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# The Canada School Journal. 

Vol. XI.

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THE CANADA SCHOOb JOURNAL.
An Kducational Journal deooted to Litirature, Seience, Art, and the adoancemenof the teaching profession in Canada.
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We are glad to learn that the moveneat fur the furmation of a Provincial Teachers' Cnion for Oatario is beximang to take shape. There is nu question inure worthy of the attention of the Teachers and Teachers' Institutes than this. Sucha anion, formed on suand principles, and comlucted with energy and independence, would du inach to raise the status of the profession. It would occupy a sphere yuite distinct fronn that of the Institutes. It should be purely and simply a Teachers' organization, free from all outside influence and dictation, from the Education $\mathrm{Depan}_{\text {patat }}$ ur almy uther gatrter. Such an institution, once well organized and in vigorvos o.eration, would become a powar in eductional matters. It would make its influence felt, not only with ratepityers and trustees, in questions affectino salaries and uther matters closely related to the welfare of teachers, but also with the Legislature. It shouli, in fact, hase wey macla to do wath shaping future educational legislation, which is, and has been hitherto, the worse, because so little affected by the experience and hnowledge of those who are in the best pusition to form an opinion on many important points. We wish the muve ment success, and hope before the yrat is over to see the Provincial Union an accomplished fact.

Tue Mfail makes a remark in reference to the Ontario Educational Exhilsit for the Intercolonial Exhibition that should set all friends of education and of honesty to thinking It asserts, virtually, that much of the splendid collection of educational appliances whirh is sent as illustrative of the stato of public education in Ontario, has no actual counterpart in the schools. In other words, the Education Department propares and forwards, as samples of our school apparatus; an exhibit which is, in some respects a falschood and a fiaud. We fear there is too much truth in the accusation. The exhibition of these appliances must be tacitly undorstood, even if the assertion is not directly made, to mean that these ure such as aie used in our pullic schools. What else can it mean? But if, as we fear, it is true that many of them can be found in none of the schools, we are surely guilty of seeking reputation and credit under false pretenses, and so making ourselves educational impostors. Is it not so? If there is another and more creditable view of the matter, we should be glad to have it presented.

Some one has said that very much of the value of an opinion depends upon whether or nut there is man lehind it. The remark is worth remembering by tho bomilhes who is every dong called upon to pronounce decisions upon matters in dispute, theoretical and practical. An excellent rule is never, if it can be avoided, to express an opinion which has not been carefully considered, or to pronounce a decision which there is not both power and determination to enforce. Let the pupils feel that their teacher is one whose words are weighty, and who can give a reason for then, and one who makes laws and enforces them carcfully, deliterately, conscientiously. We have known teachers who, in their desire to appear ever ready oracles, would give hasty, ill considered answers to questions, only to be chagrined by afterwards discovering that their guess was wrong, and by suspecting that sume of their bright pupils had discuvered the same fact. Many teachers, tuo, are constantly uttering hasty threats, which they afterwards find they cannot, or must mot. carry out. Others, again, are every day announciag ne" regulations, or prohilitions, three fourths of which are vither forgotten or fuund impracticable before a week has $p$ insed. There is $n$ force in the school-room like that of chatater in the teacher, but the character must be real, genume, und such cin be furmed only by patient thought, and puncrful self-control. Learn to think cleariy, to speak carefully and wisely, and to act ahmly, and you will be astonished to find how much deference will be paid to your opinions and wishes, in school and out.

The wise teacher never guesses at truth. It has been truly said that children and fools may easily ask questions which sages cannot answer. Yet just here arises a form of temptation to which the young teacher is specially exposed. Some
bright pupil puts a question in history or science, or it may be in grammar or arithmetic, which the teacher is unable, on the spur of the moment, to answer. The danger is that, through fear of losing the respect and confidence of the school, whose eyes and ears are open, a guess is made, and announced as a matter of knowledge. In fact, we think we have heard young teachers sagely advised never to appear not to know what answer to give in such a case. The supposition is that a confession of ignorance will lower the standing of the teacher in the eyes of the school. Even were it necessarily so, this would surely be better than the virtual falsehood which is perpetrated when one pretends to know what he, in reality, does not know. But the danger is purely imaginary. Chitdren soon learn thai not ever parents or teachers hnow everything. A frank admission of present ignorance will often increase the respect of pupils for the character of their teacher. It is an object lesson in candour and truthfuiness. If, in addition, the teacher never fails, when possible, to find out and give the correct answer another day, another valuable lesson: imparted in regard to the true way of acquiring knowledge.

Tne 'Varsity has become the theme of a sharp and somewhat acrimonious discussion in the Toronto dailies. The head and front of its offending seem to be its too free admission of crit:cism, both editorial and in its correspondence columns, of persons and things connected with University College, and its giving too much scope for "free-thinking" articles. For our own part, we cala see no valid oljection to even anonymous criticism of the public methods and work of college professors, provided such criticism be free from personal slander and malicious insinuation. In the case of a professor, as of any other public man, it is mainly nccording to the amount of truth it contains that criticism hurts. It must be remembered that students have the best opportunities for judging the faitifulness and ability of professors, and we believe there, is usually so much love of aair play, to say nothing of nore personal feelings, i: the great body of students as will make them resent, promptly and emphatically, any malicious attack upon those who stand, or have stood, to them in the relation of teachers. As to the matter of orthodoxy, we have great faith in the vitality of truth and its power to survive and flourish under the freest discussion. Morenver, we have reached a time when the right of free discussion will be insisted on. Outcries against it are worse than useless. So long as the editorial balance is fairly held and equal freedom given to both sides, the friends of orthodoxy should not fear.

A thovgnteul writer in the Journal of Elucation says:"Since we have narrowed the idea and sentinent of the word 'eaucation' simply to mean mental training, we have lost sight, to some extent, of that broader signification which includes discipline of character, and the formation and regulation of habits and priuciples in the individual." This is, undoubtedly, the great defect in our mucl-vaunted Public School system. We are not sure, indeed, that there ever has existed a system
in which the work of education, in the broader signification referred to, was letter done. The main contrast, so far as relates to the past, is between more and less of the mental training, especially in regard to the numbers to whom it was imparted. But none the less, the defect is great and patent in our present work, and one of the most important questions of the day is how to remedy it. A hopeful sign of the times is the attention that is being given to the matter. Every teacher can to some extent, though we feur, under the present machine and high-pressure conditions, only to a very limited extent, supply the deficiency in his own school.

One of the best tests of the discipline of a school is the extent to which the public sentiment of the pupils supports the teacher. In schools, as in larger and older communities, public opinicn is the most potent force on the side of good government. Under the old regime, with which many of us were familiar in our school-days, the triumph of order, or disorder, was t:00 often dependent upon the outcome of a perpetual contest between alisolute authority, as represented by the teacher, and the spirit of resistance to what was regarded as tyramny in the school. Under such conditions, the position of the unhappy master was truly that of one "against a host," and it was little wonder that he soon lost all sympathy, if he ever had any, with childhood, and yielded most of his sohool hours to the dominion of ill-temper and caprice, thus enabling the boding trumblers to discern, too often, "the day's disasters in the morning's face." To many not past middle age there are few things more vivid, or more pathetic, in the memories of boyhood than the recollection of the anxiety with which they used, every morning and aftermoon, to scan the master's countenance, as he entered the school-room, in order to discover whether he was in good or bad temper. We wonder if these old pictures have still their counterpartsin any Ontario schools to-day. Both teacher anid pupils are to be pitied in such a case.

IT is to be hoped that a very different state of affairs is the ruie to-day. A more excellent way has been found. The true teacher has learned to rely upon the sympathy and co-cperation of the great loody of his pupils. He has learned that confidence, to be genuine, must be mutual. He trusts his boys and girls, and they, in turn, trust him. Without announcing it, perlaps, in so many words, he creates the feeling that the maintenance of quiet and order is but a mears, a necessary means, to an end, not as it used to appear, the great end itself. The school is henceforth ours, not mine He is laboring for his pupils' good, and when this is done in sincerity; the pupils will not fail to feel and recognize it. In proportion as he is successful in stimulating mental activity, and ministering wisely to the child's innate thirst ior knowledge, he may dismiss all anxiety about order in the school. The hoy or girl who is intent on learning, who is inallisctually wide-awake, will be the first to resent that which makes stucly difficult, or impossible. All the moral forces of the scliool are thus enlisted on the side of tho teacher, beanuse that is the sido of reason
and right. If there are, as there most surely will be in nlmost every school, idle, mischievous, turbulent incorrigibles, they are held in check, no less by tho disapproval of their schoolmates than hy the frowns of the teachan, for of juvenile, as well as udult, evildoers, it is true that conscience makes cowards of them all. To the teacher who succeeds in thoroughly winning the confidence and love of his pupils, or even of the majority of them, so as to make them feel that their interests and aims are identical with his, the school-room is no longer a prison house, but a scene of agreeable and prolitable labor, and often of real pleasure.

A writer in the Christian Union of April 29th gives some interesting particulars in reference to McCabe 's fitting school in Virginia. The object of the school is to prepare nיpils for Virginia and other universities. One of the pecuiarities of its management is the application of the principle of goverring by trusting to the honor of the boys which, it is said, McCabe cncries even farther than did Arnold at Rugby, and with marked success. The whole moral force of the school is directed to the one end, of creating in the boys a spirit that is above the meanness of attempting to deceive. The writer, who spent some time at the school and tried to satisfy himself in regard to its working, says that "a boy who attempts. to deceive a teacher, and especially Mr. Mclabe, must be sure that no other boy knows or suspects it. If it becomes known, there is an instant demand for a trial.". A jury of the boys is impanelled on the nömination of the president, tho "aoúsca' having large rights of challenging its composition. When the verdict is made up, the youngest boy is first askedihis opinion, and so on upwards. If the accusation is sustained, the boy must leare the school, and can never again hoid up his head amongst his school-fellows anywhere. This penalty is so felt that it is said a young Virginian would sooner lose a limb than incur $i t$. The consequence is that, in almost every case, " if a boy has done anything out of the way, fear, if no higher motive, makes him seek the earliest ppportunity to report it." The writer says he has taken some pains to ascertain whother the plan is really as successful as the Principal thinks, and the evidence is strong for believing it is so. There is much in the principle involved that is very suggestive, and may be helpful to many teachers who may not be able to carry out such a plan in detail.

Apart from its immediate bearing upon the discipline of the school, there is much to be said in favor of the widest possibl, application of such methods in the school. Thereis great need. that teachers should lose no opportunity for inculcating a high sense of honor in their pupils. There is reason to fear that we, as Canadians, are not as sensitive on this joint as we should be-that, in fact, our standards of personal honor ${ }_{\mathrm{s}}$ in public and private life, need elevating. Timo was when the word of a public man was the end of all controversy. It is so n) longer. Even in Parliament prominent men do not sometimes hesitate, if not to resort to evasion and ambiguity,
at least to suspect their compeers of so doing. Those who orcupy the highest trusts in the gift of their countrymen are suspected of using the influence thus acquired for the personal benefit of themselves, or their friends, and do not always take pains to resent and disprove the imputations. In their private capacity it is no unusual thing for persons deemed highly rupectable, and oven fra: members of Christian churches, to resort to petty subierfuges in order to evade the Customs, and cheat the public revenue of a few cents or dollars. Men and women, of goci? social standing, even sometimes make a boast of their skill and success in achieving such meanness. In business intercourse it is to be feared that the number of those who would hesitate to take the best side of a bargain when opportunity offers, and so appropriate to themselves what is really the property of another, is exceptionally small. In all these matters we may not be worse than our neighbors, but it would be well for Canadian national character that the next generation should be far better than we are. And there is assuredly no class of persons who hare it in their power to do more to bring about this result than the public school teachers. lf they will but set up the bighest standards of personal character for themselves, and use every opportunity for cultivating a ligh and sensitive sense of honor in their pupils, they may earn to theruselves a noble degree, and become indeed worthy to be written as benefactors of their country, of tha very best and highest type.

## Special.

## ENTRANCE LITERATURE

Lesson LiV. - LOOHINVAR.
by J. stuart carstatrs,
Priacipal of the Chesterville Public School.

## introductory:

This ballad is taken from Scott's Marmion. Canto V., and is in a very slight degree founaed on the ballad, Katharine Janfarie in Scott's Minstrclsy of the Scottinh Border.
As regards the story, "the Gordons were Lords of Lochinvar, a castle by a lake of the same name, in the parish of Dalry in Kirkcudbright.

The Grahams were Lords of Netherby Hall, near Carlisle, in Cumberland. Helen Graham was the young lady who was to:be ma:ried to one of the Muagraves by the wish of her father and mother, but Lochinvar was the lady's true love, who carried her off from her father's mausion. Lochinvar crossed the Eske and rode over Cannobie Lee."-Morris.

1st stanza.

## 0. - See Verbalist.

Lochinvar, 3k miles east of Dalry in Kirkcudbright, is a lake 9 miles in circarnference. Near it are the remains of the ancient castle of the knights of Lochinvar, who were the ancestors of Vis: counts Kenmure.
Is come seems to differ from has come in thin respect; is.come reforring to the action at the vary moment of its completion; Thas come is used in referring too any notion that has been completed. See Mason, (now edition), §188.

Ont of by many grammarians is cc.isidered a preposition. " $0^{t}$ soems to be the preposition, and out only to morlify the sense of of."-.Johison. "When out precedes of it is corisidered to form a compound preposition, but of is the only roal preposition, out still retaining its or:ginal import, which, though it may sometimes be interpreted from, sometimes by not in, sometimes by beyoud, otc., is still correspondent to the general sense stated."-Smart. See Mason, (new edition), § 284.

The West.-Kirkcudbrightshire. Look at the map as this line is read.

I'hrough, all, wide, add forco to this line. They impress you with the great extent of the country that has no horse to compare with Lochinvar's steed.

Save.--Mason's Grammar, (new edition), § 282.
Save his good broadsword. -This adjunct so mis to belong equally to weapons and unarmed.
Broadsword.-A weapon peculiar to the S:ots, called by them the claymure.

None.-Is this properly used: Mason, (asix zuition), § 92.
There never, etc. - Never is superlative in idpa, and the term of wider meaning should exclude that of narrower meaning. See Mason § 111.

## 2nd stanza.

Stayerl, stopped.-See Ayros' Verbalist.
Aski n. Eske, "rises in two head streans-the Black Esk, and the White Esk-among the Southern Highlands; gives the name di Eskdale to the eastcrn one of the three divisious of Dumfriesshire; traverses successively uplands, vale and plain, with large aggregate of charming scenery; has a total course of about 40 miles, chiefly southward, to the head of the Solway Firth, and affords fine angling for both trout and salmon."-Paterson's Guide to the Land of scutt.
Gullant.-When this word has reference to our conduct to ladies it is accented on the last syllable ; in all other cases on the first.

Laggard, dastard. -"Ard had originally an intensive force, as in sweethard, (corrupted into stvetiteart), drunkard, cowurd, braggart, rrizard, etc. It appears in some person names as Leonard, Beruard, Ererarl. It appears to have heen very commonly appended to nouns of a contemptuous and depreciatory meaniag. Most of the wrrds ending in it that now survive are of this sort. Add to those already mentioned bastard, sluggard, dotard."-Hales. Trench in his English Past and Present mentions others.

A dastard.-Masun, (new edition), § 462, 463.
Fair, brave.-Perhaps Scott had in his mind the line from Dryden's Alexunder's Feast, "None but the brave deserve the fuir."

## 3nd stanza.

So boldly.-Note that the effect of this bold entrance is that the bride's father then spuke. If a pause is made after so it would make the third line co-ordinate with the first two.

Bridesmen.-This, in some editions, appears in the form bride'smen. The latter form seems the better.

Craven.-"Your mercy is craved." "It was usual in former times to decide controversies by an appeal to battle. The combatants fought with batonn, and if the accused could either kill his adversary or maintain the fight till sundown, he was acquitted. If he winhed to call off, he cried out 'craven!' and was held infamous, while the defendant was advanced to the honor."- Blackstone.

Bridegroom.-Mason, (uew edition), §45; 2.
Ye-Mason, (new edition), § 133. L'e is the nominative form of the pronoun, (A.S. ge) ; you the accuative. In Old English this distuction is carefully observed; and in later writera the rule was
even reversed. It was based, however, on the grammar of the Anglu-Saxons and ought to be so far sbserved that ye should not bo used in ordinary discourse as an wheusative. In modern style, ye is used whore solemnity or familiarity is intended, while you (A. S. Eove) is confined to ordinarg narrative. Thou is used occasionally in solemn speech, and it is also used to express tha familiarity of tenderness or contempt.

## 4th stanga.

Solvay.-"The Solway Firth separates Scotland from the western part of Cumberland; is in one sense, an arm of the Irish Sea, in another sense, the estuary of the rivers Sark, Eske, and Eden; extends about 33 miles east-north-castward, with a breadth diminishing somewhat gradually from about 9 miles to atout $2 \frac{1}{2}$ milos; has tides tlowing rapidly irith a 'bore' or 'reast from 3 to 6 feet high ; and, m its upper parts, except along the ruts of the streams, is all left bare by the reflux."-l'aterson's Guide to the Land of Scott. A detailed picture of these phenomena is given in Sir Walter Scott's novel Red Gututlet.

S'm come. -See first stanza.
Of mine.-Mnson, § 144, † § 479.
5TH. STANZA
Tr:ar'-SUbjunctive mood.

> Gth stanía.

S̈urlo - Mason, (new edition), § 160.
While. - A co-ordinative conjunction.
Fret. - Mason, (new edition), § $22 \bar{\dagger} \ddagger$.
Did.-Mason, (new edition), § 2054-20̃6.
Whispcred, according to Hales, connected with whist, which was "no doubt a word . . . . originally commanding silence. Compare Latin st, Italian zitto, French chut, . . . . English hush, hist, etc."

## 7th stanza.

Light.-Mason, (new edition), § 367.
Croup, spelled also croupe. -The back part of a saddle.
Sprung.—Mason, (new edition), § 225, 4, note *.
Are gone.-Soe am come, first stanza.
Scaur.-"A bare place on the side of a steep hill, from which the sward has been washed down by rains."-Jamieson.
quoth.-Mason, (new edition), § 225, 6, note $\operatorname{IT}$.

## 8 th stanza.

'Mong.-Mason, (new edition), § 23 , (near the end).
Qraemes, Musgrates.-See introductory note.
Forsters, Fenvoicks.-Neighboring families.
There was racing and chasing.-Comp. Byron's Waterloo, "Ah! then and there was:hurrying, etc." See Mason, § 381.

Cannobie Lee or Cannobiemuir.-A plain lying uorth of Cannobie, between the rivers Esk and Liddel.

Ne'er. - Sce note on 'mong, above.
Daring.-Mason, (new edition), § 216.
Class Exercises.

## $18 t$ stanza.

Distinguish $O$ from Oh , is come from has come; steed, horse, charger ; wide, broad; broadsword, weapon, sword ; rode, drove.; alone, only ; dauntless, fearless; knight, baronet.

What words in the second line add force to it?
Underline the emphatic words in the last line.
Parse all (unarmed), like, Iuchinrar.
Point out any example of poeric license.
Expreas the tirst line in prose. Mason, (new edition), § 256 ,

Distinguish stayed and stopped.
Brake, forll.-Meaning $?$
Ilad consented. To what?
Gallant. Who? Mark the pronunciation. Distinguish gallant and gallunt'; the p-llanticame late, and the gallant came lately.
Laggurd, dastard.-Meaning. What is the force of the suftix? Make a list of words having this suflix.

Distinguish brave, bold, gallant, courageous. * See Verbalist.
Point out in this stanza any deviations from grammatical laws.
Parse but, was, to wed.

## 3rd stanza.

Bridesmen.- Kinsmen. Meaning?
Bride's father. - Who? Who was the bride?
Hard, never.-Parse.
Distinguish among, amidst, and between.
Poor. -Why?
Craven.-Explain the comparison. What figure?
Said never a word. -Why? What may have cuused his silence?
Which of the two has your eympathies?
Come ye. - What effect has the repetition?
Ye-What is peculiar in the use of this word here?
Distinguish bridal, marriage, wedding.
Our.-Why does he call it " our?"
What figure in the fifth line?
How should the 4th line be read?
Underline the emphatic wurds in the last two lines.
In what narration are the last two lines? Express in the other narration.

GTH ETANEA.
Who speaks these words? With what purpose in view? With what effect? What features of the apeaker's charactor aro hore shown? Is cor seit shown in the third couplet? Why?

Wooed.-Meaning?
My suit you denied.-Express this idea in as many different ways as you can.

Lost love of mine. One cup of wine- - What is the force of of in - each. Give examples with of similarly used.

Of mine.-Parse.
Distinguish drink, quaff;-lovely, handsome; beautiful, pretty.
Point out examples of antithesis, simile, alliteration.
Express thin stanzt in the indirect narration.
Eth stanza.
The bride kissed the goblet. - Explain.
Threw doun. - Give the exact force of these words.
Cup.-Distinguish from goblet. Give other names for a drinking
vessel.
What figure in the third line? in the furth line?
Distinguish look, behold, gazo, glimpso, survey, view.
Looket down.-Why down?
To blush.-Why? What does the blush become?
Up-Why?
Sijh. - Why? What other sign of this feeling does she give?
Distinguish sigh, graan, moan ; smile, laugh, grin, giggle.
Bar. - Why is this word used? Would it have been similarly used in prose? Suggest other words that would answor at least as well.

In what narration is the last line? Express it in the other narration.
Parne tread.
6th stanza.
Supply any ellipses in the Grat line. Express the words in sgend line in their prose order.

Galliard.-Meaning 7 Grace.-Meanit ?f
F'ret. -Distinguish from fume.
What opinion of the bridegroom have you from the fourth line?
Express the last two lines ill the other narration.
What word in this stanza suggests its meaning by its soti.es?
Analyze the last two lines. Parse 'Tivere.

$$
7 \mathrm{TH} \text { stanza. }
$$

Supply ellipses in first line.
Ligit. - What in the force?
Croup,-Meaning? How could you tell it from the coniozt?
Surng.-Give the exact force.
Refore. -What different relations does this preponition express?
Give its opposites in each relation.
Which relation does it express here?
They'll. - Supply the suppressed part.
That.-Antecedent?
Point out any deviations from the laws of grammar,
Quoth is not commonly used. What effect has it here?
. . 8th stanza.

Distinguish chase, follow.
Ne'er-What figure? Give the exact force of this word.
Distinguish daring, dauntless.
What peculiarity in the rhyme of this stanza? What is it called? What efiect has it?

Is there anything in this atanza that seems to be a deviation from grammatical laws? Give a similar case from "Waterloo."

Gieneral Questions.

1. 1'araphrase each stanza of Lochinvar.
2. Tell the story on which Lochinvar is founded.
3. Lochinzar is called a tallad; Boadicea an ode. What in the ditrerence betwoon thom?
4. Sketch a map of this part of Scotland, marking the Border, and every place mentioned in the text.
5. Write notes on every proper namo in the poem.
6. Tell what you know of the character of (1) Lochinvar, (2) the bridegroom, (3) Mr. Graham, (4) his daughter.
7. Which character has your sympathios? Why? Dues he in your judgment deserve them?

## QUESTIONS IN EDUCATIONAL PHILOSOPHY.*

BY THEODORE त. MAND: M. A., D. C. L.,
Late Professor of Education and History in Acadia College, $N ; \dot{S}$.
Dr. Rand directed the attention of the Association, 1st, to some of the aspects of the so-called old and new educational teachings; 2nd, to the important doctrine of the education of the Will, which is now commanding a growing attention; and 3rd, to the truth that education embraces not only the associated development of all faci:lties essentially human, buit the co-ordination of thy functions as well, a phase of education which has yet received little or no careful attention at the hands of educationists. He then said:-Herbert Spencer says that the suppression of every error is commonly foilowed by a temporary ascendency of the contrary one. Attention wan called to facts in the history of educational philosophy as illustrative of this mode in the fluctuation of opinions, whereby advancement has been made and solid educational progresis graduilly mecured. As to this Jaw, that the "supprassion of every error is
*Extract from a paper read hefore the Nova Scotin Tenchera' Provincial Educa. tional Aspociation, at their meoting held July, 1886, in the Normal School, Truco, X.S.:
commonly followed $b_{j}$ a temporary ascendency of the contraty 1.he," it is a matter of common ubservation that onc extreme follurs annther; that when one phise of a complex trath has so engrossod attention as to cohscure a complementary phase, .nd thus to intruduce novious arrors intu practice, there is a recuil towards the neglected truth and so towards errurs of an opposite character. The error manifestly consists in exaggeration, or in disprupurtion, of two coordinate factors of a coraplox truth; each in turn is allowed to vershadow the other. But truth in sume degree is always embudied in these oscillations of opinion, and we may expect the movement to end in the conception of a larger truth, that will embrace two smaller but co-ordinate truths. Illustrations were adduced and the resultant progress noted in the wider truth gained. The old education assumed that man is to be brought to his most complete state by artilicial means. The new education assumes that man has within himetelf all the resources needed to attain his most perfect state. 'ine old doctrine is right in issuming that education is a work of art, requiring for its greatest perfection all the resources of human ingenuity and skill; but the new doctrine that education is a natural process is also right. The roconciliation hes in the fact that education is a natural process directed by human art. Su far as the process of mental culture invokes the viganic functions of the mund, it is natural; but su far as it depends on the selection and presentation of knowlelge, it is artificial. Mere nature is as puwerless to produce a man fit for the cumplicated duties of m dern life as to priduce a Gravenstein apple or a telegraph. Th. uld regards cducation as a prucess of manufacture. The new regasds education at a process of natural growth. As human beings, we are born with a predetermination to gruw, and will continue to piss through successive stages, becauso we are powerless to resist tiais dominant law of our nature ; yet this growth is in the power of man to bo controlled, modified. moldod, enlarged or contructed by him. The .id naguifics tiou ullee of the teacher and the teat buok. The new regards the teacher as rather negatively useful and the text book as somewhat of an obstacle. Books are good only as the depositories of past experience and discovery. It is now generally admitted that when teachers and books become more than helps they are hindrances; they aro valuablo only in proportion as they minister to self-help. The old conlines itself to accumulated knowledge; the new sets the pupil to the task of re-discovery. We are inclined to think, however, that the type of school work is the acquisition of accumulated knowledge, aided by observation and experiment needful to give interest in the subject studied. "Objzct teaching" is chietly valuable as it recalls tho attention from symbols to the things symbolized, rather than as a means of conveying new knowledge. Under the old education the offi: 0 of memury was exulted, but the ctilture of the obsorving faculties was sadly neglected. To make the memury a more storchouse, especially of unused material, was an error, but modern practico has veered to the other extrence and has too much ovorlooked this vory important factor in our education. A duecultivation both of the powers of observation and of memory is uecessary to sound and adequate results.

The education of the Will is one of the more impurtant questions connected with educational philosophy, and it is now furcing its importance upon all who hive to do with the practical phase of education. The new paychology regards the Will as even moro central in the character than has been the wont, and that the practical difference between it and tho intellect is very great. Indeed, the intellect may be so trained as to enfeeble and dissipate the Will. It is due to, the recognition of this truth that all earnest educationc.l thinkers aro coming to believe that we must "moralize " as wel' in "mentalize" childaren, - must develop Will as a chief factor of per so sal character. The Will is as dependent on the culture it receives as the intellect.

As lu authod, philusuphio murality is nut the desideralum. The young chald instinctively leans upon the Will of the teachur. The toacher's Will becomes his law. Thruagh habit there must be woten a pluxus, which serves as the very web of character. Conduct must be inechanized, su to speak. Thus great furce is loft iree fur creative and duterminative effurt. It has been said that our purpusing volitions are very fors compared with the lung series of desires, acts, and re-actions, often contradictory, many of which were never conscious, and many once willed but now lapned to reHexes, the traces of which, crowding the unknown margins of the soul, constitute the organ of the conscious will. Obedience is the basis of all ethical culture. The teachur, however, as the child develops must recogmze, the necensity of developing selt-guidance. The child rises from a state of dependence on the Will of another to that of dependence on his own Will-ho becomes a law unto himself. Education has been defined as working against the chance iafluences of life, and precepts and principles are necessary to incite the Will to exertion, and to steady it. The danger to be had in vew is that the child will give assent, but will not do. The mulding of conduct entelligently and of choice in accurdance with sound maxims and prmeiples guarantees the compact organinization of mand and will. The result gives power. To be able to secure It in a large degree is une of the lawful demands now being made, even of elementary education. The training of the Will through mental wurk ts one of the great opportunities ever before the teacher. Will and character are educated by effurt, not by acquisition. Always to wind alung the lines of least resistance into the chuld's mand, is enervatiug. The consciousness of effort, of the outputting of overcoming energy, develops the Will and counts for character. Doing is ossential. Smattering is dissipation of the wall-quality of mind. Only steady and cuncentrated efforts in a given direction are of roul holp. It is never to be forgotten thatall short cuts to an education, all teaching of results apart from the processes by which the results are reached, are not helpful in the training of the will of maturing minds.

In conclusion, the culture of our emutional natures was discussed. This is a proslem which, it seemed to the speaker, 18 worthy of the deepest philosophical thought, and most painstaking experiment. The object of :ducation is the development of man, the making the educated as perfeit a man as possible. To be duly qualified and equipped for life's duties, man should not only have abundant stores, but abundant power and facility for using these most variously. Tie great secret of mental education is not the forming of the mind, but the making of it. It is the cvolving of power os faculty, and a true culture is the evolving not of one faculty, but of all faculties,-faculty of intellect, science; faculty of emotion, feeling; and rational faculty for adjudicating upon the evidence of both, wisdom. The wise man is beneficent and reverent, because he reasons, not alone from intellect and science, but likewise from the feelmg of beauty and the emotions of love and faith. If both intellectual and euotional faculties are developed in him, he cannot do otherwise-both witnesses plead and he must listen to them ; they have been bred in him, they are bone of his bone. But let ono be suppressed and the most rational adjudication is most partial. Let intellect be suppressed and the result is supersition and idolatry. Emotion cannut prosper without knowledge, else it will have brute gods and human victims. But without emotion religion is extinct, and even science would presently become a moral peat, going to war for a theory, vivisecting human subjects or destroying deformed infants, as the emotion-suppressing Lacedemonians did, in fact. Education, whatever its umount, should recognize all faculties that are essentially human, developing them by exercine, co-ordinating them in exercise, and finding them fit and wholeome work.

All hideously grutesyue and whid varieties of crime utter，in hur－ riblo dumb mution，accusation against our neglect of human faculties．They are，in fact，perverted human faculties ince tract－ able，nuw telling in savage act，unmistakable，what unce they had heart and will to du．Thuy say，wo would havo gone to tho suath pule and the nurth，have battlet with hurricanes and icebergs； have holped our curiuus brains to mure knuwledge of your planet； we would lave marched，sailed，delved，burrowed and dived；but you found us no work，and we have fuund it ourselves．This much for brute crime，the ugliest result of neglected faculties，or one－ sided culture．But look at the unbrotherly disconi，and jar，and jealousy amongst leaders of education，each disparaging the other＇s work，from a sheer inability to apprehend it．＂Classicists＂and ＂naturalists，＂jgnore one another＇s clains to educational priority， because each is barren on that side where the other is cultivated，＂ and cultivated where the other is barren．Would we have each person a mastar zi ula subjects？By no means；yet we agree with Vitruvius in demanding a knowledge of the principles of all，and affirm with him that an adequate mastery of one subject presup－ poses this elementary knowledge of ali others．It is not so much the variety of facts and experiences thus attained，as the variety of thinking power and feeling power that confers this transcendent mastery which results from many sided develupment．Just here we are wont to rest confented．Cultivate，we say，every human faculty，intellectual and emotional，none missed；find studies and occupations that work and exercise these，and our catholic education is accumplished．But it is not so．Take any familiar example，say that of architectural construction，if the architect＇s knowledge of beauty and construction be separately acquired，such knowledge will not aid him in combining beauty and structure in one design． These will ever be two alien categories of conception with him，and what he modities to satisfy his sense of the beautiful，he will pres－ ently find has damaged his construction．

The associated development of the faculties and coürdination of $\checkmark$ their furctions is then the fuil statement of the theory of integral education．Although the practical and obvipus relation and inter－ Jependence of all the sciences facilitate coürdination of the intellect－ ual faculties，a practical fusion and，consequently，coördination of these with the emotional faculties ia by no means so easy an achieve－ ment．

The solution is to be sought in the direction of a sufficiently attractive educational agent capable of evoking into simuitaneous exercise both intellect and emotion．It is not our purpose to do more than direct attention to this matter．Right reason，that is wisdom，takes account of botls intellect and emotion－of the whule man ；and instead of suppressing any human faculty；duly and con－ sistently develops each，and represses the exuberant in both；for intellect also，as we have said，may run riot．If our practice fails to recognize the importauce of the culture here insisted on，we shall find even more than at present an insurgency on the part of the pasaions imperatively calling for an arbitrary exertion of intellect to suppress them，－of the brain to suppress the heart ！－and then a grievous groaning under this inteliectual despotism till nature rises in revolt，and the head and the heart are at perpetual war． The uncultivated emotions，undisciplined to take delight in truth， run．riot and feed on monstrous fiction．There is a morbid desire for the unnatural and pseudo－miraculous，science seeing nature from one side，the intellectual，findi her a circle of inexorable and self－sufficient causes，or，succumbing to insurgent emotions，pre－ $\checkmark$ usily disregarded or disowned，turns credulous，making gamen or． electric force into gods；while literature purvegs to the appetites of insatiate a motions，keen upon bloodished and the adoor of crime． Do we ank what these renulte have to do with the emutions？Will

[^0]cultivated emotions，chastenal，conrdmated and raconcaled with reason，uvincu these appotitus or aimit of these s：sulte？Are the omotious fundamentally avil and unworthy and meapable of cul－ ture 1 Are thoy unhuly and unchristian 1 Tuall thuse questions wo must answer＂nay．＂And is there no danger lest our modes of thought bewnne antichrist ；- the emotions dead，where Christ assumes them living，demands this，in fact，as a basis oi is teach－

## Examimation 絧crs．

## EDUCATION DEPARTMENT ONTARIO．—DECEM BER EXAMINATIONS， 1885. <br> high school entrance． HISTORY <br> Examiner，－ $\bar{J}$ ohn Senth，B．A．

Norr．－A maximum of 5 marks may be alluwed for neatness．
1．How did William the Normat cume to be king of the Euglish？ What changes did he and his sons make in Eugland？
2．State the chief provisions of the Magna Charta．What led to its being aigued？Why is it valued so highly？

3．Give an account of the great changes that tuok place in Eng－ land during the reign of Queun Elizabeth．

4．State briefly the causes and the results of the American War of Independeuce，and the Revolution of 1688.
5．Why is euch of the following important in the history of the English people：－

The Battle of Bosworth，The Seven Years＇War，The British North America Act，Sir Robert Peel？

6．What should we admire and what shculd we condemn in the character and conduct of King John，Cardinal Wolsey，Hampden， and Charles I．？
7．Explain the meaning of the following statement：－＂In Can－ ada all questions of government are settled in Parliament，in which both sovereign and people have a voice．＂

## geograpay．

## Examiner，－J．E．Hodgson，M．A．

1．Define：－latitude，longitude，onsis，delta．
2．Namo the provinces and territories of Canada．
3．What counties of Ontario border on Lake Ontario？
4．Name the principal sea－ports of Canada．
5．Trace the following rivers ：－Mississippi，Danube，Nile．
6．Draw an outline map of Afric $s$ and indicate thereou the posi－ tion of ：－Algiers，Cairo，Natal，Cape Bın，Victoria Nyanza， Orange River．
7．What and where are the following：－Labrador，Three Rivers， Portland，Selkirk，Cuba，Panama，Heligoland，Maelstrom，Vésu－ vius，Oyprus，Malta，Ceylon，Formosa．Tranavaal，Fezzan，Niger
8．（a）What portions of Canada are noted for any of the follow－ ing products ：－wheat，apples，peaches，pine，coal，iron，salt，gold， copper $?$
（b）What commodities do we nbtain from the following coun－ tries ：－Japan，Barbadoes，Spain，Brazil ？

$$
\begin{gathered}
\text { ARITHMETIC. } \\
\text { Examiner, }-\overline{\text { E. }} \text { Hodgson, M.A. }
\end{gathered}
$$

Nore．－A maximum of $\bar{\delta}$ marks may be added for neatness．
1．Define the following terms ：－Factor，Prime Number，Multi－ plication．Write down all the Prime Factors of 2,310 ．


2. (a) Roduce to simplest form : $133{ }^{3}{ }^{3}$.
(b) What is the least number from which 3,224 and 1,656 may each be taken an oxact number of times?
3. A man who lost $\frac{1}{3}$ of his fortune in one year, and $\frac{7}{7}$ of the remainder the next year, had $\$ 900$ left. Find the amount of his fortume at first.
4. What quantity taken from 1001 will make it exactly divisible by $12_{3}^{3}$ ?
5. Express 3.74976 minutes as the decimal of a week.
6. What will 11,700 feet of lumber cost at $\$ 27.50$ per thousand?
7. Name the units of longth, time, and sterling money.
8. Find the simple interest on $\$ 800$ for 3 years at 51 per cent.
9. A cistern has 3 pipes; the first will fill it in 10 hours, the second in 12 hours, and the third in 10 hours. In what time will they together fill the cistern?

## COUNTY OF WELLINGTON PROMOTION EXAMINATION PAPERS. -MARCH 26 mR , 1886.

## CANADIAN MISTORY.

entrance to gourth class.

1. Name six or seven early Canadian explorers. What does explorer mean?
2. Tell what you can about Frontenac, Columbus, and Champlain.
3. Who was the first Canadian Viceroy of the French King? When? What became of him?
4. What inducements had Canada for carly European explorers and traders?
5. Namo somo hiadrautes to rapld settlement in Canada's early history.
6. What is meant ly "The Company of Merchants," "Company of One Hundred Assuciates," "Customs of Paris."
7. Who were La Salle, Marquette and Cartier?
8. What Colonial wars occurred between New England and New France (Canads), and briefly describe one of them.

## GEOGRAPHY.

## ENTRANCE TO FOURTH CLASS.

1. Define axis, horizon, harbor, estuary, peninsula. and boundary river. Give exanples of the four latter.
2. Name the countries, also their capitals, in North Americs bordering on the Pacific Ocean.
3. Name the interior countics of Ontario and their county towns.
4. Name the provinces of the Dominion in order, beginning at the west ; also name and locate as well as you can their capitals.
5 What and where are Columbia, Orleans, Regina, Chicago, Canso, Owen Sound, Nelson, Cod, Alleghany and Rio Grande?
5. Name the exports and imports of Canada.
6. Draw an outline of the Province of Ontario, marking the position of its cities; also trace on it the Thames, Grand, Severn and Rideau.

## SPELLING.

enthance to fifti class.
To be read slowly and distinctly, and the grentest care taken that ouch pupil understands every word. Each sentence to be first read in full, the pupils simply paying attention, thon again slowly, the pupils writing.

1. The wretch concontred all in solf shall forfoit fair renown.
2. I had beun the humble instrument permitted to unravel this purtion of the great mystury.
3. The sun produces aqueous vapor.
4. The old' schoolmaster's amile of approbation made his face seem very pleasant.
5. Thoir batterel srmor had flashed fiory and golden in the sunshine, and now looked silvery in the moonlight.
6. Write your name in kindness, love, and morcy.
7. It is congealed intu a sort of wax, without, crystallizing.
8. They thought these maivellous ivi... $\mathrm{z}^{3}$, clad in glittering steel, or in raiment of various colors, were inh bitants of the skies.
9. Fame is the fragrance of heroic deeds.
10. The young man, after the reverential manner of thowe timen, bowed to the ground.
11. She lives in that great cloister's stillness and seclusion.
12. Pollution, benediction, decrepit, blithese.ne, gurgling, immense, dagnities, zigzag, yearned, dusboliove, imporishable, mesnorial.

## ARITHMETIC.

## entrance to firtir class.

1. Define Fraction, Mixed Circulating Decimal, Discount, Ratio, and Proportion.
2. How long will a railway train 220 yards long take to cross a bridge 440 yards long at the rate of 15 miles an hour?
3. A piece of ground 40 rods long contains 8 acres. Find the cost of fencing it with a straight rail fence, the rails being 12 feet long and costing 820 a thousand; the fence to be 5 rails high, and 1 foot allowed for overlapping.
4. If 3 men cr $\overline{5}$ boys can du a piece of work in 15 days, in what time will 3 men and 5 boys do the work?
5. Divide the product of the sum and difference of 82 and $71^{3} \sigma$ by half the difference of their squares.
6. If a man sells a horse which cost \$120, and loses $\boldsymbol{q}^{2}$ of tho proceeds; find the selling price.
7. Suld 2 loads of wheat each containing 65 bushels. One load brought 12 cents a bushel minre than the other. The amount received for the one load was $\$ 4.20$ more than that received for the other. Find the price per bushel of esch load.
8. At what fraction of cost are goods marked which when lowered 15 per cent. leave a profit of 10 per cent.?
9. Find the difference between the simple interest and the true discount of $\$ 480$ for 2 years at $7 \frac{1}{2}$ per cont.
10. From 70 take $6 \cdot 0125$ and divide your answer by ( $7 \cdot 79+4 \cdot 71$ ).

## GRAMMAR AND COMPOSITION.

entrance to fifth class.

1. Anályze fully:-

The thoughts are strange that crowd into my brain, When I look upwards unto thee.
2. Parse: 'l'houghts, strange, crowd, that, into, upwards, and thee.
3. Give the possessive plural of : A boy's hat; a man's folly; $a$ woman's dress ; a sheep's tooth ; my brother's knife.
4. Define: Clause, imperative mood, predicate, gender, case, paragraph, and transitive verb.
5. Correct :-
(a) How beautifully it looks.
(b) The rapidity of his movements were beyoud example.
(c) None of my hands are empty.
(d) It was not her that was to blame.
6. Paraphrase:-

Keep gunrd of your words, my darlings, For words are wonderful things.
Thes are sweet like the bee's fresh honey, Like the bees they have terrible stines.
They can bless like the warm, glad sunshine, And brighten a lonely life,
They can cut in the strife of anger, Like an open tro-edged knife.
7. Construct a sentence containiug a transitivo verb, an adjective clause, and a prepositional phrase.

## ENGLISH MISTORY.

## entrance to mifth class.

1. Who wore the Britons? The Gauls? The Saxons? The Danes? The Normans?
2. Tell what you know about Alfred, Simon De Montfort, Hampden, Marlborough, Walpule, ard Tennyson.
3. What is meant by the Reformation? How was it brought shoi:? Name sinme of the leading apirits in this muvement.
4. Whit caused the American War of Independence? The war of $1812-15$, The Crimean War?
§. Briefly deacribe : Petition of Right, the Emancipation Act, the Pest Act, and tho Act of Supremacy.
5. Name sume leading men who lived in the reigus of Elizabeth, Queen Anne, and Queen Victoria.
6. What is meant by : Politics, Cabinet, Speaker, Opposition, Premier, Act of Parliament?

## GEOGRAPHY.

## ENTRANCE TO EIFTH CLASS.

1. Nume the countries and their capitals borcuering on the Mediterranean.
2. Name the New England States and their capitals.
3. Draw a hemisphere neatly marking on it the Tropics, Arctic and Antarctic Circ'es, and Meridians.
4. New York is $74^{\circ} \mathrm{W}$. Long. St. Louis is $90^{\circ} \mathrm{W}$. Long. Find the difference in their tiune.
5. Name, say, ten exports and ten imports of England.
6. What and whero are Tasmania, Melkourne, Congo, Zanzibar, Buinbay, Sinai, Skye, Lepanto, Atlas, and Tiber.
7. Tell the cause of the tides. Also locate three volcanoes and three salt lakes.
8. Write the names for which the following abreviations stand : B. C., Mich., O. F. R., N. S., Lat., P.M., Mun., N. Y., Cal., and P.E.I.

9: Draw an outline of the British Iales, marking the position of Cork, Glasgew, Liverpool, Dublin, Edinburgh, London, and Cheviol Hills.
10. Name the Tslands of the Baltic, the rivers flowing south in Asia, and waters (both lakes and rivers) whose ultimate outlet is the Nelson aliver.

## EASY PROBLEMS IN PHYSICS.

## BY A PUBLIC BCHOOL TEACHER.

1. Deduce the formula for convorting degrees on Fahrenheit's scale to corresponding degrees on the Centigrade scale.
2. Convert (1) $84^{\circ} \mathrm{C}$. into F . ; (2) $40^{\circ} \mathrm{C}$. into F ; ( 3 ) $39^{\circ} \mathrm{F}$. into C .; (4) $76^{\circ} \mathrm{F}$. into C .
3. Explain the thenry of Renmur's thermometer. Where is this instrument used i Write down the equations connecting the numher of degrees 111 a given tomperature, for the thiee thermometers, Fithrenhait, Centigrade, and Reamur.
4. The number of degrees indicnted by a Reamur thermiometer is 66. What is the corresponding numbur on tho Centigrade scale? On the Fahrenheit?

- The sum of tho readings on a Fahrenheit and a Centigrade thormumetor is 102. What is the reading on each?

6. State and explain the laws relating to the variation in the volume of a gas, for change in temperature or pressure.
7. A quantity of air occupies 29 litres under a pressure of 740 mill. ; what will be its volume under a pressure of 755 mill. ?
8. 100 volumes of air under a pressure of $29 \cdot 25$ inches of mercury become how many volumes under a pressure of 30 inches of mercury?
9. At what temperature will the reading of the Fahrenheit therutometer be three times as great as that of the Centigrade?
10. At a temperature of $40^{\circ} \mathrm{C}$. a quantity of gas occupies 45 cubic feet, what will be its volume at $70^{\circ} \mathrm{C}$.?
11. At a tomperati:re of $27^{\circ} \mathrm{C}$. a quantity of hydrogen measures $100 \mathrm{C} . \mathrm{C}$. ; find its volume at a temperature of $-47^{\circ} \mathrm{C}$.

A certain quantity of chlorine at a temperature of $\overline{0} 6^{\circ}$ Fahrenheit occupies 28 C.C.; what space will it occupy at $60^{\circ}$ Fuhsenheit?
18. Under a pressure of 760 mill, and at a temperature of $17^{\circ} \mathrm{C}$. a quantity of confined air measures 370 C.C.; what will be its volume at $33^{\circ} \mathrm{C}$. and under a pressure of 740 mill . ?
14. 93 volumes of hydrogen at a temperature of $37^{\circ} \mathrm{C}$. and under a pressure of 29.5 incher of mercury become how many volumes at the normal temperature and pressure?

## Asteribk.

(Ansuers will be given in next issue of the Journar).

## frattical PAlthods.

We announced that in this issue we would discuos the best plans for malsing Friday Afternoons both pleasant and profitable. We have nut received the response we expected. We considered the subject a prolific one, but perhaps it is so easily settled in the teacher's mind as to the nature of these exercises that no diticulties are found, and no help from us is needed. If so, we are satisfied; it leaves more space to insert other communications and selections that may be of greater utility, and we print some points in primary arithmetic that may be acceptable. We have, however, one letter on Friday Afternoon exercises :

Dear Sir,-Did the teachors who read your excellent educational papor ever try the plan of publishing a school newspaper every week? Of cource, I do not mean a printed one. We hiave large, common paper, such as is used for our country newspaporr, and the communications are pasted on it. A fourth class girl or boy is appuinted editor for two weeks, and the editor's duty is to enlist the help of two sub-editors, and to procure contributions from the pupils of every grade in the school. I amsupposed tos act as critic, and am expected to make whatever comments I think right on the published productions. Some pupils show much taste and refinement in the selections they bring the editor, and all evince an interest in the publication, which I have found to be productive of the best results. We permit no political or sectarian discussions or references ; wo have brief ess.ys on various topics arising out of the week's lessons; dificulties in study aro inserted in the "Question Bux"; pictures are pasted in with descriptive information ; countries visited and what was seen in them-arising out of geography lessons; seloctions from standurd authors, in the contributor's best caligraphy, short poems, proverbs, witticisms,all writter on :one side of the sheot to alluw of pasting on-and a variety of other matte:.
As we cannot give a copy to each pupil, it is read out by ono selected by myself, and is Lept on the school table for criticism for one week.

I have three classes in my room, my assistant has two, and all are assembler in my room when the "School Echo" is read. I should have said that contributors are not reguired to give their names.

Yours, etc.,
Grenrille Co.
Donald.

## ON SUBTRACTION.

When a person-say, a store clerk-is giving change, does he perform an exerciso of subtruction mentally to ascortain the ripht amount? Suppose he 'ras to make change out of a two dollar bill for a purchase of 37 cents' worth, does he say 3 at out of two hundred leaves 163? No, ho performs an exorcise $\mathrm{m}^{2}$ addition to equalize the amount of sales and the change with the sum tendered in payment, and will put down 3 cents, saying 37 (cost of salos) and 3 make 40; puts down 10 cents more to mako $\overline{0} 0$ cents ; 50 cents additional to make one dollar, and one dullar more to make up the two dollars. Thes is done rapid!y and perhups with more accuracy than the mental subtraction process. Subtraction is, tharefure, performed by addition; that is, it is really complementury addition. Now, is it needful to teach our littlo ones the mysteries of borrowing and carrying, and burden their immature intellects with the herculean effurt to take 8 out $1 \overline{5}$ ? Already in their addition exercises they have learned that 8 and 7 make 15 . and can tell how much must be added to 8 to mase 15 , or to 6 to make 10, etc. They have been instructed to carry one for numbers from 10 to 19 inclusive, and the apparently questionable honesty of borrowing 10 and carrying back only 1 instead, is obviated by a consistency between operations in the direct addition and the cumplementary. Thus:

Find the difference between 8035 and 4321 .
86ij3 1 and what mako is 4 (put down); 2 and what
4321 makes? 1 (put down), and so on.
4314
Find the difference between 5635 and 4739 .
$8635 \quad 4$ and what make $\overline{5}$ ? 9 is more than $\overline{5} ; 9$ and what
4739 make 15] 6 (down); carry $1 ; 3+1=4$, and what
$38 \overline{96}$ make 1319 (down), and so forth.
In Long Division this process will save time and needless figures, for the multiplication of the divisor and complementary addition of the product may be performed simultaneously, thus:

5S36)1875943(321
120514
8: 23

## 2iss Rem.

The operation is periurmed as folluws: 3 sixes are 18 and 1 (down)=19, carry 1,3 threes 9 , and $1=10$, and 5 (down)- 15 , carry $1 ; 3$ cughts 24 and $1-25$, and 2 (down) $2 \overline{4}$, carry 2,3 fives $1 \overline{5}$, and $2=1 \bar{t}$, and $1\left(\begin{array}{l}\text { awn }\end{array}\right)=18$, and so on with each line.

Toronto.

## Senex.

## Erutational Aotes amd ficlos.

A Teacher's Institute for the Township of Yarmouth and Southwold, will probably be leeld during May in St. Thomas.

Mr. Dumald McCaig, of Ruch Irund, at one time Inspector oi Pubjuc Schovels for the Cuanty of Wellanton, has been appointed In. spectur of sclouls fur the district of Algoman Firee P'ress

The vacancy in the divison of the Ailsa Crayg .Public School, caused by the resignation of Miss Jackson, has been filled by tho appointment of Miss E. Sproat, of Lucan.
A by-lax to grant the sum of 52,500 to the Collegiate Institute will shortly be submutted to the St. Mary's people. The existence of the school will depend on the result of the vote. - Frec P'ress.
The Strathroy Collegrate Institute DBoard aro talking about in creasing the accommodation by enlargure the Instutute building, the probabile cost of whrh would be $\mathbf{3 5}, 000$.
D. $k^{2}$. Clapp, 13.A., of N. Wellingtun, has resigned his position as Inspector of the Listowel Public School, and Mr. William Alex hander, county Inspector of l'erth, has been apponted in his stead.
The third-class non-professional will occupy from! an m. on Tuesday, the Gth July, to $15.25 \mathrm{p} . \mathrm{in}$. on Sinturday, the 10 h . The firstclass grade C commences un ALonday, the 12th of July, and grades A and 13 on Tuesday, the 20th.
A number कf the gris attending the Central School, London, have leen formed into a thoral society, under the direction of Miss Cogne. Fach eirl will furmsh her own plants, and will be reaponsible far their proper cultiration. Somerhere abmat the month of June they intend holdang a publice exhabition of the results of their ndustry:-Firec l'rcss.

We once heard a man of prominence in the community in which ho lived, and of experience in school direction as member of the Board of Education, declare that if God would forgive him for over proposing to lessen the salaries of tenchers ho would nover be a party to consent to such a plan again, as experience had taught him that of all the methods dovised for crippling school work it was tho most effectual. He knew it by actual experience. Would that others mght adopt the same wise conclusion.-Central School Jour. nal.

A very successful examination was hold at the Coulson Union school on the 22 nd ult. The teacher, Mr. F. C. Whitelock, was assisted by tho Rov. J. R. Real, Warminster; G. A. Rix, Hobert; E.J. Palk, Craighurst ; and E. Wilson, Eady. About 30 visitors were present. After the classes were examined Mr. Real was elected to tako the chair, which he accepted ; and a number of recitations and readings were well rendered by tho pupils, interspersed by some chotce slees sung by the schuol. Addresses were delivered hy the trustees, parents, and teachers present, all expressing ontire satisfaction with the order and condition of the school.
The North Wellington teachers assemble in council at Mount Forest, 27 th and 28 ih inst. The programme is replete with firstclass exercises, and Mr. J. J. Tilley will give his able assistance to make the meeting a success. Arrangements are made for discussion on each of the subjects to be presented. We are surry that want of space prevents our giving the programme of 28 subjects in full. Dr. H. P. Yeomans is to open a discussion on "School Hygiene." All the classes of the Mount Forest Model School. except the highest, will be present at the several sessions to afford the teachers opportunity for practic.l illustration. A. M. Slields, B.A., is president, and Miss C.srrie A. Junes, of Harriston, secretary.
By arrangement made by the Minister of Education with the authorities of the University of Toronto, the University of Trinity College, Victoria Unirersity, and Queen's University, candidatos for matriculation will have the opportunity of being examined at each of the High Schouls in June and July at the same time as candidates for teachers' certificates, and the Universities will furtherinnere accept the results of the non-professional examination for teachers' certificates, so far as that examination covers the subjects required for matriculation, so that candidates need only take the additional subjects for matriculation. They may, however, if not candidates, for teachers' certificates, take the University papers all through. Applications for matriculation will be made as heretofore to the registrar of the Umversity at which the candidates propose to matriculate. The papers will be laid before the candi1 dates by the local presiding examiners, and the results returned by the Department to the registrars of the respective Universities. It has already been amnounced that Victoria, Queen's and Trinity Unversities appointed a common examining Board.-Journal, St. Thomas.
At a recent mecting of the Peterboro Board of Education Dr. T Tassie, Yruncipal of the High School, repurted that one of the High I School luspectors had mformed him that if the High School pupils idid not mprove in therr writing and reading, especially the former, plucking rould be general at the approaching examinations. Ho thicught it was about time the writing of the pupils mias improved, :unl he was pleased to know that more attention was being paid to this branch in the lower classes. Ho was pleased to make three important amnouncements to the Roard. The Governor-General's medal had arrived and was now in his possession. Mr. J. H. Burnham had offered a silver medal for the Institute pupil who ranks first in the Toronto University matriculations this year ; and Mrs. Nicholls gencrously offers a free scholarship at Queen's Uni1 versity to le competed for by pupils of the Institute. The Princiipal complaned that the Easter hulidays had materially interrupted the school work, and advised that as few holidays as possible be granted. Moved by Mr. J. R Strattun, seconded by H. Denne, "That tho thanks of this Buard be tendered to Mrs. Nicholls for her liberal grant to the Endumment Fund of Quocn's College, Kingston, wheroby a free course scholarship in arts is arailable for a student of thn College, and in her liberality in permitting Dr. Tassie, Principal, to nomi ate the student ; and tho thanks of this Bourd be also tendered to Mr. J. Hann Burmham for his gift of a solid silver medal for the pupil of the Institute taking the himhest marks at the matriculaticn examinations of Givirersity College, Toronto, and that the Secretary forwand a coupy of this resolution to the partics above named."-Carried. - Peterborough Examiner.

## Citctatn © Chit-CHhat.

Dr. Oliver Wendell Hulmes, is visiting Eugland. It is more than hall a century since he wis there before.
"The Pilgrims Progross," has been trauslatod into Chinese, and is aid to have attained a large circulation in China.
A Shilling Edition of Thackeray's Works is beiny brought out in Lomdun. It is said that advance orders have been sent in for 50,000 copies.
"Joseph the Prime Minister," is the title of a new work about to be puibinhed. from the pen of Rev. Dr. Taylor, of Broadway Tabernacle, New York.
Miss Cleveland is said to be preparing a critical review of American fiction. The Current thinks Congress should consider the pror riety of voting her one of its medals for conspicuous bravery.
Gma is Co. have in preparation "Tho Begiuner's Latin Book," hy Wim. C. Collar, A.M., Hoad Master Roxbury Litin School, and Mi. Grant Daniell, A.M., Principal Chancery-Hall School, Boston. Ready in July.
The Second Volume of Dent's History of the Canadian Rebellion, is nuw out. The readers of it should also read the other side of the story as presented in the pamphlet lately published by Mr. King and others.
The Boston Latin School is the oldest school in America. Houghton, Mifflin \&Co., are about to publish Dr. Brook's oration, and Robert Grant's puem recently delivered on the clebration of the 250 th anniversary of the venerable institution.
D. C. Heath © Co. hare in preparation a series of Monographs on Education. Nunber one of this scries will be a Bibliygraphy of Pedagugical Literature, cirefully selected and annotated by Dr. G. Staniey Hall, Professor of Psychology and Pedagogics, John Hop-
kins University. kins University.
Forgotten Meanings is the title of a littlo hand book in which are called to mind the original meaning and use of nany words whose early signifization has been generally lost sight of. Thus, to give one or two illustrations, the word "awkward," is, by derivation, "left-himded"; the word "aghast" describes terror such as one feels whe sees a ghost; the word "nincompoop" is, the editor tells us, a corruptioa of the phress non compos mentis; and the word "bogus," he asserts, cones from "Borgheso," a riscil who swindled many people in this country by counterfeit bills. -Chris. tian Union.

## Trachers' ${ }^{2}$ Assaciation.

HaldimaNz.-AIfet in Calcdonia High School, April 2sth, at 10 a.m. Mr. C. Moses, I. B. S., in ahecuce of the Preeident, occupid the chair. The Rev. Mr. Black, opened the meeting with devotional exercises. Thic secretary reaid the manates of the hast regular wectus, whech were ailopted. Thic fyllouing cummattecs wero struch. Ist. Tu numato officers for the ensuing year Messrs. Andersun, Duff, Hume, and Misses Lambierc anil o Neil 2nd To report on the suitalility of the new registers-Mcssts. Finch aund Hindson, and the Misses Harris and Highfeld. 3ri. To report on the school journals-Nissrs. Rowat, Kenncly and MeMlurchy, nul Misses Wilson and Parker. A ceurral discussion took phace on the Entrance Exammations, in which Nessrs. Huma, Kennrdy anil Moses took purt The suljects in whith cuuth. dates generally failed were discussed, and the causce of fallure ponted out. Mr. Kcuncly. dwelt for some time on the subject of Orthocps. Hegnve a list of worls in daily use which were generally mispronmunced. and indicated their correct promunciation on the blacelhart. Mr. Cheswright discussel the dessirability of onamenting the school-houses and school grounds. He advecated the plantung of trecs, shrubs, vines, and the arrangian of a for nou cr- beds ; the lhanging of tho maps onthe walls, instead of piling them up in a comars to be destroy cal. Pictures and nottors mighit he hung on tho valls to advantage. Dr. MeLellan, Dircctor of Teachers' Institutes, ndircssed the Association on the subject of "The Teaching of Litcrature in Public Schools", Mr. David Muyle, of Toroato nuxt aldid csscl the teachers on the desiratility and fcasi: education anat the correc:ing of abuses gencrally. After a brief discussion of this sulject, it was movel by Mr. Clirswright, seconded by Mr. Hume, anil cesolveli, That in the opinion of the cenchers of the county of Hallimanul it is sicsinghlect to forma " Union " of the teaclicrs of the Province of Ontario, pnd that a delegato be appointed by this Association to attenid $\alpha$ inecting to be called for the furtheranco of the propaosd olject. On moticn of Mr. Creswright, seconded by Mr.

Kianear, it was resolvell to pay 40 per cent. of tho subseription price of cach Elducationdl Maguaine from the general fuml of the Association, for teachers subseribing for the same. A very large am highly apprecia. tive audience assembled in the Argyle Prestyterian Church to hear a lecture hy Dr. McLellan, on "Critics Criticised." Rev. J. Black occupied the chair. Mr. Finch took up the subject of Tin: "Tables. He illustrated tho difficulties in forming a good one by drawing tho time table of his school on the blackboard. After a lnief discussion of this subject, Dr. McLeellan discussed "The Training of the language Facillty:" The next subject diseussed was Eleuientary Drawing, ly Arthur J. Reading, Esq., tcarlicer of Mechanical and Prospective Drawing in the Ontario School of Art. Miss O'Neil illustruted her methoi of teaching the preposition to a class. Her methoil of teaching this subject was admired by all present. Miss Cassidy next taught a reading lesson to a class of begimers according to the phonic methon, nt which she provell herself an aliept. On resumimb business at 1.30 p.m. Mr. Hindson discussed " That Books," under tho following heads: 1st, The object of test books ; Qnd, The uniformity of text books ; 3rd, The ficquent clanges of text books. L. Kinnear, B.A., reada very able paper on English Phiniology. Mr. MeCarthy next discussed the Teaching of History. His treatment of this subiect camot fail of being productive of the very best results. Mr. Rowat discussed Decimal Fractions. The officers for the ensuing ycar are : President, Mr. R. C. Clieswright ; Vice. I'resilent, Miss S. Folinshee ; Sectetary-Ireasurer, Mr. C. Moses, I. P. S.; Executive Committee, Messrs. Kennedy, Hindson, Mc.Murchy, and Misses Murphy and Husband; Auditors, Mcessrs. Rowat and Fowler ; delegate to the Provincial Association, J. P. Hume, M.A. Several votes of thanks were tendered, and after a short address fron the Rev. Mir. Black, the Association adjourned.Condensed from the Grand Rirer Sachem.

## Giterarn Rebicus.

Outhines of Psicholoos: Portious of the Lectures of Hermann Iotz Translated and edited by George T. Ladd. Doston: Ginu di Company.
This volume contains dictated portions of the lectures delivered by Hermann Lotz-a Gennan philosopher of the widest culture, who, by prefer. ence, native facility, training, and practice was well fitted to deal with the great science of Prychology. It is not likely that any other compend of truths tonching the science of mind, at once so brief and compeehensive, is to be found in all the literature of the suliject. This treatise will be of specisl service to thoce readers who are desiruus of grasping the principles of modern philesophy without the labor of mastering the details. A wide range of subjects is toached upon within the limats of thas brief work, the second part meluding chapters on the Seat of tho Sonl, its lieciprocal Rela-
tions to the Body, its Essential Nsture, and even on the Kindom of Souls tions to the Body, its Essential Nsture, and cyen on the Kingdom of Souls.
The professor of Philosoplay in Yale College, performed the work of tranklation, and he has certanly presented to us the psychological truths of the original with admirable forec and exactuess.
The book is in handy form, well printea, and neatly bound.
Greek Inflection, on Onject Lessons in Guef Pumozoay, by B. T. Hardington, M.A.
This is one of the many valushle books issued ly Gimat Co. Buston, who have during the past few gean su largely cuatribued tw advance the study of Classual, Englinh and generallherature throughont the States and Canadn. The little brok of furty-fuur pages furnshies valuable anformation on the Philology of the languago of Homer, Thucydides and Demosthenes, and other Greek anthors who for $n$ hundred generations have delighted and instracted the human mind. The olject of tho work, the author states is "to cconomize time, and to sugcest a systenat.c and scientific trentment of the nom and verb," and "to collect the latest developnents of Philulogy." By means of mules and their application to the $A$, the $O$, and the Consonant declensions, by classified lists of numes of these declensions: by kimilar lists of ndjectives of the vowel declensimn of adjectives, also of ndjectives of the Consonant, and the Consonant and vowel declenston, and by a
 render it ant only intelligible, bat intenaely interesting. Wo cordially rectmmend this liul treatise, and we belicve it will be largely instrumelltal in accomplishing the object thelcarned anthor has in view.
The Chorce or Books, and other Literary Pieces, by Frederick Harrisom. Paper corers, 50 cents. Macmillan © Co., London and Nict York; Williamson \& Co., Toronto.
Ahout me-fifth of this brok is taken up with an essay on tho clooice of books, the rest of it leing rovised lectures to popalar audie, eres on various topics, sur h as "The Remance of the Pecrage" "+ Froudo's Lific of Carlyle," $\ddot{H}$ Lifo of Geerge Eliot", "HistoricLondon."."The JEsthete," "The Jrench Revolution" ric Tho strla is gooll and pleasing, and that porticn on "The Cluice nf Bonks," will hor mad with much profit by the student who trivlies a clear idea of tho lest literature to occupy his aticution in a given
time. timac.

Elozctucity Theated Expemmentahis. By Liumeus Cummiug, M.A., Lato Scholar of Trinity College, Cambridge, Assistant Master in Rugby School. Rivingtons, Waterloo l'hace, Lomulon.

This work contains the substance of experimental lectures delivered to some of the senior boys in lughy School, and conmrises one sehool year's course of ahout seventy lessons, of one hour each. I'he lessons are educational, not technical, aud anple explanation and numerous experiments are devoted to the principhes of the scieace. Tho rapil dovelopnent of electrical science and the many uses to which electricity is applied, demand an attention that must not be overlooked in our selools, sud a simplo and plain dissertation on the suliject, adapted no well to the sequirement, of our senior classes as this work is, should meet with the highteot favor from progressive teachers. We commend the boh so tho attention of all interested in physical sciente.

Tesmentinct Sona. Hemalib, by J. C. Macy. For 'Hemperance Meetings Lodges and tho Home Circle. Irace 35 cents. Ohiver Ditson \& Cu., Bos. ton.

This netr and genial book seems to ho an advance on previous ones in true musical quality; brightness, and appropriateness. Nuw and Good Temperance words to "Mome Again," "Margand," " Red, White and Blue," "Glozy Hall-ujal,"" Coming thro' the Rye"," Tenting on the old Camp Gromnd," and other favorite melodies, constitute a marked feature. There are also plenty of pathetic songs, batte and victury sonı"; some good tempreance glees, and music adopied to the various rites of G.ad Lemplars, 'lemplars of Honor, Rogal Pemplars and Sons of 'Temperamee, and the Women's Christian Temperance Union is not forgoten.

The Texishaxce Teachivos of Science. Adepted to the use of Teachers and Pupils in the Public Schools, by A. 13. Palmer, M.D., IJL.D., University of Michigan, with an Intromuction by Mary A. Liveruore. Cloth 60 cents. Buston: D.C. Meath \& Co.

This in just the look that is wanted to instruct our youth in the facts concerning the use of alcolol in any shape. To state that a thing is pernicicus without giving the reasons is simply to arouse curiosity to find out wherein it is so, and when the evil effects of alcohol on the varjous orgatis of the human body are so clearly and cmphatically shown as thoy are in this jittle volume, there can be no uncertainty, no illusion. Few who read this book will hesitate in the step they ought to take in justice to thenasclves, for the welfare of friends or the beuefit of the commanity. Teachers can. not teach temperance truths successfully if unacquainted with the physiology of the subject; in the book before us this is expressed in unanistakable language.

Inongantc CuEmistur. A Text Book for Students, by Prof. Victor von Richter, University of Ureslau. Authorized Translation by Edgar T. Smith, M.A., lh.D., Yrof. of Chemistry in Wittenlere College, Spriugfeld. Ohio. 460 pages, 89 wiod cats, and Colored Lithographic Plate of Syectra; cloth, \$2.00. Whiladelphia. I. Blakiston, Son \& Co., 'Toronto: Haxt \& Compais:

This book is the second ducrican cdition from the fourth German edicion, and it has reached five editions in Russin, one in Holland, and no in Italy. In most of the chemeal text-looks of the present day; one of the striking festures and dilliculties with which teachers have to contend is the separate presentation of the theories and facts of the science. These are usually tanght apart, asif catirely midencndent of cach other, and those exyerienced in teaching the strbject huow only too well the tronble encountered in atiemptiug to get the student properly interested in the science and in bringing lim th a clear comprehension of the same. In this work, which lias been received with such hearty weleone, ilie first edition having been rapidly disposed of, theory and fact are brought close together, and their intimate relation clearly shown. From carciul observation of experimente aud their resnles, the student is led to n enrrect understanding of the interesting principles of chemistry: The descriptions of the varions inorganic substances are full, and embody tite results of the latest discocerica. The periodic sysiem of Mendelejelf nud Lothar. Meyer constitutes am imphortut feature of the look. The thermo-clienical phenomenz of the various groups of elements also receive proper consideration, both in their relat:on to chemical aftinity and the law of jwriodicity: The anatter is so arranged as to adapt the work to the use of the begimer, as well as for the more advanced student of chernical science.

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## THE SCHOOLMASTER'S GRAVE.

DY T. c. habbaugh.

I stnod at the grave of the masterTho dear old man that died At his post in the sild log school-house, Where we sat side by side; The place looked lorn and lonely To me in the shadows.dim, But a bird in the alder bushes Was singing a song to him.

The flow'rs we planted above him Hare gone with the theeting yearn ;
We watched them bud and blossom, And watered them with tears;
And oft when summer twilight To earth new boauty gave,
We turned aside together
To stand at the master's grave.
I see him now as he taught us For the last time that day;
His face was sad and tender, For his thoughts seemed far away, And he looked the dear old master,
No longer stern and grim,
As if the angel in Heaven
Had whispered "Come," to him.

## And as he sat describing

The customs of foreign lands,
His face grew white, he trembled, The book dropped from his hands.
And with a gruan that scared us, Oa the deak he bowed his head; And we sat silent with horror, For we knew that he was demd.
Then over the scliool so merry
There stole a solemn hush,
And e'en the song of the robin Grew still in the alder bush.
And the laughter's face was sober, Still was the truant's shout,
And we felt that for the ratater Furever school was out.

I thnught of the school-days jolly, Of play.ground, beach, and class,
As I inelt by the grave of the master, And parted the long green grase.
And I tried to read the inscription That the parmon wrote for hina,
But the words all ran together For my eyes with tears were dim.
The master sleeps where we laid him, When the summer day was done;
You know how the children, weeping, Went humerard, one by one, And you and I at even, Whon slars lit up the sky,
Stole back to his grave together, To whisper 2 last " Good-by !"
Years have passed, but the master On the hill-side slecps, alone,
And the waving grass of summer Hid his memorial stone.
He was lind, the dear old master, Though soinetimes stern and grim, And I kuluw that the angels of Heaven Opaned the gate to him. - The Normal Exposient.


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