 + c^7$

$$\begin{aligned} &= \frac{a^2 + b^2 + c^2}{2}(a^5 + b^5 + c^5) \\ &+ \frac{a^3 + b^3 + c^3}{3} \cdot \frac{a^2 + b^2 + c^2}{2} \cdot (a^2 + b^2 + c^2). \\ &= \frac{a^2 + b^2 + c^2}{2} \cdot (a^5 + \dots) \\ &\quad + \frac{a^5 + b^5 + c^5}{5} \cdot (a^2 + \dots). \text{ by (7)} \end{aligned}$$

$$\therefore \frac{a^7+b^7+c^7}{7} = \frac{a^2+b^2+c^2}{2} \cdot \frac{a^5+b^5+c^5}{5}$$

$$\frac{(a^7+b^7+c^7)^2}{49} = \frac{(a^2+b^2+c^2)^2}{4} \cdot \frac{(a^5+b^5+c^5)^2}{25}$$

$$= \frac{a^4+b^4+c^4}{2} \cdot \frac{(a^3+b^3+c^3)^2}{25} \text{ by (6)}$$

$$\therefore 50(a^7+\dots)^2 = 49(a^4+\dots)(a^5+\dots)^2$$

Now put $a=x-y$, $b=y-z$, $c=z-n$ and proposed identity follows.

$$172. \text{ If } (a+b+c)^3 = a^3+b^3+c^3, \text{ then}$$

$$(a+b+c)^{2n+1} = a^{2n+1} + b^{2n+1} + c^{2n+1}.$$

$$(a+b+c)^3 = a^3+b^3+c^3 + 3(b+c)(c+a)(a+b)$$

$$\therefore 3(b+c)(c+a)(a+b) = 0,$$

\therefore one factor must vanish, let $b = -a$

$$\therefore (a-a+c)^{2n+1} = a^{2n+1} - a^{2n+1} + c^{2n+1}$$

$$i.e. c^{2n+1} = c^{2n+1}.$$

PROBLEMS.

194. If ABC be any plane triangle, and if the angle BAC be bisected by AD , meeting BC in D , then the rectangle contained by BC and CD is greater than, equal to, or less than the rectangle contained by BC and BD , according as the angle ABC is greater than, equal to or less than the angle ACB .

195. AB , CD are two chords in a circle, intersecting in any manner in a point P . Prove that the sum of the squares upon AP and PB is equal to the sum of the squares upon CP and PD , if the arc AC be equal to the arc BD .

196. Construct a triangle, given the three angles, any chord of the inscribed circle, and the ratio of this chord to the diameter of the same circle.

197. A traveller notes that 70 times the square of the distance between two stations, diminished by the sum of this distance, and 2,582 miles is equal to the square of a quantity represented by the square of the distance less 20 miles. Required this distance.

198. If the roots of the preceding biquadratic be increased by a certain quantity, the resulting equation is

$$x^4 + 20x^3 + 40x^2 + 599x + 862 = 0.$$

Required this quantity.

199. Prove that

$$(a-b)^6 + (b-c)^6 + (c-a)^6$$

$$= \left\{ \frac{(a-b)^2 + (b-c)^2 + (c-a)^2}{4} \right\}^3$$

$$+ \left\{ \frac{(a-b)^3 + (b-c)^3 + (c-a)^3}{3} \right\}^2$$

200. Sum to infinity, x being a proper fraction,

$$3.8 + 6.11x + 9.14x^2 + 12.17x^3 + 15.20x^4 + \dots$$

D. F. H. WILKINS, B.A.,
Math. Master, High School, Chatham.

201. Find the cube roots of unity and the factors of

$$x^2 + x + 1, x^2 \pm xy + y^2, x^3 + y^3 + z^3 - 3xyz.$$

202. If $X = ax + cy + bz$, $Y = cx + by + az$,
 $Z = bx + ay + cz$, then will

$$X^3 + Y^3 + Z^3 - 3XYZ$$

$$= (a^3 + b^3 + c^3 - 3abc)(x^3 + y^3 + z^3 - 3xyz).$$

203. Prove that $\frac{(a+b+c)^5 - a^5 - b^5 - c^5}{(a+b+c)^3 - a^3 - b^3 - c^3}$

$$= \frac{5}{3}(a^2 + b^2 + c^2 + ab + bc + ca).$$

204. As a problem on the last, shew that if

$$a+b+c=0, \frac{a^3+b^3+c^5}{5}$$

$$= \frac{a^3+b^3+c^3}{3} \cdot \frac{a^2+b^2+c^2}{2}.$$

Similarly prove

$$\frac{a^7+b^7+c^7}{7} = \frac{a^3+b^3+c^3}{5} \cdot \frac{a^2+b^2+c^2}{2}$$

$$= \frac{a^3+b^3+c^3}{3} \cdot \frac{a^4+b^4+c^4}{2}.$$

J. H. BALDERSON, B.A.,
Math. Master, High School, Mount Forest.

PUBLIC SCHOOL DEPARTMENT.

[Contributed to, and under the management of, Mr. S. McAllister, Headmaster of Ryerson School, Toronto.]

DEPUTATION TO THE MINISTER
OF EDUCATION ON SUPER-
ANNUATION, ETC.

THE Public School Section of the Legislative Committee appointed by the Provincial Teachers' Association, at its last meeting, after two unsuccessful attempts, gained an interview with Mr. Crooks on Saturday, the eighth of January, to urge upon his attention the resolutions passed at the meeting of the Public School Section in August last. He courteously received the deputation, consisting of Mr. McAllister and Mr. Spence, and entered fully into a discussion of the resolutions that were submitted to him. These were as follows:—

1. That the discretionary power given to Public School Inspectors to permit third-class teachers, holding Intermediate and third-class certificates, to go up for their professional training for a second-class certificate at the end of a year's experience in teaching should be withdrawn.

2. That the present method of granting permits and permanent certificates to third-class teachers is liable to abuse, and should be altered so as to afford a reasonable guarantee that those teachers securing these privileges are worthy of them.

3. That the vote for Public School trustees should be by ballot.

4. That the age of candidates on entering the profession of teaching should be—for females eighteen (18), and for males twenty (20) years.

5. That twenty-five years' service in the profession, or having attained the age of fifty, entitle a teacher to superannuation.

6. That no teacher who retires before ten years' service be allowed a refund of more

than ten per cent. of his payments to the superannuation fund.

7. That the allowance to superannuated teachers be increased, and, if need be, that the yearly subscription to the fund be increased also.

8. That provision be made for the widows of superannuated teachers.

9. That rotation of examiners applied to the various Departmental Examinations would add to the improvement of education throughout the country.

10. That in the opinion of this Section, it would be to the advantage of the schools of the Province to retain the Apparatus part of the Depository for the present.

Mr. Crooks pointed out that Inspectors had now no discretionary power to shorten the term of service which a third-class teacher had to go through before going up for a second-class professional certificate, as the Department has fixed it at one year. He admitted that it was an open question whether the time was too short. It was reduced from two years to one to avoid the danger to the country of a scarcity of teachers. It was pointed out to him that the large numbers who annually secure intermediate certificates, added to those who are in possession of third-class certificates, not only render that danger very remote, but have, as a matter of fact, caused an over-supply of teachers in many districts. His attention was called to the fact that there is an appalling number of applicants for any situations of low grade that are offered, and that this mainly arises from the facilities afforded young people to enter the profession. So far as regards second-class teachers, this might be checked by lengthening the term of service before giving permission to any third-class teacher to secure

a second-class professional certificate. Two useful ends would be accomplished by this :—the number of second-class teachers would be kept within reasonable limits, and these would be of a better stamp, because of the lengthened experience required in the school-room. Mr. Crooks agreed with the deputation in their views, and gave them to understand that he did not regard the present regulation requiring only one year's training as a hard and fast one and incapable of amendment! On the contrary, he conveyed the impression that so soon as the term of service could be lengthened without interfering with the necessary supply of teachers it should be done.

In regard to the second resolution he explained that in every case he required specific information from Inspectors as to the existence of certain necessary conditions before a permit was issued; the most important of these was the scarcity of properly-qualified teachers in the district. In every case where the Inspector did not certify to this the permit was refused. It was pointed out to him that these conditions were sometimes set aside. One case was mentioned of a district in which two permits were granted, though there were applicants in each case of properly qualified second-class teachers for the positions the permits were given to fill. He admitted that this may have been true, but said that the Inspector of that district had been replaced by a more trustworthy man. He was asked if permits could not now be done away with altogether in the principal counties, and he replied that since he took office he had caused an immense decrease in the number, and he had no doubt that within a limited time they would be things of the past, except in the outlying townships. He pointed out the desirability of recognizing merit in many third-class teachers, who were unable, from a variety of causes, to secure a higher grade of certificate. The deputation quite agreed with him in this, and disclaimed any desire to prevent deserving and efficient third-class teachers from remaining in the profession; but it was mentioned that, from a variety of causes, abuses had

crept in, and it was suggested to him, whether before confirming a certificate, it would not be desirable to have some knowledge of the merits of each case brought before him by means of an official of his own in addition to what is supplied from other sources. He said that the number of cases of this kind in the Province was small, probably not above forty.

He said he could hold out no hope of introducing the ballot into school trustee elections, for the simple reason that he was opposed to secret voting, and when it was pointed out to him by Mr. Spence that there was some inconsistency in having the votes for municipal councillors and members of Parliament by ballot, and those for school trustees open, he replied that the danger of bribery and corruption was so small as hardly to necessitate secret voting for school trustees. He was reminded that teachers sought this as a protection to themselves in the exercise of their rights as citizens.

In support of the fourth resolution, it was pointed out that many young people were appointed to positions as teachers before they had acquired sufficient experience in life, apart from any professional training, to undertake the management of children. That a young man of twenty would be more likely to manage children properly than one of eighteen, that, not only would he have the experience in life that two years at a very impressionable age can give, but he would be more likely to have the dignity manhood gives to assist him. Mr. Crooks admitted the desirability of increasing the age of both male and female candidates, but expressed a doubt whether the respective ages should be eighteen and nineteen, or eighteen and twenty. He was reminded that a female eighteen years of age was, if anything, more matured than a male of twenty. It was suggested to him that if the ages remained as they are, those who enter the profession should be required to act as assistant teachers until they attained the ages of eighteen and twenty years respectively.

In regard to the Apparatus part of the Depository, Mr. Crooks did not think any good

purpose would be gained by retaining it. The articles that had been kept in stock were not of the best quality, and as a matter of fact, he had seen apparatus in High Schools that had been got from New York, because of better workmanship, and at a less expense than that supplied by the Department. He pointed out that already various parties had begun to meet the demand which the Depository had supplied, and he had no doubt competition would be keen enough to enable the purchaser to get the best value for his money.

The resolution on Rotation of Examiners had already been acted upon, but he kindly gave the deputation some explanation of his views on the formation of the new Committee. Professor Young, on his urgent representation, had consented to continue in his position as Chairman, beyond this, he allowed the deputation to infer that no appointment had been made, but his opinion was favourable to placing the three High School Inspectors upon the Committee, subject, of course, to the established conditions of retirement. He further thought that it would be desirable to have at least two of these officials always on. The remaining members would be selected on account of their special fitness for the duties that would be required of them. As the work of Public School Inspectors in examining for non-professional certificates had now ceased, he thought the body of sub-examiners, whose duties would in future be more onerous, should be largely recruited from these Inspectors. They would be valuable on account of their experience in similar work.

In regard to Superannuation, the Minister stated that in the year 1880 there were 391 superannuated teachers drawing pensions, which amounted to \$41,751; the amount contributed by the teachers in the same year was \$14,065; of this \$11,565 was made up of the regular subscriptions; the balance was arrears that had been paid in. The highest pension paid to any teacher was \$284, for 48 years' service; the lowest was \$56, for 10 years' service.

He had caused a scheme to be drafted

which he submitted to the consideration of the deputation. He did not think well of the proposal that was referred to in Mr. Boyle's paper, of charging a fee for entrance to the profession; but as teachers got a good deal of their training for nothing, and were at no expense for their examinations, he thought that it would not be unjust to levy a yearly contribution from each male and female teacher of \$3, and let this go to swell the superannuation fund. He would give teachers the option of increasing their yearly payments, so as to secure a larger allowance. He gave the following figures as an indication of what might be proposed:—

- A contribution of \$3 per year for 25 years would secure an allowance of \$100 per year.
- A contribution of \$6 per year for 25 years would secure an allowance of \$120 per year.
- A contribution of \$8 per year for 25 years would secure an allowance of \$135 per year.
- A contribution of \$10 per year for 25 years would secure an allowance of \$150 per year.

He would propose that no allowance should be made for less than ten years' service.

When the case of widows was brought to his notice, he said that they could be provided for in the details. It was pointed out to him that by the Quebec scheme widows and children were allowed one-half the husband's pension. By this scheme Mr. Crooks reckoned that, for 391 superannuated teachers, \$34,839 per annum would be needed; of this, the teachers would contribute \$20,833 and the Government \$14,006. Having spent two hours with the deputation, he expressed his regret that another engagement called him away, but he kindly gave them the various documents he had used in drafting his proposed scheme, that they might examine them, and form their own conclusions. In parting with the deputation he said they would see he had tried to redeem the promise he had made to a similar deputation last year—to give the matter of superannuation his earnest consideration.

The same gentlemen, accompanied by Mr. Doan—the third member of the deputation—met the Minister, by his request, on Monday, the 17th of January. He stated then, that since last meeting them, the matter of super-

annuation had been brought before the Executive Council, and at a meeting on Saturday, the 15th of January, the Hon. Mr. Hardy's bill for Superannuation in the Civil Service, as well as the superannuation of teachers, was discussed. The Council disapproved of the project to make the rate compulsory on female teachers, as their circumstances were so different from those of male teachers. Female teachers must, at best, be regarded as a transitory class, since in the large majority of cases the profession of teaching was to them but a step towards taking upon themselves the responsibilities of married life. It was thought, therefore, that it would be unjust to make the many contribute to a fund from which a very few would reap any benefit. In proof that this would be the case, he stated that out of the 391 superannuated teachers in receipt of allowances in 1880, only 38, or one-tenth, were females. He thought it would be better to make the contribution to the fund on the part of both male and female teachers optional, as it had formerly been, and at the same time to give those who contributed the choice, within certain limits, of making an increased yearly payment, with the object of securing, after a certain period of service, say twenty-five or thirty years, a pension large enough to provide them with bread and butter.

In dealing with the subject, the difficulty the Government had to meet was how to keep faith with superannuated teachers by providing money sufficient to meet the annual allowances. In 1879 these amounted to nearly \$50,000, and of this but a moiety of some \$11,000 was contributed by the teachers. He mentioned that one way of meeting this difficulty would be to take, say \$20,000, from the \$240,000 of the Government grant, and set it apart for the purposes of the fund. There would be no hardship in this, for, in the first place, this grant had been increased through his instrumentality on three separate occasions by \$20,000 each, and in the second, the decrease of the grant to each school corporation would be imperceptible. Besides, it might be legitimately diverted to the purposes of the superannua-

tion fund, seeing the grant was specially devoted to the payment of teachers' salaries. Mr. Doan asked if he was in favour of granting the allowance after twenty-five years' service; but although this question was urged by Mr. McAllister, he did not give a direct answer to it.

He shewed that by Mr. Hardy's bill *employés* of the Government, who receive a salary of \$600 or less, are to pay annually for superannuation purposes, one and one half per cent. of their income; those receiving a salary between \$600 and \$2000 are to contribute two and a half per cent. In return for this they are to receive an allowance of one fiftieth of their average salary for each year of service up to twenty-five, but no addition shall be made for any service beyond twenty-five years. He shewed that by this plan an *employé* would at the age of twenty-five years receive a retiring allowance of twenty-five fiftieths, or one-half his income. And Mr. Hardy reckoned that, to provide for this, the Government would have to supplement the yearly payments by an equal sum at least. Mr. McAllister directed Mr. Crooks' attention to some of the features of the Grand Trunk Company's scheme of superannuation. By it each *employé* is required to contribute two and a half per cent. of his income, and in return he is allowed a retiring pension of one-sixtieth of his average income for each year of service, but there is no increase after forty years' service. The highest pension by this plan is forty-sixtieths, or two-thirds of the average income. To provide sufficient money to meet the demands upon the fund the Company contributes an amount equal to what is deducted from the salaries of the officials, and if this proves insufficient a further sum is given, but at no time is this to exceed one-half of the amount previously contributed.

Mr. McAllister also directed the Minister's attention to some of the features of the Quebec and the Irish schemes of superannuation. He pointed out that in the latter the allowance at sixty-five years of age is more than double that at forty-five. Mr. Crooks admitted this, but questioned the wisdom of increasing the allowance after a certain period

of service, say twenty-five or thirty years, as this might afford a temptation to teachers who had outlived their usefulness to continue in the profession. He thought in all cases there should be a difference great enough between the salary and the pension to afford no temptation to withdraw from the service for the sake of the pension. While the latter should still be large enough to afford an inducement to teachers to remain in the profession long enough to enjoy it. He shewed that civil servants were a more permanent body than teachers, because the latter are continually migrating into other walks of life, thus making the profession a mere stepping-stone. But he was reminded that this was a fault it should be the aim of a good system of superannuation to remove. He finally asked the deputation to consider the matter, and if they could suggest a scheme that they thought would be successful, he would submit it to the Accountant of the Department, and also give it his own consideration.

His attention was again directed to permits, and he was pointedly asked if he thought they would soon be done away with. He said he thought they would, and reiterated that he was most careful in granting them. He again assured the deputation that before a permit was granted the case passed under his own personal observation; and he had also directed the Deputy to examine carefully the merits of each case before submitting it to him. Mr. McAllister then asked him if the deputation was to understand that Public School Masters were to have no recognition in the reorganization of the Central Committee and its body of sub-examiners. He replied, that for the latter body he wanted men that would do a great deal of work well for a very little pay. Mr. Spence assured him that Public School Masters were accustomed to do this. Mr. McAllister urged the desirability of having the large body of Public School teachers represented at least on the body of sub-examiners; and pointed out that there could be no valid objection to this, seeing that very few were employed in preparing scholars for the Intermediate Examination, and they could therefore not be in

danger of reading the papers of their own scholars. Mr. Crooks admitted this, and remarked incidentally that he wished to discourage Intermediate work in the public schools, as it tended to withdraw the teachers' attention from the more important work of elementary training. He promised to give this matter further consideration. The Deputation then withdrew.

NORMAL SCHOOLS.

THE following admirable remarks of the late Dr. Sears concerning the proper functions of a Normal School are well worth quoting:—

“Next go with me to the Normal School, which is a State institution. It is provided for by the Legislature, and managed, as to its external affairs, by a board of education. Its peculiar work is in charge of a Principal, who is a specialist in the art of teaching. It is his to teach not only the practice of his art, but the science on which it is founded. We may find him employed in his most difficult work, giving the philosophy and methods of primary instruction.

“To shew what high qualifications it requires, and how few succeed in it, he gives an outline of the psychology of the juvenile mind, and discourses in detail upon its dominant faculties; its delicate organism, weaknesses, and peril; its active, but one-sided and partial curiosity; its tastes and aversions; its vivacity or lethargy, and the restraints or incitements it needs; its various passions and biases to good or evil; its impulsiveness and changeableness; its lively imagination, and active but feeble intellect. Or you may find him discoursing on didactics; teaching how to unfold a subject from its elementary principles, proceeding by slow and regular gradations; how to awaken interest; how to adapt instruction to capacity, or previous attainments; how to adjust the proportions of instruction and study to each other; how far to indulge or repress mental peculiarities.”

Dr. Sears, in making this sketch, no doubt

drew from his experience of the working of Normal Schools in the United States; but when we read it, the disappointing realities of our own Toronto one makes it seem like a utopian sketch. We look in vain for the "specialist in the art of teaching;" for instruction worthy of the name in the art and science of education; for any attempt at "giving the philosophy and methods of primary instruction." We have yet to meet the Normal School student who has learnt in that institution "how to unfold a subject from its elementary principles," "how to awaken interest;" in fact, how to do the numerous necessary things that constitute good and successful teaching.

SCHOOL-ROOM WORK.

COUNTY OF HASTINGS MODEL SCHOOLS,
OCTOBER, 1880.

Professional Examinations for Third-Class Certificate, supplied by the courtesy of Mr. Mackintosh, P.S.I. for North Hastings.

MENTAL ARITHMETIC.

Time 45 minutes. Write the Answer only after each Question.

1. Write down the sum of $3\frac{3}{8} + 13\frac{1}{2} + 9\frac{5}{8} + 17\frac{1}{4} + 24\frac{3}{8} + 5\frac{3}{8}$. *Ans.*—
2. If $\frac{1}{2}$ of $\frac{1}{3}$ of $\frac{1}{4}$ of $a = \frac{1}{3}$ of $\frac{1}{4}$ of $\frac{1}{2}$ of $b = \frac{1}{2}$ of $\frac{1}{3}$ of $\frac{1}{4}$ of c , find the lowest integral values of a , b and c . *Ans.*—
3. Find 2 numbers such that $\frac{1}{3}$ of $\frac{2}{3}$ of one of them = $\frac{2}{3}$ of $\frac{1}{3}$ of the other. *Ans.*—
4. In a certain school $\frac{1}{3}$ of the pupils are in the First class, $\frac{1}{3}$ of the remainder in the Second, $\frac{2}{3}$ of the rest in the Third, and 8 in the Fourth; how many pupils altogether? *Ans.*—
5. A man paid an income tax of 2% and had \$5500 left; what was his whole income? *Ans.*—
6. Zaccheus offered to give half his goods to the poor, and to restore four-fold of any gained unjustly; if to do this exhausted $\frac{2}{3}$ of his fortune, what proportion of it must have been dishonestly acquired? *Ans.*—
7. A is worth \$2,700; $\frac{2}{3}$ of his property = $\frac{1}{3}$ of $\frac{2}{3}$ of B's; find B's fortune. *Ans.*—

8. A gambler lost half his money, and then gained \$2; played again, lost half he had, and gained \$3; played a third time, lost half and gained \$4. This third play did not alter his financial condition. How much did he start with? *Ans.*—

9. One-third the course of a river is through forests, $\frac{1}{4}$ through prairie, $\frac{1}{8}$ through desert, $\frac{1}{8}$ within the walls of a city 17 $\frac{1}{2}$ miles from its mouth; what is its entire length? *Ans.*—

10. The interest on a certain sum is £222 $\frac{3}{4}$, the discount with rate and time the same is £200; find the principal. *Ans.*—

11. The interest on one cent is one mill; find discount for same time and rate. *Ans.*—

12. A traveller rode to a certain place at the rate of 12 miles an hour, returning on foot at the rate of 4 miles an hour. The whole journey occupied 3 hours; how far off was the place. *Ans.*—

13. A railway carried 6000 tons of freight for one company and 4800 tons over the same distance for another; the whole cost of transportation was £270; how should this amount be divided between the companies? *Ans.*—

EDUCATION.

I. Explain clearly what you understand by the following terms, viz: (a) Education, (b) Instruction, (c) School Organization, (d) Classification, (e) School Discipline.

II. (a) What should a School Time Table exhibit? (b) What rules should guide the teacher in its formation?

III. Name the punishments which may legitimately be employed by the teacher.

IV. In the infliction of punishment by what rules should the teacher be guided?

V. (a) Distinguish between *expressive* reading and *intelligent* reading. (b) Which is the more important? (c) Describe the principal expedients you would employ to secure *intelligence* in reading on the part of your pupils.

VI. How would you *teach* (a) Square and (b) Cubic measure to a class?

VII. How would you proceed in each of the following cases:—

- (1) Truancy is prevalent in your school.
 - (2) Some of your pupils frequently come to school with their lessons unprepared.
 - (3) Some of your pupils are inattentive to their personal cleanliness and neatness.
 - (4) A very defective style of articulation and pronunciation prevails in your school.
 - (5) Some of your pupils come habitually late to school.
- VIII. State clearly how you would teach—
- (1) A *first* lesson in reading to a primary class.
 - (2) A *first* lesson on the reduction of fractions to equivalent fractions having a common denominator.
 - (3) Spelling to a Second class.

HYGIENE.

1. Criticise the room in which you are writing with reference to the following points:—(a) Situation, (b) Size, (c) Seats, (d) Heat, (e) Light, (f) Ventilation.

2. Name other points necessary to be taken into account in estimating the suitability of a school-room, from a hygienic point of view.

3. What precautions should be taken by a teacher to guard against injuries to the eyes of his pupils?

4. Give a brief description of the process of digestion; (a) of animal food, (b) of vegetable food, (c) how is the process affected by the work of the school.

5. Describe the human ear, and point out the dangers, general and special, of boxing children on the ears.

6. Describe Miss Buckton's method of cooking a mutton-chop, giving her reasons for the several steps.

HIGH SCHOOL DEPARTMENT.

THE TORONTO NORMAL SCHOOL.

THE following letter addressed to us puts before our readers the case of the Western Normal School in what seems to us a very clear light. The writer gives his impressions of the institution. There is no difficulty in seeing that there is a good deal rotten in Denmark. When the Minister has time to attend to this matter we hope he will reorganize the whole institution.

We have never yet met a student who has spoken well of either the staff or the system. What should be the coping-stone of our Public Schools is little better than an organized fraud on the public, and the Minister of Education retains in office for some inscrutable reason a staff that would disgrace a fifth-rate High School. As our High Schools are now closely connected through their Second Class candidates with the Nor-

mal Schools, the subject is one of interest to High School Masters, and we propose to make the question a live issue, until what a long suffering public objects to, be rectified. We venture to say that there is not a Public or High School Board in Ontario that would tolerate for a day the continuance of the very serious evils to which our correspondent directs attention:—

To the Editor of High School Department of the Can. Ed. Monthly:

SIR,—As I am aware that you take a deep interest in the cause of education, I feel it my duty to give you a very brief account of a few particulars, referring to the working of the Toronto Normal School, so far as it concerns candidates for Second Class certificates. It is well known that the institution just named, is frequently spoken of by those who have

attended it as a complete failure, serving no other purpose than that of giving remunerative situations to a few individuals. For my own part, I cannot wholly agree with such statements, because I feel sure that, during a session, many hints are thrown out which would be of practical use to a teacher, if carefully attended to; but, although this is the case, I cannot help saying that in many respects it falls far short of the excellence to which a Normal School should attain. With regard to the Model School which is in connection with it, I must speak in the most favourable terms. It is managed by teachers who are really exemplary, and who evidently take delight in the proper performance of their duties, not only when they are teaching their classes, but also when they are criticizing the candidates. The time, that is set apart for attending the Model School is much too short, being only three hours per week. Would it not be better to devote plenty of time to what is really practical, than to spend so much of it on lectures, which, to say the least, are exceedingly dry? Allow me to refer to the manner in which some of the subjects are presented in the Normal School. Lectures on Education are delivered by the Principal at least four times per week; but he wades backwards and forwards from one subject to another, with so much irregularity, that it is almost impossible to follow him. Would it not be better to go on with one thing until it is understood, then take up another, etc., than to mix them up, as is done at present? A considerable portion of the time is taken up in what is termed "Practical Grammar" which for the most part consists of the analysis of sentences supposed to contain difficulties. When a point is brought forward, that is in the least degree worthy of comment, it is cleared up by reading from Bain, Angus, Latham and a host of other authorities, the sage preceptor seldom venturing an opinion of his own. Does this deserve the name given to it? How would such a system succeed in either a High or Public School? Respecting Hygiene, I am glad to say that

it is brought before the class in such a manner as to render it interesting. Although the teacher does not display as much energy as might be expected, he possesses in a good measure the power of securing and keeping the attention of the class. Chemistry is another branch that is very fairly taught. I believe that the Science Master does what he can to instruct the students in that part of the work which will prove most useful. It is to be regretted, however, that he does not pay more attention to pronunciation and to the correct use of language. Drawing is said to be taught twice a week. I must say that this is done in such a way, that no matter what taste a person has for drawing, he cannot but become disgusted with it. The teacher very often wastes nearly the whole time for the lesson in examining drawings on small pieces of paper, which are handed in at some previous time. Should he not have looked over these at his leisure, instead of idly spending time which might otherwise be usefully employed? Besides this, if a student asks a question for information on a point, which, though difficult to him, may seem very simple to one who has a fair knowledge of the subject, the teacher seems to take more delight in holding him up to ridicule than in removing the difficulty. Instead of teaching the elementary principles, the instructor, seemingly anxious to shew what he knows, rushes into perspective drawing, the result being that the candidates approach it with about as little intelligence, as far as the subject in hand is concerned, as a child that is amusing itself trying to make pictures on a slate. Music is also taught so poorly that no one can fail to see that time devoted is completely wasted. It must be said to the credit of the Principal that excellent order is maintained throughout the institution. Hoping that those who have to deal with educational affairs will before long take the matter in hand and endeavour to raise the Normal School to a proper standard, I remain, yours, etc.,

A NORMALITE.

Jan. 17, 1881.

HIGH SCHOOL TIME-TABLE.

IN pursuance of our design we print the Time-table of a smaller school than that given some time ago:—

CONDENSED TIME-TABLE OF A HIGH SCHOOL WITH FIVE MASTERS,

Periods, 45 minutes each, as a rule. Hours, 8.30 to 1.30. Classes which recite on Mondays, Wednesdays, and Fridays, are marked "3;" Tuesdays and Thursdays, "2;" every day "5."

LOWER SCHOOL.

MATHEMATICS.

Arithmetic.—Junior, 3; Senior, 5; Intermediate, 5. *Geometry*.—Jun., 2; Sen., 2; Int., 3. *Algebra*.—Primary, 2; Jun., 3; Sen., 5; Int., 5. *Nat. Phil.*—Sen., 3; Int., 3.

CLASSICS.

Latin Gram.—Prim., 3; Jun., 3; Sen., 2; Int., 3. *Cæsar*.—Sen., 3; Int., 3. *Cicero*.—Sen., 2. *Virgil*.—Sen., 3; Int., 3. *Prose*.—Sen., 3. *Greek Gram.*—Prim., 3; Jun., 3; Sen., 3. *Xenophon*.—Sen., 2. *Homer*.—Sen., 2.

ENGLISH.

Gram.—Prim., 3; Jun., 2; Sen. and Int., 2. *Composition*, (same as Gram.) *History*.—Prim., 2; Jun., 2; Sen. and Int., 3. *Geography*.—Prim., 2; Jun., 2; Sen. and Int., 3. *Literature*.—Sen. and Int., 3. *Book-Keeping*.—Prim. and Jun., 2; Sen. and Int., 3. *Penmanship*.—Prim. and Jun., 3. *Spelling and Dictation*.—Prim. and Jun., 2.

MODERN LANGUAGES.

French.—Prim., 2; Jun., 3; Int., 5. *German*.—Prim. 2; Jun., 2; Sen., 2.

NATURAL SCIENCE.

Chemistry—Sen. and Int., 2.

UPPER SCHOOL.

MATHEMATICS.

Arith., 3; Algebra, 3; Geom., 3; Trigonom., 3; Nat. Phil., 3.

ENGLISH.

Gram. and Comp., 2; Literature, 2; History (Modern), 2; (Ancient), 2; Geography (Modern), 3; (Ancient), 2.

CLASSICS.

Latin Gram., 3; Lat. Prose, 3; Cicero, 2; Livy to alternate with Horace, 2; Greek Gram., 3; Xenophon, 2; Homer, Iliad, Book I., 3; Book XII., 2; Odyssey, 2. Herodotus, 2 (alt. with Iliad XII.).

MODERN LANGUAGES.

French, 5; Grammar, 2.

NATURAL SCIENCE.

Chemistry, 2; Physiology, 3; Botany, Friday.

EXTRAS.—Drawing and Painting, 3; Music, 2. These subjects in charge of three lady teachers.

Written examinations, monthly, results of which, combined with mark for daily work, make up report sent to parents. Latin and French commenced in Preparatory Department. In the above table, no interference between Intermediate options, nor between the several honor courses in Upper School.

MODERN LANGUAGES.

[Embracing Practical School Work in English, French and German subjects.]

DEFINITIONS OF OLD WORDS AND PHRASES.

BEHOLD, compounded of *be* and *hold*, signifies to hold or fix the eye on an object. We may see without looking, and we may look without seeing. The eye sees; the person looks. That which is seen may disappear in an instant, but what is looked at must make some stay. We look at objects to observe their external properties; but to behold is to look at for a continuance, and excites a moral or intellectual interest. We behold any spectacle which excites our admiration, our pity, or love. "The most unpardonable malefactor in the world, going to his death, and bearing it with composure, would win the pity of those who should behold him."

Eclipse, from the Greek, to fail, and is therefore what causes a failure of light. Obscure, from *obscurus*, means interrupted by a shadow, thence a diminution of light. Obscure is opposed to bright. What is obscure is not to be seen distinctly or without effort.

"In dim eclipse, disastrous twilight sheds
On half the nations, and with fear of change
Perplexes monarchs."—*Milton*.

"His form had yet not lost
All her original brightness, nor appeared
Less than archangel ruined and the excess
Of glory obscured."—*Milton*.

Retrospect, from *retro*, behind, and *specio*, to behold or cast an eye upon. Review is a view repeated. Survey is a looking over at once, from *sur*, over, and *voir*, to see.

"Believe me, my lord, I look upon you as a spirit entered into another life, where you ought to despise all little views and mean retrospects."—*Pope to Atterbury*.

"The retrospect of life is seldom wholly unattended by uneasiness and shame. It too much resembles the review which a traveller takes from some eminence of a barren country."—*Blair*.

"Every man accustomed to take a survey of his own notions will, by a slight retrospection, be able to discover that his mind has undergone many revolutions."—*Johnson*.

Prospect, from *prospectus*, to see before, that is to see a thing before we think of it or do it. A prospect implies that which directly presents itself to the eye. A drawing of an object is a view, though not a prospect.

"We're charmed at distant views of happiness,
But near approaches make the prospect less."—*Yolden*.

Flame,* from the Greek, to burn, means the heated and bright exhalations sent out from fire. Blaze, from the German, *blazen*, to blow, that is, the flame blown up into an extended flame. A candle burns by flame, paper by a blaze. Illustrate, from *illustro*, that is, to make a thing bright that it can easily be surveyed and examined. Elucidate, from *elucidatus*, that is, to bring forth into, that it can be fully seen, understood, and made clear.

Serve, from *servu*, a servant, to work for or obey as an inferior, or as under another.

"A thousand years scarce serve to form a state;
An hour may lay it in the dust."—*Byron*.

Desolate, from *desolatus*, made alone, without any other one.

"None are so desolate but something dear—
Dearer than self—possesses or possessed."
—*Byron*.

* See note at end of article.

Help, from the Saxon *helpan*, to do good to; that is, to do that aid in getting what is useful and essential.

"He that wrestles with us strengthens our nerves and sharpens our skill. Our antagonist is our helper."—*Burke*.

Chastise, from *castigo*, to make pure, to correct by punishment.

"Heaven is not always angry when he strikes;
But most chastises those whom most he likes."—*Pomfret*.

Example, from *exemplum*, the thing framed according to a likeness. Pattern, from Dutch *patroon*, that which is to be copied, imitated, or followed.

"I do not give you to posterity as a pattern to imitate, but as an example to deter."—*Junius*.

Count, from *computor*, forming into an account, to add up the different parts, to know the quantity.

"Count that day lost whose low descending sun
Views from thy hand no worthy action done."

Substantial, from *substantia*, the act of standing under; that is, real, evident, standing by its own power.

"We'll shine in more substantial honours,
And, to be noble, we'll be good."—*Percy*.

Fit, from *fit*, it is made, made for the purpose.

"But whether on the scaffold high
Or in the battle's van,
The fittest place where man can die
Is where he dies for man."—*Barry*.

Acquire, from *acquiro*, to seek; that is, to seek or try to get what we want.

"A genius is never to be acquired, but is the gift of nature."—*Gay*.

Attain, from *attineo*, to hold; that is, to get what we try for and hold it fast, and is a finished action.

"Inquiries after happiness and rules for attaining it are not so necessary and useful to mankind as the arts of consolation and

supporting one's self under affliction."—*Shepherd*.

Flourish, from *floro*, I flower; that is, full and complete as a flower in bloom. Precedence, from *pre* and *cedo*, the state of going before; that is, to take place or be done before something else intended or expected. Precedent means that going before which is a guide to follow.

"Mastering the lawless science of our law,
The codeless myriad of precedent,
That wilderness of single instances."—*Tennyson*.

Explicit, from *explicitus*, unfolded or laid open; that is, to remove every difficulty out of the way, so that a thing is clear, open, and needs no explanation.

"Since the revolution, the bounds of prerogative and liberty have been better defined, the principles of government more thoroughly examined and understood, and the rights of the subject more explicitly guarded by legal provisions than in any other period of the English history."—*Blackstone*.

Occasion, from *occasio*, that which falls in the way so as to produce some change. Opportunity, from *opportunus*, the thing that happens fit for the purpose. We do things as the occasion requires or as the opportunity offers. Concert, from *concerto*, to debate together. Contrive, from *controver*, to find out by putting together. Manage, from *manus* and *ago*, to lead by the hand. Measures are concerted; schemes are contrived; affairs are managed.

"Modern statesmen are concerting schemes and engaged in the depths of politics at the time when their forefathers were laid down quietly to rest, and had nothing in their heads but dreams."—*Steele*.

"When Cæsar was one of the masters of the mint he placed the figure of an elephant upon the reverse of the public money, the word Cæsar signifying an elephant in the Renick language. This was artfully contrived by Cæsar, because it was not lawful for a private man to stamp his own figure upon the coin of the commonwealth."—*Addison*.

"And tell the nations, in no vulgar strain,
What wars I manage and what wreaths I
gain."—*Prior*.

L. G. W., in *Progress*.

[NOTE.—We append a few corrections in the derivations in the above article, which seem necessary.—ED. C. E. M.]

"Flame" is from Latin *flamma* through the French, *not* from the Greek. "Blaze" is *not* from the German but from Anglo-Saxon *blasian*. "Pattern" is probably the same as "patron." "Fit" is now derived from Icelandic *fitza*, to knit together.

NOTES ON CHRISTOPHE COLOMB.

(Continued from page 525, Vol. II.)

CHAPTER III.

Par un soleil brûlant—Under a burning sun.

Voyageant—(See De Fivas, Gram. 582.)

Aisance—Ease of circumstances.

Voyageurs pédestres—Travellers on foot.

A peine parvenu . . . vie—Who had hardly reached middle age.

Pensif de regard—With a thoughtful expression.

Gracieux . . . lèvres—With a gracious and gentle smile playing on his lips.

Se teignaient—Were tinged, were interspersed.

Tempes—Temples.

Mèches blanches—White locks.

Que hâtent . . . d'esprit—Which misfortune and mental labour hasten on.

Primitivement coloré—Originally florid.

Mâle—Manly, masculine.

Préférer—To utter.

De huit—Of, from eight.

Mûris—Ripened.

Homme mûr—Mature man.

Diego—Spanish for James.

Attendris à—Touched at.

Equipage—Outfit, dress.

Les firent entrer dans—Brought them into.

Le pain . . . pèlerins—The bread and rest due to pilgrims.

Descendit—Came down.

Juan—Spanish for John.

Ancien confesseur—Late confessor.

Recueillement—Reflection, meditation.

Par cette retraite même—By this very seclusion.

Grand crédit—Great influence.

Main affidée—Trustworthy hand.

CHAPTER V.

S'informa . . . des—Made inquiries about the.

Routes détournées—Unfrequented roads.

Attente—Expectation.

Voici . . . depuis—This is what has been learned about him since.

CHAPTER VI.

Gênes—Genoa.

Infime—Humble.

Ennoblies—Ennobler means to expect, to make noble; anoblir, to confer a title of nobility.

'Eclat—Fame.

Naissent des—Spring from the.

Le jour—The light.

Contre-épreuve—Counter-proof, impression.

Dont—With which.

Colomb enfant—Columbus as a child.

Prieux . . . enfant—Inclined to piety from his tenderest years he was, while still a child . . .

Davantage (See De Fivas, Gram. 206).

Cé qu'il . . . Dieu—What he was seeking in the heart of everything was God.

QUESTIONS ON OTTO'S GERMAN GRAMMAR.

(Continued from page 526, Vol. II.)

LESSON V.

15. What classes of nouns are declined according to Otto's Third Declension (Primary of the Strong) ?
16. Decline *Sohn, Baum, Stuhl, Wall, and Tag*.
17. Give a list of masculine nouns of the Third Declension, which do not modify the radical vowel.

18. In what respects does the declension of compounds, or words of more than one syllable, differ from that of simple nouns?
 19. Decline *Apfelbaum, Befehl, König, and Palast*.

LESSON VI.

20. To what declensions do feminine nouns generally belong? How does Otto classify them?
 21. What peculiarity have feminine nouns in the singular?
 22. Decline *Hand, Braut, Blume, Kirche*, with the Article.
 23. To what Declension do *Mother and Tochter* belong? Decline them.

LESSON VII.

24. Go through the present indicative active of *lieben*.
 25. What kinds of neuter nouns does Otto's Fifth Declension contain?
 26. Decline *Geschenk, Kameel, Dorf, Kind, and Amt*,

(1) How are words in *-thum* declined?

(2) What two nouns in *-thum* are masculine?

(3) How are neuters in *-r* declined?

27. Decline *Haar, Meer, Schaf, Pferd, and Herz*.

LESSON VIII.

28. Give a list of eight prepositions that always govern the Dative.
 29. Mention five prepositions that are followed always by the Accusative.
 30. What nine prepositionstake sometimes the Dative, sometimes the Accusative, and when do they govern one, when the other?
 31. What two prepositions, among others, take the Genitive?
 32. Contract *an, auf, in, bei, für, durch, von, vor, über, zu*, with the Article, Dative, or Accusative.
 When possible give two contractions.

LESSON IX.

33. What nouns of Otto's First Declension (Strong, contracted) take *n* in the plural? (8)
 34. How do Latin words in *-or* (unaccented) form their plural?
 35. Give the noninative plural of *Doktor, Professor, and Major*.
 36. What (6) nouns of Otto's Third Declension take *-eu* instead of *e* in the plural?
 37. What (11) masculine nouns are declined according to Otto's Fifth Declension (Strong, enlarged)?
 38. Give examples of feminine monosyllabic nouns, which form their plural in *-en* (Weak) instead of in *e* (Strong).
 39. Give the plurals of *die Kenntniss, die Besorgniss, and die Trübsal*.
 40. What (7) neuter nouns form their plurals in *en* (Weak)?
 41. What (8) neuter nouns ending in *-r* take *e* instead of *er*?
 42. What four neuter nouns take *e* in the plural to distinguish them from other nouns in *-er* in the singular? Examples.
 43. Give the plurals of *Boot, Bein, Erz, Gift, Foch, Loos, Pferd*.

ENGLISH.

THE INFINITIVE MOOD.

I. THERE are two forms of the Infinitive mood in English; an example of one is seen in the sentence, "I can go," of the other, in "I am come to do it."

II. The form without the preposition *to* is the simple infinitive; that with *to* is called the gerundial infinitive, when it is used adverbially or adjectively; it is parsed exactly as the simple infinitive when used as an abstract noun.

III. The simple infinitive, whether of the same form as the gerund or not, is a verbal noun, and may be the direct object of transitive verbs. In modern English, the form without *to* is not used as a subject; we can

hardly say, "Go is better than stay." The form with *to* can be either subject or object.

IV. The gerundial infinitive may be adverbial, denoting purpose, as, "I am come *to do it*;" or adjectival, as, "'Tis a consummation devoutly *to be wished*."

V. The simple infinitive form (without *to*) was brought about by dropping the Anglo-Saxon *an* or *n*, though, of course, words of foreign origin may never have had the termination. Hence, A.-S. *bindan* gives us our "bind," as in the phrase, "I can bind."

VI. The gerundial infinitive is derived from the A.-S. dative of the infinitive in "an." This dative was formed by adding an "e," doubling the "n" of the infinitive, and placing the word *to* in front of the new form. Hence, *bindan* became in the dative "*to bindanne*." In course of time, this form lost the termination "anne," as the infinitive lost the termination "an."

VII. The infinitive "bind," thus stripped of its termination "an," which distinguished it from other forms of the verb, became identical in appearance with the first person singular, and all persons of the plural of the present indicative. The form being too vague to stand as a subject, the gerund or the infinitive with the gerundial 'to,' was used instead, as in "To err is human, to forgive divine."

EXAMPLES.

[The underlined infinitives are gerundial, the remaining are simple infinitives.]

1. He would have gone.
2. He made me go.
3. Why run *to meet* (adv.) what you would most avoid?
4. They were slain *to make* (adv.) a Roman holiday.
5. Music hath charms *to soothe* (adj.) the savage breast.
6. And fools who came *to scoff* (adv.) remained *to pray* (adv.)
7. I saw him fall.
8. I like a rascal *to be punished*.
9. The prisoner was ordered *to be executed* (simple infinitive—see 20).
10. I like *to walk*.
11. *To walk* is healthful.
12. I know him *to be honest*.
13. Let him be only good.
14. He is said *to be coming*.
15. He is slow *to forgive*. (adv.)
16. You are cruel *to frighten* (adv.) her.
17. Here is water *to drink*. (adj.)
18. Give me paper *to write on*. (adj.)
19. Your mistake is *to be deplored*. (adj.)
20. He ordered the soldier *to perform that duty*.

THE teacher, in the exercise of his profession, finds abundant opportunities for the exemplification of the great truths of the Decalogue. In the little community that surrounds him, there arise constantly cases of arbitration, of jurisdiction, of government; cases involving the rights of property as well as the rights of persons. The amount of original sin developed in one small school-room, would convince the most skeptical of the truth of the doctrine. In these cases the teacher becomes the appellee, the referee, the judge. There is as yet no *lex scripta* for them. It is lost in the *lex loci*. How im-

portant, then, that his decisions and his teachings in this line, should be in harmony with that which is recognized in every land as true and just! How necessary that the justice of his decisions should be recognized by the little world that surrounds his throne! These decisions often repeated, have a powerful influence on the after-life of the pupil. They make or mar. Children have a keener sense of right and wrong than adults. Satisfy this feeling of right and justice and you strengthen it; violate it, by palliation, or inconsistency, or neglect, and you so weaken it that it falls at the first assault.—*The Teacher*.

CONTEMPORARY LITERATURE.

ELEMENTARY EDUCATION IN THE
CHIEF COUNTRIES OF
THE WORLD.*

THE volume whose title we give below is the second annual edition of a very useful and highly interesting book on the contemporary history of Elementary Education throughout the world. It gives, in a very readable form, an outline of the present state of education, and of the most recent changes in the intellectual progress of all the countries in Europe, and of most of those in the other parts of the globe. It is a Blue Book on "Education in 1879," but not overweighed with useless statistical tables or dry irrelevant reports. The Germans, possessing already several excellent and systematic handbooks on the History of Education, such as Raumer, Stracks, and others, have naturally turned their eyes from the past to the present, and entered upon the stage of contemporary history. In England, we do not yet seem to have approached the first stage, for a good general history of education in an English dress remains still a desideratum.

The present volume contains some 500 pages, half of which are taken up by a *catalogue raisonné* of the school literature published in Germany during the last year. The articles on the different branches of education are contributed by men of note in the scholastic world in Germany, and the whole is edited by Herr Seyffarth, Member of the Prussian Chambers. The key-note of the introductory chapter, on the general march of education during the past year, is not one of exultation. Nearly everywhere in Europe the two antagonistic forces of Ultramontane Catholicism and Protestantism on the one

side, and Secularism on the other, have joined issue as to which shall guide the course of national education. That in a strife so bitter the original starting-point is often lost sight of, and that the means are mistaken for the end, will astonish no one. The clerical party has the advantage of knowing what they are aiming at, whilst their opponents only know what they are not aiming at, so that the latter present many a weak spot of their armour to the full-tilted lances of the former; but such will forever remain the vantage-ground of those who take their stand upon what is sanctioned by time and custom. During the past year the victory in many countries has been with the reactionary party. In Prussia, in Bavaria, and in Baden, they have driven their opponents from the field on several important questions, whilst their recent defeats in France and Belgium are looked upon by them, and by many impartial spectators, as but the signals for a renewed attack upon their antagonists at no distant date. From the statistical tables and other data, we find that Prussia, Holland, Switzerland, and Sweden are the most highly educated countries in Europe; that is to say, in them the general level of education is higher than elsewhere. Whether greater excellence and higher talent will be found in these countries, because their level of education is higher, is quite a different thing, and remains an open question.

No fewer than eighty-three periodicals devoted to educational matters are published in Germany at the present time—a formidable array indeed, compared with their number in other countries. This alone may be added as a convincing proof of progress. The training of teachers becomes more and more an object of care with the State, and we find that the number of training schools is rapidly increasing.

* "Allgemeine Chronik des Volksschulwesens.—1879." Von L. W. Seyffarth. Breslau: E. Morgenstern. 1880.

The religious difficulty seems to have exercised a particularly depressing influence on education in Bavaria and Baden. In Alsace, the Prussian system is being acclimatized as fast as circumstances and the natural repugnancy to it of the inhabitants will permit. The end, however, is easy to foretell. Before France will dare to strike another blow in vindication of her ancient right to these provinces, they will, to all intents and purposes, have been Germanized.

Of the other European countries, we will first cast a glance at England, and enjoy that rare gift of seeing ourselves as others see us. It is rather disappointing to find that only two pages of the whole book are devoted to this country, compared with about twenty-five to Switzerland, for instance. Here, it seems to us, the editor has somewhat lost sight of the proper historical perspective of his book. "On the whole," says the article on England, "some progress has been made in Education, but more as regards the external organization than in the method of teaching. Even a cursory glance at the English publishers' catalogue shews that school books have latterly considerably increased in number. We find in it thirty publishers of works on education, edited by some of the most learned men in the country. But, in spite of this, we are sorry not to be able to report any material change in the method of teaching. The book, not the teacher, is still the central point of instruction. Yet in principle it is admitted that the teaching power of a country should at least have some training, for there are a few training schools scattered over the country." Comments on this latter statement are needless. It cannot be denied that too many teachers in this country are still lamentably deficient in an acquirement which it should be their first care to cultivate—The Science and Art of Teaching.

In France, popular education is going through an experimental stage. The Republican Government has determined to raise the standard of it, and is of opinion that this can only be effected after the clerical influence over the schools shall have been considerably curtailed. The three new educational clauses

of Ferry, depriving the clergy of the power of granting degrees, and the recent decrees against the Jesuits, show that no half measures are intended. We further find that a Museum of Education has been founded, in imitation of our Museum at South Kensington, and that Froebel schools have been started in the Department of the Seine.

If possible, the two camps of clericalism and secularism assume a still more threatening attitude against each other in Belgium. The clergy, both secretly and openly, defy the laws passed by the new Liberal Government. At a Consistory of the bishops held at Malines, a decree has been promulgated, forbidding the clergy to administer the sacraments—1st, to all those who send their children to the State schools; 2nd, to all laymen giving religious instruction; and 3rd, to all pupils in the Government training schools; whilst the teachers in the State schools are threatened with excommunication. In the churches a special prayer is being read for deliverance from their wicked lawgivers and from those who obey them. What, amidst all this, becomes of the poor children waiting for intellectual bread, can easily be imagined. Several hundreds of schools are without teachers, and the attendance in many of them is almost reduced to zero.

From such a picture of unseemly reprisals and strife, it is a relief to turn to Iceland, where an extraordinary activity is being displayed in reasserting their old position of a very well educated people. The "Althing" has just entrusted the control and inspection of the national education to the hands of the clergy, and great educational improvements are reported as being introduced over the whole island.

An equally satisfactory report is given of educational progress in Bulgaria. The Slav element in Eastern Europe is being gradually developed. This is scarcely so reassuring a fact from the point of view of the older surrounding States, which are watching its progress with much concern for the future. For, with the Slavs, progress means self-assertion, and is fraught with many a danger to the peace of half the Continental States. It will

be an evolution of a very pronounced type, in which many weaker elements will have to go to the wall, before the fitter can survive.

The report on education in Russia is highly interesting, and is exhaustively treated. It traces the present unsatisfactory state of affairs, and the growth of that hydra, Nihilism, to its very sources. Since Peter the Great began to civilize the country, and thought that men, like plants, could be developed on the hot-house system, the efforts of his successors in a similar direction have led to even more deplorable results. At present Russia has a Church which exercises hardly any influence over the people, and a system of education, theoretically good enough, but in practice only calculated to breed discontent in the young as soon as they have been taught enough to see how bad and aimless has been their instruction. The control over the schools in Russia lies with the military authorities, and here we have the first source of mischief. The choice and the extent of the different subjects taught are not made dependent upon any standard of ideal happiness or morality, but upon the caprices of men often entirely ignorant of the nature of a good or a bad education. The most common branches of an ordinary modern curriculum are frequently struck off the register, because they are deemed dangerous to the existing powers. But the Russian character is of an ardent and enthusiastic nature, and the disappointed student goes forth to other countries to seek what has been arbitrarily withheld from him in his own. Returning home, these oppressed intellects become the nucleus of secret bands of kindred spirits, who forthwith begin to proselytize, and finally lapse into Nihilism. Various other causes must be added to this, such as the lack of integrity among the higher officials, and the absence of a large middle class, to enable us to form some idea of the actual state of this unfortunate country.

The chapter on Spain is conspicuous by its brevity. Half-a-dozen lines suffice to tell us that we can readily estimate the intellectual culture of this country from the fact that only 9 per cent. of the population attend school ;

that, although there has existed since 1857 a law making school-attendance obligatory on children between six and eight years of age, there is no one to enforce it ; and that half the schools are without teachers, for want of persons capable and willing to undertake the office.

The report on the United States is satisfactory, on the whole. Much room, however, remains for improvement in the education of the lower classes in the Southern States, and the *questio vexata* of the treatment of the black race by the whites, interferes greatly with the regular working of the law on education. A recent investigation into the proceedings of the Board of Inspectors at San Francisco has thrown a painful light upon the conduct of several of its members, shewing that corruption and a mercenary spirit in the States are not confined solely to politics, or to the sale of University degrees. It appears, that for several years some of these inspectors have been making a trade out of examination questions for the diplomas for teachers. Candidates could obtain the questions for the coming examination for a consideration of from 100 to 200 dollars.

Glancing over the other countries of the world, we find most progress reported in education in Madagascar, Algeria, and Japan. It is well known that Madagascar has been for some time under the humanizing influence of Christianity ; that the French are doing their utmost to introduce order and civilization into their colony of Algeria ; and that the Japanese are rapidly, if not too rapidly, changing their ancient landmarks, and trying to assimilate European ideas and culture.

The foregoing detached fragments will suffice to indicate the general aim of this book. Besides the reviews on ordinary school subjects, it contains much valuable information on such special subjects as the Teaching of the Blind, and of the Deaf and Dumb, the Hygiene in Schools, Gymnastics, etc. We can recommend it to all who are interested in the work of education, and only regret that it has not yet appeared in an English dress.—*Educational Times*.

A HISTORY OF OUR OWN TIMES, by Justin McCarthy. Vol. II. New York: Harper & Bros.; Toronto: James Campbell & Son.

THIS attractive volume covers the quarter century between the Chinese war of 1856 and the general election of 1880,—thus literally bringing the narrative down to our own times, even though we should be yet in our cradles. There is a charming frankness in Mr. McCarthy's treatment of contemporary men and questions. In the older time it was a rare privilege for a public man to read his own obituary; but the new history and the new journalism have changed all that; and, while robbing death of some of its terrors, they have also, alas! withdrawn many of its attractions. Lord Cranbrook (Mr. Gathorne Hardy) will read with interest (p. 305) that he "was a man of ingrained Tory instincts rather than convictions. He was a powerful speaker of the rattling declamatory kind; fluent, as the sand in an hour-glass is fluent; stirring, as the roll of the drum is stirring; sometimes as dry as the sand and empty as the drum." Oh, it may be said, the Radical historian cannot forgive Mr. Hardy for having wrested Oxford University from Mr. Gladstone! But let us hear his appraisement of Mr. Ayrton, Mr. Gladstone's Commissioner of Works (p. 502): "He was blessed with the gift of offence. If a thing could be done either civilly or rudely, Mr. Ayrton was sure to do it rudely. He was impatient with dull people, and did not always remember that those unhappy persons not only have their feelings but sometimes have their votes. He quarrelled with officials; he quarrelled with the newspapers; he seemed to think a civil tongue gave evidence of a feeble intellect. He pushed his way along, trampling on people's prejudices with about as much consideration as a steam roller shows for the gravel it crushes. Even when Mr. Ayrton was in the right, he had a wrong way of shewing it." There may be judicial impartiality in all this, but surely Rhadamanthus is in the judgment seat. We are drifting away from the discussion of public questions to mere personal

attributes and to an inquisition on sins done in the body. In these estimates of contemporaries, the influence of Mr. Frank Hill's "Political Portraits" is discernible. The success of those brilliant contributions to the *Daily News* was so decided, that the literary art of etching with corrosive acids has since been greatly cultivated, and necessarily with a large sacrifice of accuracy.

We regret to observe that Mr. McCarthy tries to extenuate lawlessness wherever possession of the soil is in question. For other forms of lawlessness he has less tenderness. He boldly confronts the outrages of trades-unions, but the outrages of Land Leaguers he regards with an averted eye. This historical squint produces an inevitable distortion of view. Are mutilations and murders more virtuous when used to lower the rent of land than when used to raise the wages of industry? The struggle for life is the plea in each case, and this justification may be used to cover every assault on ownership that has ever been committed. In Mr. McCarthy's political economy, land has some occult properties that take it out of the ordinary laws of supply and demand, and the moral law follows this new economy. The ordinary commandments must not, it seems, be applied to Irish tenants. A change of farm occupants is not in Ireland a commercial transaction; it is construed as a Saxon usurpation. It would be obviously inconvenient to apply these principles to the rather numerous cases in the United States where Irish backwoodsmen take their holdings from the aborigines, and serve a perpetual injunction on the evicted Indian by means of a well-directed bullet. During the recent candidature of Mr. English for the Vice-Presidency, whole newspapers were filled with catalogues of his sheriff's sales and evictions, but we have not yet heard of any remonstrance from European powers. Dennis Kearney tried logically to apply to the United States what our historian calls "Irish ideas." Kearney must now be hopelessly "bothered" to find out why he reached the seclusion of a Californian gaol, while Parnell "is having a fine time entirely."

Mr. McCarthy has been so long justifying agrarian outrage in Ireland, that his moral sense has become impaired in cases that suggest even the most remote semblance to the political situation of his native land. Even Nana Sahib is more than half covered by Mr. McCarthy's shield, because he is conceived to represent the nemesis of an invaded soil. Most of us can recall only too well the story of that awful summer evening at Cawnpore when Nana Sahib's butchers outraged and hewed to pieces a large houseful of defenceless and tenderly-reared English gentlewomen. Even after this writer's unwarranted deductions from the atrocities, his story should make any well-constituted mind recoil with horror. So far as he dare presume on the patience of English readers, Mr. McCarthy apologizes for the conduct of the vile miscreant who directed this massacre, and he conjectures it "to have occurred to the Nana, or to have been suggested to him, that it would be inconvenient to have his English captives recaptured by the enemy, their countrymen."

Some of our Indian heroes fare but ill at this historian's tribunal. For the summary execution of the Princes of Delhi he casts unworthy aspersions on the memory of Hodson, the gallant cavalry officer who did so much to recover India. At the same time Mr. McCarthy takes under his especial patronage Lord Canning, the Governor-General. He contrasts his forbearance, and takes frequent refreshment from a foolish nickname "Clemency Canning." Now all this is grossly inaccurate and most flagrantly unjust. Lord Canning did generally exercise admirable self-control and forbearance; but in the particular case of Delhi he telegraphed to his Commander-in-Chief these exact words: "No amount of severity can be too great; I will support you in any degree of it." Hodson was acting under these instructions, and his superior officer, General Wilson, modified them by the single reservation that the life of the aged King of Delhi be spared. Hodson by an audacious *coup* captured the whole royal litter, and he carried out his official instructions in their obvious significance.

Though in places, our author makes an unsafe pilot, he always makes a delightful companion. His style is limpid, and carries the narrative pleasantly along. As we float in the sunshine, we often catch from afar the delightful breath of the early English literature, which has given so many writers their charm and strength. Mr. McCarthy finds time for a brief notice of our intellectual growth in Canada, and draws upon the papers contributed to the *Canadian Monthly*, referring by name to those of Mr. Bourinot.

J. H. H.

THE ORTHOEPIST: A Pronouncing Manual containing about 3,500 words, including a considerable number of the names of foreign authors, artists, etc. that are often mispronounced, by Alfred Ayers. New York: D. Appleton & Co.; Toronto: Hart & Rawlinson, 1881.

NOTWITHSTANDING the service rendered by dictionaries of the language, there is ample room for just such a work as this, bringing into prominence classes of words which are more or less in use by educated people and that are to be met with in all departments of the literature of the day, but which in current speech are more often mispronounced than pronounced aright. The excellent article on "Our Own Blunders," which appears in the present issue, attests the necessity of resorting, and resorting frequently, to competent authorities, for guidance in this matter of orthoepy. Mr. Boyle's plea for increased attention on the part of teachers to their "manner of speech," and to the interchange of kindly criticism on each other's orthoepic attainments is worthy of the serious consideration of the profession. When the printers of this magazine furnish themselves with type, as they intend presently to do, with the requisite diacritical marks, we purpose to open a department in which the generally-received authorities on the pronunciation of a word will be given, in the case of disputes referred to us, as well as with the object of occasionally citing words which in colloquial speech are popularly mispronounced. This work of Mr. Ayers will be found a useful one to the profession.

EDITORIAL NOTES.

OUR EDUCATIONAL AFFAIRS IN PARLIAMENT.

"THE Session of the Ontario Legislature," says the *Bystander*, "opens with the pomp of Provincial Monarchy and the 'Speech from the Throne.'" What lustre this magnificence will shed upon the subject of Education, when it comes to be deliberated upon by the assembled wisdom of the Province, remains to be seen. So far in the Session, discussion on this vital and most practical of questions would seem to be more affected by the majesty of silence than by that of a state pageant and emblazoned clothes. Mr. Crooks, of course, contrived that the subject should be smiled upon from under a cocked hat, and that the speech from the Throne should stroke Education with the fur, to the credit of the Province and the glory of the Minister. The subject has since been nibbled at by our representatives, but beyond putting a series of motions on paper, and calling for numerous returns, of little practical service in discussion, nothing has been done. There seems to be a hesitancy to approach the subject, or a lack of talent in the House, with the requisite knowledge, to deal with it. The latter we fear is the case. The Ministry are themselves shy of the discussion, and seem to want to draw the fire of the Opposition by files rather than by platoons. They evidently expected concerted attack, but the morn of battle doesn't come. What they themselves propose to do can only be matter of conjecture, for so far the oracles are dumb. Why speech should be restrained by party reticence when Education is the theme, it would be a difficult to say. Such a want of candour, if it does not excite hostility, is likely, at least, to awaken suspicion.

With regard to Upper Canada College, the Premier is responsible for postponing discussion on this anomaly of our school system. He has promised some measure, which he states is to popularize the institution, whatever that may mean; but with the feeling in the country against its privileged status, which, if we mistake not, has a strong reflex in the House, any proposal short of placing the College on the footing of the Secondary schools of the Province, we feel sure will not be satisfactory. We trust that the Government may see this matter in its proper light, and will do justice, however tardily offered, to the High Schools and Collegiate Institutes that over the country are doing such excellent work for the higher education of our youth. At this stage of our educational progress, when the Secondary schools are running so strenuous a race, and the masters have so eagerly accepted the strain which our elaborate educational system has imposed upon them, it is not generous, it is not just, to handicap them in the running by maintaining a pampered institution, which, whatever the achievements of the High Schools, their conductors must continue to see placed at an enormous advantage over them, and be given a status shamefully invidious, which it cannot be said, in competition with them, to have won. In this matter, whatever proposal the Ministry may have to make, the House will be doing a simple act of justice by giving careful consideration to the petitions now being sent in by the High School Teachers and Trustees.

Mr. Lauder's motion for a return of the text-books authorized by the Education Department from 1867 to the present time, though we do not see much practical result from it, now that the Minister has seen

reason to be watchful of the intrigues of some of his Central Committee in placing on the authorized list such works as they were directly or indirectly interested in, may serve some further admonitory purpose which will repay the labour of preparing the return.

Mr. Harcourt's motion for the Statistics of the pupils in each year from 1877 to 1880, who were preparing at the High Schools and Collegiate Institutes for the profession of Public School teachers, with the number of those who matriculated at Universities, and indicating those who gained honors, may likewise be justified by the direction which subsequent discussion may take. The return may prove of service if it bring into relief the number of those who enter upon the work of education prepared at the High, rather than at the Normal, Schools, and if it direct attention to the inefficiency of the latter as institutions of professional training which, if they are to be maintained, should be doing more thorough and creditable work.

Mr. Morris's motion in regard to University Consolidation is one that a competent Minister of Education would not have allowed to be moved by anyone outside the Cabinet,—if he did not himself initiate the movement; far less would he permit the motion to be made by a member of the Opposition. In default of the Minister's action, the motion comes very fitly from the member for East Toronto. The proposal is a commendable and desirable one, though the Committee to whom it is proposed to entrust it, in our humble judgment, is not by any means of the character which ought to be chosen for so grave and responsible a work. However, we are of opinion, to which we gave expression last month, that a more comprehensive and exhaustive inquiry was urgently needed into the whole subject of education, and that the Committee should be composed of experts occupying the highest positions in the Province, and of the ripest professional experience. If the Minister of Education would avail himself of such a body, and restore, with the best procurable material, the Council of Public Instruction, he would do a lasting service to the cause of

education, and do much to redeem his administration in the eyes of the country. It is said that, instead of taking such a course, the water-logged Central Committee is to be towed as a derelict to its moorings again, and to be put to such harbour uses as the dismantled wreck may be able to perform. We trust that some Plimsoll may be found in the House to save education from so great a misfortune and the Province from such a disgrace.

THE EDUCATION REPORT FOR 1879.

THE Minister's Report for 1879, which has been religiously locked up in a cupboard until the meeting of the House, as a child's toy is hidden away by a mother's hands against some red-letter day in her little one's life, has just reached us. It appears, as our readers know, just a year behind time, and if biennial sessions are in future to be the rule in the Local Legislature, we shall be getting the record of our educational work in double doses, and on the *third year* from that of which the Report treats. So much for the absurdity of official routine and the farce of the dignity of Parliament! Were the school year to end with the mid-summer vacation, as Mr. Morgan, of Barrie, in one of the Inspectors' Reports in the present "blue-book" wisely suggests, we might get the Minister's annual abstract six months earlier than we do. There is practical advantage in this, both to the Inspectors themselves, who have now to make their annual returns at the busiest season of the year, as well as to the House and the country; and we commend Mr. Morgan's suggestion to the Department. As the Report has only just reached us, we do not purpose to examine it here at any length. Deferring this task to our next issue, we simply skim its pages in the meantime, and baldly summarize its contents. We note that it has grown in bulk somewhat, over that of the previous issue, and we trust that the Minister, if he retains his portfolio, is not going to overpower us some day with a document as corpulent as that which used

to be annually trundled out from the Government press by his predecessor in office. Official blue-books, as a rule, entail a cost to the country much beyond their worth, and statistics, which few take the trouble to read, might be far more serviceably presented, in a lucid and compact summary. As reports go, the present one is, on the whole, well-compiled and laudably confined within moderate dimensions. A few comparative tables, and those giving the statistics of the Department from, we might almost say, the flood downwards, are yet to be met with; and our old friend, the Educational Museum, meets our eye in the accustomed here-we-are-again phraseology, commencing "The Educational Museum forms a valuable part of our system of popular education," (*vide* pages 22 of the Report for 1879 and that of 1880,) and again, "The Educational Museum is not a mere collection of curiosities"—paragraphs which the printer might stereotype for annual use with as much confidence of their re-appearing as he may repose in the recurrence of the seasons. Not content, however, with the space devoted in the Report to this department having the care of "not a mere collection of curiosities," we find six pages further on taken up with a rehash of the art-jargon of European Picture-Gallery guide-books describing it, a compilation which, we presume, with the sinecure office of showman-patrol to the "curiosity-shop," now represents the services to the Bureau of Education of the relieved superintendent of the abandoned book-shop, at a cost to the country of the comfortable sum of \$1,400 a year, with, no doubt, as of yore, the accustomed "casual advantages." Happy officials! happy country! Attention, we observe, is called in the Report to that hitherto close-preserve of departmental office-dom, the Education Office Library, which, useful as it might and ought to be, considering its annual cost to the Province, should, we think, be removed and made an adjunct of the Legislative Library, or better still, made a gift of to the city, and thus become, what it is not now, available for public use. Of the really serviceable matter in the Report, our readers will

seek with relief the portion devoted to the practical business of the blue-book. Here will be found the High School programme of studies for 1879-80; the Regulations for the examination of candidates for teachers' certificates; and those directing the mode of holding the Intermediate Examination, etc. The Reports of High School Inspectors Buchan and Marling will of course be turned to and read with interest, as they deserve, and those of the County Inspectors, who have something thoughtful to say of their work, and the suggestions which their experience has enabled them to throw out for the benefit of our educational system, will find willing audience to wait on their words. As the latter afford material in abundance for comment in our proposed future review of the Report, to it we postpone what we have further to say.

MR. BOURINOT ON CANADIAN EDUCATION.

IN our last issue we called the attention of our readers to an important series of papers now appearing in the *Canadian Monthly*, on the "Intellectual Development of the Canadian People," by the Clerk of the House of Commons, Ottawa. The second of the series, as we stated, was devoted to the subject of education, a chapter in Mr. Bourinot's historical review which his great industry and intimate knowledge of the factors of Canada's intellectual and material prosperity have enabled him to make of exceeding interest. After reviewing, from the earliest period, the history of educational effort in the Dominion, the writer, as we indicated in our December number, devotes the close of his paper to the consideration of some features in our present educational system which detract from its general excellence, and to a few words upon the teacher himself, his influence upon the young, and the necessity of bearing in mind that the bent of present day teaching should be in the direction of practical studies. In the case of higher education, our author also urges, that a system of options will best serve the interests of those who seek university training for special avocations in life; and

he calls upon the people of Ontario, in view of the "heavy requisitions on the intellect of this very much-governed country," to give that liberal aid to the endowment of a Provincial university "necessary to the establishment of a national seat of learning, and which will give the fullest scope to Canadian talent."

Before coming to the defects referred to in our Public School system, the reviewer pays a merited compliment to the schoolmasters of Ontario, who, he affirms, "are, as a rule, a superior class of men." "Yet it must be admitted," he wisely adds, "that much can still be done to improve their position. Education, we all know," he goes on to say, "does not necessarily bring with it refinement; that can only come by constant communication with a cultured society, which is not always in Canada ready to admit the teacher on equal terms. It may also be urged that the teacher, under the system as now perfected, is far too much an automaton—a mere machine, wound up to proceed so far and no farther. He is not allowed sufficient of that free volition which would enable him to develop the best qualities of his pupils, and to elevate their general tone." How true are these remarks, most of our readers will bear witness, and they naturally find corroboration in words of our own (quoted by Mr. Bourinot) which appeared in THE MONTHLY for February, 1879, in dealing with the "Promotion of Culture in Canada" and the desirability of allowing greater play to the individuality of the teacher in the exercise of his vocation.

Coming now to the defects of our school system, Mr. Bourinot quotes the remarks of a writer in *Scribner's Monthly*, "as of some application to ourselves," and which thus satirizes the cramming and examination craze of the time. The writer says, that now-a-days there is "too decided an aim to train everybody to pass an examination in everything," that the present system "encourages two virtues—to forgive and forget—in time to forgive the examiner, and to forget the subject of the examination." This inevitable, and we might also say invariable, result of

"cramming" has rarely been better hit off. With equal point, Mr. Bourinot, himself, touches on another foible of our Ontario educational administration, which has been repeatedly gibbeted in our own columns, viz., "the somewhat remarkable multiplication of text books, many of which are carelessly got up, simply to gratify the vanity and fill the purse of some educationist anxious to get into print." Grammar, the essayist also refers to, as a lost art in the Public Schools, where, in place of the homely, intelligible language of Lennie, and other old-time favourites, pupils are bewildered by the complex, analytical methods of modern teaching, which he hopes those educational parliaments—Teachers' Associations—will help to get rid of. Our space, we regret, forbids us to make further reference to the excellent paper Mr. Bourinot has given us, and we must content ourselves with expressing pleasure at learning that the author purposes compiling for separate publication the articles contributed to the *Canadian Monthly* on the general subject embraced in the title we have already quoted, and that the book may soon be expected to be in the hands of all interested in the intellectual development of the Canadian people.

THE following cutting we make from a recent number of the *New England Journal of Education*, and we ask our contemporary what fiend has tempted it to poke such fun at our, educational authorities? The happy, the exhilarating, effects of our Central Committee, have certainly been the theme of comment in Ontario, but hardly of congratulation. Our contemporary's notions of the *personnel* of the Committee are about as far astray as its notions of what they have accomplished, and the wisdom of their appointment has very far from been "amply vindicated." When we get "a few able men," and honest ones, to represent the interests of education here, the good friends of New England may learn what salutary lessons are to be derived from the spectacle of their employment amongst us; till then "the spiritual side of American life," as well as, unhap-

pily, that of Canadian, must continue to look on "dishevelled and disintegrated public schools" with that mournful glance which speaks unutterable things to all but the "book-writing" Inspector and the venal Central Committeeman. Here is the cutting:

"Our friends in Canada (Ontario) are congratulating themselves on the happy effects of their Central Committee of Examiners, consisting of Chief Superintendent, the Council of Instruction, and four public-school inspectors. Under the vigorous working of this Board the High Schools, Normals, Teachers' Institutes, and Model Schools have wonderfully improved, and the wisdom of thorough supervision is once more amply vindicated. We must learn, especially in New England, to trust a few able men with ample powers of supervision before our dishevelled and disintegrated public schools can be brought up to the point that will satisfy people who demand the worth of their money, even in the things that pertain to the spiritual side of American life."

GEORGE ELIOT, *ob.* DEC. 22ND, 1880.

DEATH, at the close of the year, took from literature one of its most central figures, and quenched in night an intellect which, in its range and power, has scarcely had an equal since Shakespeare. "George Eliot" had almost all the gifts with which the human mind has ever been dowered, and no writer, of her sex at least, can be said to approach her in the many-sidedness and profundity of a mind whose creations are as unrivalled as they are diverse. What a wealth of portraiture she has bequeathed to the English-speaking world, those who have followed her creations from "Adam Bede" to "Middlemarch" best know. But richer than these treasures are the revelations into, and sympathy with, a human nature which few have better understood, in all its variety, depth, and richness, and which none have depicted with greater power or with more fidelity to life. Her loss to English letters is simply irreparable, and, in her, literature mourns: one of the rarest minds and loftiest natures which the Divine, perhaps, has ever put into human clay. No

new creation of her pen will hold us again in its spell, but as her place is now among the immortals in English literature so will what she has written pass into the mind and spirit of that thinking, reasoning humanity which she did so much to elevate and ennoble. But hush! "her own words best honour her, not ours!"

ON the question of Spelling Reform, and against some of the objectors to it, Dr. Murray, the editor of the English Philological Society's Dictionary thus speaks very plainly in his annual address to the Society:—"The etymological information supposed to be enshrined in the current spelling is sapped at its very foundation by the fact that it is, in sober earnest, oftener wrong than right; that it is oftener the fancies of pedants and sciolists of the Renaissance, or Monkish etymologists of still earlier times, that are thus preserved, than the truth, which alone is *etymologia*. From the fourteenth century onward, a fashion swept over French and English, of remodelling the spelling of words after the Latin ones, with which, rightly or wrongly they were supposed to be connected; and to such an extent has this gone that it is, in nine cases out of ten, now impossible without actual investigation, to form any correct opinion upon the history of these words—the very thing which the current spelling is supposed to tell us."

SPEAKING of some recent cases in which teachers have been fined for inflicting violent punishment on pupils, an English contemporary makes the following remarks:—"Judging from the accounts printed, it is to us lamentable that teachers should so far forget themselves as to inflict such dangerous and excessive punishment. It appeared to be due to the temper of the teachers. Such teachers transgress one of the fundamental principles of school management—never to administer chastisement when excited or out of temper. . . . Teachers must, as they value the health of their scholars, their own

reputation, and that of their fellows, eschew boxes on the ears and slaps on the face. Whilst severely condemning such action, we cannot altogether withhold our sympathy from the offenders. We know so well that the trials to which they are subjected, and the strain upon nerves and temper, are at times almost beyond human endurance. Still, we have not the slightest hesitation in adding that a man or woman frequently using such cruel and excessive punishment in the heat of passion, is unfit for the work of teaching, and should be made to seek some less worrying employment."

Another educational journal, referring to the same topic, says:—"Education seems to be conducted at present in too many cases with an amount of ferocity which is quite inexplicable. Hardly a day passes without one or more schoolmasters being charged before magistrates with ill-treating their pupils." In this, as in some other respects, Canada, or at least Ontario, is a long way ahead of the mother country—sometimes, we are disposed to think, a little too far ahead.

OUR excellent contemporary, *The Canada Presbyterian*, has the following kind and appreciative words about us in its issue of the 28th inst.:—"THE CANADA EDUCATIONAL MONTHLY, edited by Mr. G. Mercer Adam, closes its second year with a first-class number . . . If the *Educational Monthly* does not receive the hearty co-operation and support of the profession, in whose interest it is published, the editor is not to blame, for he has succeeded in bringing out a periodical in every way a credit to the teachers of the Province." Our acknowledgments are due to the *Canada Presbyterian*, and to many of the journals of the country, for their uniformly friendly yet discriminating comments upon the publication. Our success, we are glad to assure them, is a substantial and encouraging one, and fully justifies the conviction with which we started the enterprise, viz., that the educational profession of Canada would appreciate and support a higher-class serial literature, in con-

nection with its work, than any it had hitherto been supplied with.

THE United States Senate lately passed a bill that will have an important influence on the spread and support of education. It provides that the net proceeds of the Patent Office and the sale of public lands shall be forever devoted to educational purposes; the principal to be funded and the interest at four per cent. to be paid to the States in the proportion of their illiteracy; provided that no State shall be entitled to any portion of the funds unless it maintains a school system for all its children for at least three months in the year. A portion of the fund is also, for the present, to go to the Agricultural Colleges.

THERE is held annually an Exhibition of Drawings in connection with the schools under the care of the London (Eng.) Board. But few of the scholars exceed thirteen years of age, many of them being under ten, and yet they are said to produce excellent work. Mr. Jas. Nasmyth, the inventor of the steam-hammer, in a letter to the *Times*, a short time ago, expressed himself thus:—"Sixty years' experience with engineering works, and with the mechanics and other classes of workmen engaged in such occupations, enables me to say, that of all the useful acquirements beyond those of 'the three R's' is that of drawing."

PROF. TYNDALL asserts that "The finest touches of moral power, the grace, and beauty, and grandness of life, depend upon the emotions of man as much, at least, as upon his understanding. Poetry, Science, and Art, are sister-workers in purifying these emotions, and tending to make man a better and more complete being."

MR. HARRY ALFRED LONG, a distinguished member of the Glasgow School Board, recently visited some of the schools in Toronto, and is giving Scotch readers his opinions thereon through the columns of one of the city (Glasgow) papers.

THE Board of Directors of the Ontario Teachers' Association met in the office of the Toronto Public School Inspector on December 31st, to arrange the programme of business for the next convention. There were present the President, Mr. Alexander, (in the chair); the Secretary, Mr. Doan; the Treasurer, Mr. Spence; and Messrs. MacMurchy, of Toronto; Millar, of St. Thomas; Purslow, of Port Hope; Somerset, of St. Catharines; Hughes, of Toronto; Little, of Acton; Dearness, of London; McAllister, of Toronto; Rannie, of Newmarket; and Duncan, of Windsor. The following subjects were put upon the programme for afternoon business:—Industrial Drawing, Uniformity of Text-Books, the Use of the Bible in the School-Room, Agricultural Education in the Schools, and Physical Education; or, as a substitute, Qualifications for the Civil Service. It was decided to invite a number of prominent educationists to be present to deliver evening addresses. If the interest in the proceedings of the coming meeting be at all equal to that displayed by the Board of Directors in framing the programme, it will prove a very successful one.

When the meeting closed the members of the Public School Section met and decided upon the following programme for the work of their section:—Model Schools, the Over-Supply of Teachers, Representation at the Provincial Association, and Entrance Examination to High Schools.

Advantage was taken of the meeting to organize the Legislative Committee. Messrs. Fotheringham, Dearness, Hughes, McAllister, Doan and Spence were present. Mr. Hughes was appointed Chairman, and Mr. Doan Secretary.

THE first number of *The Educational Record*, the new organ of the Protestant Board of Education of the Province of Quebec, has just reached us, bearing the imprint of the *Gazette* Printing Office, Montreal. In our present crowded issue we can only meantime acknowledge receipt of the publication,

heartily wish it well, and promise in our next to give that notice of its advent which its merits and the cause it represents urgently claim for it. Its editor is Mr. R. W. Boodle, B.A. (Oxon), whose contributions to Canadian literature doubtless many of our readers are familiar with.

THE LATE CHIEF JUSTICE MOSS.

IN the recent lamented death of Chief Justice Moss, which took place at Nice, in the south of France, on the 4th inst., the Ontario bench suffers an almost irreparable loss, while his *alma mater*, at which he so brilliantly distinguished himself during his academic career, loses its Vice-Chancellor and a zealous and enthusiastic friend, whose removal from the scene of his untiring and loyal labours every *alumnus* of University College will profoundly and unfeignedly deplore. As Vice-Chancellor and member of the Senate, Toronto University had no more ardent friend; and it may truly be said, that no more distinguished graduate ever passed from its halls to enter upon the business of life which, alas, whatever the honour subsequently won, has but too soon come to its earthly close. Few, at his early age, have passed from the ranks of the living so deeply regretted and so highly esteemed. Fewer still have passed hence so universally beloved. Vice-Chancellor Blake pronounces this eulogium upon the deceased:—"His pre-eminent ability, his conscientious devotion to his duty, as a judge, as a lawyer, and to the country, in whatever way he could serve it, the genial courtesy which characterized his intercourse, not only with the profession, but with all who came in contact with him, make his loss one which will be widely deplored, by the bench and the profession, as well as by the country at large. I gladly pay every respect in my power to his memory, not only because of his high position, as the head of the judiciary of the Province, but from a deep feeling of affectionate regard which time can never efface."
