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Dec. I.-Entertainment by Mr. and Mrs. Wallis A. Wallis, of London, Fing. "Recitals, Entertainments and Costume Impersonations," the same as were given before the Queen and Royal Family at Windsor Palace, England.

Dec. 8.-Lecture by Hon. J. White Giddings (Lieutenant-Governor of Michigan.) Subject, "The Evolution of the Demagogue."

Dec. 15.-Humorist, Frank Lincoln, known around the world as "Lincoln and Laughter."

Dec. 22.-Lecture by Rev. Joseph Cook, of Boston, Mass. Subject, "Use and Abuse of Sunday," new.

Jan. 5.-lllustrated Lecture by Miss Olof Krarer, a native Esqui maux, 35 years of age, 40 inches high, 77 times in Philadelphia the $p^{a^{4}}$ four years and recalled several times in other cities. Subject, "Greenjan ${ }^{\text {d, }}$ or Life in the Frosen North."

Jan. 12.-Lecture by C. H. Fraser, a brilliant orator, humorous $a^{\mathfrak{p}^{\mathrm{d}}}$ instructive, powerful and striking. Subject, "The World's To-morrow," or "Dream of Destiny."

Jan. 19.-Concert by the Chicago Rivals. Miss Gertude Spragu ${ }^{\ell}$, phenomenal contralto, Miss Fannie Losey, great violinist, Miss Jen $\mathrm{p}^{\mathfrak{p}^{\mathrm{i}}}$ Shoemaker, singing, realer, and Delsartean, Mr. Francis L. Rollins, humor ${ }^{\text {isb }}$ and dialect impersonator.

Mar. 23rd.-Lecture by Rev. Robert McIntyre, (of Denver, Col) Ten thousand people attended his great lecture at Grimsby Park, Augar last. He is more popular than ever. Subject, "Thirty Hours in the Sunless World, or a Trip Through Wyandotte Caverns.'

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## Editorial Notes.

IT is well to bear in mind that it is quite as easy for a teacher to err on the side of explaining too much as on that of explaining too little. We were once associated with a lady teacher who simply overwhelmed her classes with the minuteness and profuseness of her introductions and explanations. Not only was much precious time wasted, but the self-reliance and selfhelp, which are the very essence of all true education, were discouraged rather than cultivated. She was deemed a brilliant talker, and evidently without being conscious of the fact, liked too well to hear herself talk.

A correspondent of The Educational Record, of Quebec, quotes the following as a sample of advertisements which are appearing from time to time in the papers.
"Wanted nine female and two male teachers for-district. Applications will be received up to July 27 th. Applicants must enclose three copies of recent testimonials, must be efficient teachers and must state salary expected." And then comes the rub as follows: "The Board do not bind themselves to accept the lowest or any tender."

And the situations in question, he tells us, like many others, are not worth more than $\$ 150$ per annum. Comment could but weaken the eloquence of such facts.

The first, best and all-sufficient reason why every boy and girl should be educated to the highest possible degree is that every boy and girl is capable of being thus edu-
cated. Every person should aspire to have a trained mind, simply because he has a mind to be trained. Education is worth having for the sake of the advantages it gives one in every worthy occupation of life. It fits its possessor to be a better farmer, a better carpenter, a better merchant, etc. But tenfold more is education worth having because it developes the human powers and fits its possessor for a higher manhood or womanhood. Educators of all classes will do well to insist on this view, because it is the broadest view, and because it covers all cases.

We referred, in a note in our last number, to some of the disadvantages under which public or State school teachers in Prussia are placed by reason of the relation of Cl urch to the State. On the other hand, the Prussian system has, no doubt, many excellencies. In an article which appeared a few months since in the Atlantic Monthly it is stated that there were in 1880,116 normal schools in Prussia, under the direction of the Guvernment, all of which were preparing teachers solely for the people's or elementary schools. No teacher can obtain a permanent position in these schcols unless he possesses a diploma from one of the normal schools. In Prussia teaching is a life business, and the teacher is a State officer, entitled to a pension when he becomes incapacitated by age for profitable labor. We are not sure that this is a desirable system, or that it would be even practicable in Canada. The same writer says that the Prussian Government is able to determine approximately how many teachers will be needed for the schools each year, and can so order the normal school work as just to supply these needs.

What are we coming to? Are the higher sentiments of the race deteriorating under the influence of scientific (?) craze? Persons of acute sensibilities and sympathies have long shuddered and protested in vain against the atrocious cruelties perpetrated in the name of Science upon helpless animals, ly vivisectionists. But to think that such things should be done in the schools, aml, tell it not in barkest Africa, by lady teachers: A recent number of the Wiscon$\sin$ Journal of Ellucation tells us that teachers of physiology even in Wisconsin high schools-some of them-are coolly cutting up live kittens and compelling their
pupils to witness the whole revolting process. It is time to wake from our indifference. Of what use is it-even setting aside the dumb creatures' rights-to accustom the boys and girls to witness anything so calculated to benumb the finer sensibilities and brutalize them? A young woman in one of those high schools, recently, when "taken to task" by a representative of the indignant citizens, replied that that was but the beginning of scientific research, and further, that only the ignorant object to such things. It is not long since we read in one of our educational exchanges, we think it was the N. Y. School Journal, an article over a feminine name, defending the dissection of the bodies of animals in the school room. The writer even tried to wax enthusiastic.

A High School principal, at one of the recent teachers' institutes, in the course of an address in which he very properly advised teachers to read broadly and by no means confine themselves to professional literature, took occasion, we are told, to disparage educational journals, or at least those published in this Province. This illustrates the tendency to extremes which is so characteristic, as Arthur Helps somewhere says, of mankind. There is no educational paper worthy of the name, certainly there is none published in Ontario, which does not, probably, do more to encourage and promote broad reading by teachers than any other agency. But to suppose that a teacher, we care not whether young and inexperienced or the opposite, can keep abreast of the times in his profession and make the progress in practical excellence which is the duty and should be the ambition of every teacher, without the aid of one or more good educational papers or magazines, is to miss the mark very widely. The teacher who should read only educational papers would never attain to great proficiency, even in that profession. But, we venture to say, the teacher who regularly and carefully gets all the good he or she can out of the best professional papers will be found to be, as a rule, the very teacher who reads most widely and intelligently on other subjects. Hence to set the educational paper over against the historical or scientific book, as if those who read the one were necessarily those who do not read the other, is to show a singular want of observation or thoughtfulness in the matter.

English.
All articles and communications intended for this department should be addressed to the English Editor,
EdOCATIONAL JOURNAL, Room $20,111 / 2$ Richmond Street West, Toronto.

## ENTRANCE LITERATURE.

the heroine of vercheres.
by the late w. h. huston, m.a.
AUTHOR'S LIFE.
Francis Parkman was born in Boston, Mass., 1823. When only twenty years of age he travelled in Europe (1843-44) and on his retmon was graduated from Harvard. He was early drawn to the consideration of the early history of America, aud in 1846, in order to observe the habits of the Indians and to become aequainted with their legends and traditions, he abandoned the pursuit of law. Owing to the severe hardships he encountered during his stay amongst the Dakota and other Indians, his health was broken and he has since been an invalid. Notwithstanding the great difficulty he experiences in reading or in writing, he has visited France twice in order to examine original documents in Paris, and he has produced a series of animated and accurate works, with reference to the early settlers of the States and Canada. Some of the volumes are : "The Conspiracy of Pontiac." "Pioneers of France in the New World." "Jesuits in North America," "Discovery of the Great West," "The Old Regime in Canada," "Frontenac and New France Under Louis XIV." This series is worthy of a place in every Canadian library, as it is the result of Parkman's belief that the anvals of French rule are not barren of interesting and important events that have had much influence on the formation of character and opinion in North America. The "Heroine of Vercheres" appears in "Frontenac and New France."

## notes and suggestive qeestions.

"The Heroine of Vercheres." What is a heroine? Name any whom you know of. Why is this girl worthy of the name?
"Incidents that are preserved." What is an incident? Is it right to talk of one being preserved?

- Frontenac's troubled second administration." Froutenac's first administration lasted from 1672 to 1682 . He was recalled to Frauce because of his quarrel with his council. In 1689 be was sent out a second time to command the French in their struggle with the British. Though arriving at a time when affairs in Canada were greatly confused, he soon restored order, and in his contest with the British regained for the French name the dignity and honor that his immediate predecessors had lost.
"None are so worthy of record." Should are be is?
"Seignior." French officers that decided to live in Canada received large grants of land from the Government and in course of time time became a privileged class, a sort of feudal system having sprung into existence.
"Recital." Meaning.
"Twenty miles below Montreal." How wide is the St. Lawrence here? In what county is Vercheres? What river is on the east of the county?
"Blockhouse." A sort of Fort made of hewn timber and loopholed for purposes of defence.
"Inhabitants were at work in the fields." At what probably?

On duty at Quebec." Meaning? How far away was he?
"His wife was at Montreal." What sort of place was Montreal in 1692?
"Madeleine." Pronounced Má-délāo.
"Here come the Iroquois." Much of the history of Canada is concerned with the struggles with the Iroquois from the country south of the lakes, and the Hurons and Algon quins in what is now British territory. This warfare was characterized by sudden attacks,
fierce conflicts, ruthless torture of prisoners, and insults to the dead.
"At the distance of a pistol shot." How far would this be?

Made the time seem very long." What is meant?
" Whistled about my ears." Why cars?
"Few people." How many?
"Palisades had fallen." What does this show concerning the arrival of the Iroquois?
"Putting on a hat." Why was the bonnet exchauged for a hat ?
"Let us fight to the death." Meaning?
"And our religion." The Iroquois despised the Hurons for adopting the religion of the Freuch.
"Two of the bastions." A bastion is a tower, very broad in proportion to its height, projecting from the wall in such a way as to permit an uninterrupted view along the outside of the wall. It would seem that in this case there was a bastion on each of the four sides of the fort.

## SHALL AND WILL.

We employ two auxiliary verbs to express the future, using "shall" for the first person, "will" for the second and third persons. Of these verbs the one implies, more or less obscurely, an obliligation, the other a volition, and when using them we do not always have in the mind a perfectly simple notion of futurity; associated ideas are often connected with it which induce sbades of meaning in our expressions.
The most closely connected of these associated ideas are those involving the conception of intention on the part of the person speaking; and when this conception, and not merely a simple future, is to be expressed, we immediately exchange one auxiliary for the other; that is "I (or we) shall die," is the expression of a simple future contingency, perfectly paralleled by "he, you, or they, will die"; but" $I$ (or we) will die," conveys a meaning of intention, paralleled again by "he, you, or they, shall die." Can anything be clearer than this? Yet how often we hear, "I am afraid I will be late"; "They say I will find the place very duil"; "He tells me we will have leave to do it"; or "We have decided the baby will go to-morrow." And frequently also, though not so frequently, such expressions as "I swear I shall repay you"; or

I doubt whether he shall succeed.
In these cases the meaning is made evident by the context, and the mistake of grammar is patent; but in other cases the whole weight of the meaning rests on the verb, and demands the strictest accuracy-a demand frequently unanswered. Yet it is not till the difference, the imwered. Yet it is not till the difference, the im-
mense difference, is felt between "I shall be at mense difference, is felt between "I shall be at
home to-morrow" and "I will be at home to-mur-row"-not till it is involuntarily perceived that the one phrase is only a prophecy and the other a promise, and that "he shall at be home to-morrow" is, on the contrary, the promise, and "he will be," etc., the prophecy-that a man or woman has any right to use the words at all. Theman has any right to use the "words at all. low with regard to the persons, a rule precisely analogous to that which governs "shall" and "will." They are sometimes, in fact, as Sir Edmund Head (the great "Shall and Will" censor) points out, "only hypothetical futures." When one says, "I should have caught the fever if," etc., one speaks of what would have have been a future event; and "should" "is here have been a future event; and "should" is here would be. And we say, "He would have gone to Europe if," etc., because in the future it is "He will go to Europe if," etc. There are cases, however, where "should" and "would" are not "hypothetical futures," but completely express past condition; and when, as we have seen with "will" and " shall," the choice of the verb with" will and shall, the choice of the verb is thinking one thing has no right to say another. For instance, "I should have seen him there" is a simple statement of what might have been: "I would have seen him there" means "I would by my own consent have seen him there." "We should not have done that" means only (setting aside the possible meaning "We ought not to have done that")" It would not have been done." "We would not have done that" means "We should have been unwilling to do so." (Observe in this last phrase the recurrence to we should to indicate the simple past, as we shall, the simple future.)

Sir Edmund Head gives a wonderful quotation from Chalmers, which affords the best possible illustration of carelessness with regard to this usage: "Compel me to retire and I shall be fallen indeed : I would feel myself blighted in the eves of all my acquaintance; I would nevermore lift up my face in society ; I would bury myself in the oblivion of shame and solitude; I would hide me from the world; I would be overpowered by the feelings of my own disgrace; the torments of self-reflection would pursue me." The two "woulds" in italics are unquestionably The two "woulds" in italics are unquestionably
ungrammatical, because, to use Sir Edmund's words, "in these two cases, the context excludes all notion of will or intention, and therefore we know that they must be meant to express the simple future, which they ought not to do with the first person." The other preceding "woulds" cannot be called manifestly wrong, "because they are connected with acts which are voluntary at the moment, and the writer might perhaps be entitled to the benefit of the doubt, if he had not shown by the other portions of the sentence his ignorance of the English idiom.'
Some few apparent anomalies in the use of these verbs are explicable by principles which it is not possible to go into fully in so short an exposition as this, but which may be hastily referred to. In some forms, of dependent sentences "shall" and "will" are used for the third person as if it were the first person-that is, in a dependent sentence of which both clauses concern a third person, "shall" is properly to be used instead of " will" to express simple futurity; so that, while it is necessary to say "He will'go," it is necessary to say "He says he shall go." This is probably due to a dramatic impersonation, on the part of the speaker, of the person spoken of, making the usage the same as if the phrase were, "He says I 'shall go' "; and it therefore holds good in the reverse with the use of "will"--e. g., " He thinks he shall go to Europe,' expresses the simple future, while "He thinks he will go to Europe" would properly convey an intention. The usage is unsettled for the second person. One may say either "You say you will go" or You say you shall go." Sir Edmund Head is of opinion "the speaker [in this case] may, as it were, look at the sentence with reference either to himself or to the person whom he is addressing." But we must repeat that for the third person the form is fixed: "He says he shall go" and "He said he should go" are the only forms which do not imply volition. Sir Edmund justly remarks, when considering the occasional uncertainties: "It may be maintained that, as "will" is a sort of interloper, "shall" ought always to be employed unless good cause be shown against it"; and he elsewhere states his belief that "shall" was the original future auxiliary.'
It may be observed here that where there is the slightest touch of hypothesis (except in the cases in which, as we have already pointed out, the past tense has the character of a hypothetical future), the weight of "shall" and "should" is changed -ee.g., "You should go" or "He shall feel it," expresses duty or compulsion, or destiny ; but "If you should go" or "Whenever he shall feel it," are the natural form of our contingent future. Sir Edmund considers also akin to this the fact that in interrogative sentences the form of the first person is, so to speak, preferable for the second person. Thus, "Shall "Wou go to Europe?" is a simple question of fact. "Will you go to Europe?" implies that the Werson addressed has not come to a decision. While "Will I (or will we) do it?", is wholly inadmissible, except as meaning "Do you ask if I will do it?"; if used instead of "Shall I do it?" (i.e., "Am I expected to do it?"), it is a mistake.
It should not, in passing, be overlooked that the effect of emphasis on these verbs is very extraordinary. "The letters," as Sir Edmund says, " remain the same, but they are in fact "ifferent words." In the phrase "I will go," "He shall come," the verb ceases to be an auxiliary.
Few better modes of acquiring certainty and delicacy in the use of these words can be suggested than is open to the student of Shakes peare; the flexibility of his use of them, and its frequent subtlety, are astonishing, and his accuracy great. But even he stumbles sometimes - for instance, in allowing Antipholus to say to Angelo, "" Perchance I will be there as soon as you" " "Comedy of Errors," iv. 1, 39). We can see here the impossibility of trusting at all to the ear in this matter, since Emilia's declara-
tion, "Perchance, Iago, I will ne'er go home," is faultless. Other mistakes are where Lucio condoles with Claudio about his life --"who (which I I would be sorry should be thus foolishly lost" ("Measure for Measure," i. 8, 95) ; and Falstriff declares, "I will sooner have a beard grow on the palm of my hand than he [the juvenal, the Prince, your master] shall get one on his cheek" "("2 Henry IV.," i. 2, 23). Don Pedro says of Beatrice, "You amaze me; I would have thought her spirit would have been invincible against all assaults of affection" (Much Ado," i1. :3, 118) ; and there are some others. But let no verbal sinner console himself with the belief that he has Shakespeare for his companion. He that he has Shakespeare for his companion. He
can only count on Chalmers, and on Scotch and English generally. And if he continues to commit mistakes, let him at least (not) declare, "I 'would' feel myself blighted in the eyes of my acquaintance, I 'would ', be overpowered by the feelings of my disgrace"; but none the less may "the torments of self-reflection pursue him!"The Nation.

## CORRESPONDENCE.

R. C.T. By "grammatical function," is meant the part a word or phrase plays as a member of a group of words (phrase or sentence). For example, "He went past, day by day," contains the phrase, " day by day," which has the grammatic function of an adverb; compare, "He went past daily." So, too, in the compound, "country-house," "country," though a noun, has the grammatical function of an adjective, in modifying the significance of "f an adje

By "grammatic relation," is meant the connection in which one part of a sentence stands to any other part. , In, " He went past, day by day," "day by day" has, as we saw, the grammatical function of an adverb, and it stands, as, an adverb, in relation to the verb, "went," namely, in limiting the idea of "going" by defining the time of the action; it stands in grammatical relation to the verb, it modifies. Similarly "country" stands in grammatical relation of an adjective to "house."
W. J. G. Plurals: chiefs, duchesses, princesses, geese, Socrateses, righteousnesses, Charleses.

Possessive, sing. : chief's, usually duchess', and princess', goose's, Socrates', righteousness' Charles's.
Possessive plural: chiefs', duchesses', princesses', greese's, Socrateses', righteousnesses' Charleses'.
I give the absolutely possible case forms, but no one but a lunatic would use the poss. pl. of righteousness, Socrates, etc.

## W. J. B. Article in next number.

A. M. M. A compound complex sentence is one that, in addition to having the ordinary principal clauses of a compound sentence, contains likewise a dependent clause. If we take the compound sentence: "The fishermen pulled harder on the oars and scanned the sky anxiously," and modify it by a dependent clause, we get the compound-complex sentence: "The fishermen, when they saw the leak, pulled harder on "the oars and scanned the clouds anxiously." The test of the compound-complex sentence is then the presence of the subordinate clause in the compound sentence.
The sentence, "save his good broadsword, he "Weapons had none"," is a simple sentence, subj., "he," verb, "had," obj., "(no) weapons (save his good broadsword)." The object, you will notice, is really, "weapons." It is modified by "no," while "no" is restricted by the prepo"sitional phrase, "save his good broadsword." "Save," is, of course, a preposition (=but, except) governing "broadsword," and connected with "no weapon."

In "I should have given him the book if he had called," "should have given" is the perfect conditional mood of the verb, "give," 1st sing;
"In "I ought to be giving these loaves away," "ought" is a present tense, in meaning ( $=\mathrm{it}$ is my duty), of the verb "owe," 1st sing. indic. Historically it is the past tense, as the $t$ showa; compare "brought," but has come to be regarded in this special sense of obligation as a present tense. "To be giving" is the infinitiye, mood, progressive form of the verb "give," depending on "ought." The clauses of stanza ii of Yarrow Unvisited
(IV.R, p. 185) is as follows: "Let Yarrow folk
..Yarrow," is complex sentence; "'tis their own," simple sentence; "(let) each maiden (go back) to her dwelling," principal sentence; "let herons feed, (let) hares couch, and (let) rabbits burrow on Yarrow's banks, but we will go downward with the Tweed, nor (will we) turn aside to Yarrow," compound sentence.
The clauses of stanza iii, p. 186, are " Let beeves.... meadow," simple sentence ; "(let) the swan....shadow," simple sentence; "we will not see them to-day nor (will we see them) yet to-morrow, compound sentence; ${ }^{\circ}$ we will not go to-day nor (will we go) tomorrow," compound sentence; (it is) enough if we know in our hearts that there is such a place as Yarrow," complex sentence.

## S.-In Celia Thaxter's

" Nobody thought to look at the guy,"
the "guy" means the " scarecrow."
In Helen Bostwick's Little Dandelion (II. R. p. 143)
"Under that fleecy tent"
refers to the covering of snow that falls upon the flower.

## "In her white shroud"

refers to the circle of white seeds that surrounds the dandelion after it has flowered.
The opposite of "sagacious" is "foolish."
In Wordsworth's
" My heart leaps up when I behold," etc.,
the sentiment is that of joy and delight.
In Bryant's Waterfowl,
Thou'rt gone ; the abyss of heaven
Hath swallowed up thy form; yet on my heart Deeply hath sunk the lesson thou hast given, And shall not soon depart ;
He , who from zone to zone.
Guides through the boundless sky thy certain flight,
In the long way that I must tread alone,
Will lead my steps aright,
the lesson referred to is that explained in the last stanza, namely, just as God guides the waterfowl in its lonely flight, so He will guide me in my lonely way.

## Sehool-Room Methods.

## READING.

No 1.
by literatus.
Of all the methods hitherto devised for teaching children to read the English language, the Alphabetic is the shortest, the easiest, the most philosophic, and incomparably the best.
The following are the letters, and the names most suitable for teaching purposes: $\mathrm{A}, \mathrm{b}$ (be), c (ke; se before $\mathrm{c}, \mathrm{i}$, and $y$ ), $d$ (de), e, $f(\mathrm{if}), \mathrm{g}$ (ge as in geese ; je generally before $e, i$, and $y$ ), $h$ (he), $i, j(j a), k(k a), l(e l), m(e m), n(e n), o, p$ (pe), q (koo), r (ar), s (es), t (te), u, v (ve), w (woo), x (eks), y ( yi ), and $\mathrm{z}(\mathrm{ze})$.
Combinations: oo (as in ooze), au and aw (as in awl), ou and ow (as in out), oi and oy (as in oil), ch (che), ck (ek), gh (af), ph (fe), qu (kwe), sh (she), tch (etch), th (the, sharp as in theme), th (the, flat as in them), and wh (hwe).
Note.-It will be observed that there are three f symbols: $\mathrm{f}(\mathrm{ef})$, gh (af) and $\mathrm{ph}(\mathrm{fe})$; and four k symbols : c (ke), k (ka), q (koo), and ck (ek).

## A FIELD EXCURSION.

## miss florence perry, st. paul.

Tuis field excursion was taken with forty children from the A1 and B2 grades.
The aim was (1) to train the observation ; (2) to give information about fossils and the formation of soil from rocks ; (3) to sum up and fix in the children's minds the knowledge gained by a previous study of seeds. The place chosen was a vacant lot within walking distance of the school building, at the rear of which was a higb bank, showing limestone ledges and the erosion and plenty of fossils. The time used in going
and returning was one hour and fifteen minutes. In proparation for this excursion we had the regular language work and four special lessons. Two of these were cn shells, what lived in the shell, what became of the animal, how the shells were obtained.
Coral was shown the children and its formation discussed.
'T'wo other lessons were given on the constituents of soil. By watching a handful of soil stirred into a glass jar of water we learned that soil is composed of pebbles, large and small, sand and mud.
The appearance of limestone and rock was studied and the name given. By means of rock pounded up we found how mud was formed.
When ready to start the children were formed in line, two and two, asked to keep on the sidewalk and refraim from shouting.
Three questions or riddles were given to the children:

1. What can you find in the limestone rocks?
2. How do you think the soil is made?
3. How many different kinds of seeds can you find and bring home?
The children showed an absorbing interest in finding the answers to the questions and before we had been on the grounds five minutes they found the fossils. Each child kept a specimen for his own. After returning to the building the fossils were examined, and the children were told their origin.
Some of the children had observed the action of the water in wearing away the bluff and were ready with the answer to the second question.
From three to seven or eight kinds of seeds were gathered.
This excursion was a great surprise to the teacher. It proved that little children can be taken out for a field lesson with profit. The children were orderly and attentive. They went children were orderly and attentive. They went
out to find something and they found what they out to find something and they
looked for. -School Education.

## WHY DO WE INVERT THE DIVISOR?

This subject is discussed in nearly every institute, and yet when an examiner asks that question the answers many times show that it is not clear in the mind of the teacher.
If the child has been properly taught up to the time of the introduction of division of fractions, he will understand the relation that each fraction holds to the unit from which it was derived. If he does not understand this, you may teach it to him in the following or some better way. Draw a line upon the board that is nine inches long. Let them think of this line as a unit or one. Use $1,2,3,4$, etc., as divisors, and secure the quotients $1, \frac{1}{2}, \frac{1}{3}, \frac{1}{4}$, etc. These quotients are readily perceived by the pupils. Use 2 as a divisor.
Show that is contained in the unit one time and one-half of another time, or $\frac{1}{2}$ times. Use 3 as a divisor, and show by use of line and other means that it is contained in 1,1 and $\frac{1}{3}$ or ${ }_{3}^{4}$ times. Use other fractional divisors and generalize as follows: A fraction is contained in a unit as many times as is indicated by the fraction inverted. Follow this conclusion with many questions similar to the following

How many times is $\frac{5}{6}$ contained in 1 ?
$\frac{8}{4}$ represents the division of 1 by what number?
What fraction is contained in $1 \underset{7}{i}$ times?
A man divides an acre of land into plots of $\frac{2}{13}$ of an acre each. How many such plots can he secure?
You say that 3 is contained in 1 how many times?
Pupil- $\frac{8}{3}$ is contained in $1 \frac{3}{2}$ times.
Then how many times will it be contained in $\frac{1}{2}$ of 1 ?
Pupil- $\frac{1}{2}$ of $\frac{3}{2}$ times.
And how many times in $\frac{7}{}$ of 1 ?
Pupil--7 of $\frac{3}{2}$ times.
What does an inverted fraction show?
Pupil-The number of times that the fraction is contained in 1.
Analyze the following: divide $\frac{5}{5}$ by $\frac{3}{4}$.
Analysis: $\frac{3}{4}$ is contained in $1 \frac{4}{3}$ times, and it is contained in $\frac{5}{3}$ of $1 \frac{5}{8}$ of $\frac{4}{3}$ times, or $\frac{20}{8}$ times, or $\frac{10}{10}$ times, or $1 \frac{1}{9}$ times.
Give many examples, have the analysis written, and you need not fail to make this plain to any class.-Exchange.

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## Editopials.

## TORONTO, NOVEMBER 1, 1894.

*THE SCIENCE OF EDUCATION.

WE have at last a book. It is a depressing reflection that in educational literature there is so much utter rubbish. But here is one of the very few pedagogical books in English of any real value, and of these in our judgment it easily takes the first place. Mr. Parker's book challenges the attention of every thoughtful man, whether interested professionally in education or not.

This is a real book we say. It has life, for it is the outcome of forty years' thinking and practical experience on the part of a man of philosophic mind and a rare "human instinct." Better still, he has had the opportunity to see his theory in operation in the hands of a staff of kindred spirits.

The comparative futility of the educational theorizing of the past is no proof that a science of education is an impossibility. To deny this is to deny the fact of life itself. Life and development, physical and mental, are the manifestations of law, and the work of educationists is to search for this law by careful study of the facts of natural growth. Natural

[^0]growth is law, and the law after which we are searching.

Now we know that in the first six years of a child's life he learns by himself more than we can ever afterwards teach him. He has learned something of the elements of all the natural sciences, but he has also accomplished the wonderful feat of learning to speak. Why, when he comes into our hands, does the immeasurably easier task of learning to write and to read require these many years of schoollife? If any one has not reflected upon this let him compare the number of physical adjustments in writing with those required for the forty-two English sounds. And further, the whole framework of language has to be added to the task of learning to speak. What then is the secret of these six years of child-growth? In this is the secret of our science. The law that underlies all growth, physical, mental and moral, simply expressed, is this: Something in the environment creates a moment of interest, of attention; a moment of selfeffort follows in the child ; this reacts upon the human organism and a point of growth is attained. These are the only educative moments. In the moral and intellectual life all human effort, all study is, at bottom, but the search for law. The condition under which a moment of growth takes place the author characterizes as an effort of intrinsic thought, and, stated simply, his prime argument is this, that the subjects which nature herself sets the child-soul at once to study are the proper bases of all true elementary education, and that, at the same time, under the impulse of this intrinsic thought, all other forms of expression - the art of speech has already been acquired in that best of all schools may most fully and most economically be acquired. This principle he proceeds to apply to the teaching of reading, writing, and arithmetic. It will be hard to find in educational literature a more interesting and suggestive chapter than that on reading. We shall learn to read precisely as we learn to speak - by whole words and sentences, the art of teaching lying in the skill with which it contends against the vastly greater practice given in nature's school. Here then is the material upon which we have to work - the child-soul, endowed with spontaneous activities, music, imagination, creative impulse, taught for six years by nature, that is, according to divine law. Here are our hints for main subjects and methods. But what of the lazy child? Why is it that we never have to complain of laziness until we find the child in school? The truth is this, he is a born worker, and laziness is the product of checked growth induced by false education.

How far is all this from the underlying principle of all education? Does not all our education practically consist in the learning of forms and the acquisition of skill, for a time supposed to be coming when these shall be needed? But when we went to school with nature we learned for our immediate necessities, and we learned more than we can ever be taught again. In truth, dullness is very often the child's refusal to learn forms and words without understanding and for no appealing purpose. And how often has this dullness been but the refusal of genius to adapt itself to our bed of Procrustes?

We wish we could follow the argument further, and with some detail, as the author extends and completes its applications. The book abounds in frequent passages such as, "Of all the shallow, heartless sayings, 'art for art's sake' seems to be the culmination and climax; 'money for money's sake;' 'knowledge for the sake of knowledge," " are comparable phrases. There is nothing in this universe that is not for the sake of human souls. Without their charm of style the book has the compressed life with which the French alone in modern times seem able to endow a theory.

The book is perfect in print and paper but should be better bound, and a few defective sentences need immediate removal, such as that on p. 279, beginning "There are two hypotheses," which is hopeless. It is greatly to be desired also, that the chapter on "democracy and education" should be re-written. This is the only flaw in a noble work. The confusion of the spirit of democracy with the form of government, the claim that a common school system is unique with the American republic, the remarks made upon the source of most crime, are all unworthy of the author. The deduction that the quantitymethod, as he aptly characterizes the education of the past, is a conscious device of aristocracy, sounds like the anarchistic vaporings with which our time is too familiar.

Some one will object that the logical conclusion of the whole theory, when we come to consider moral development, runs a-tilt of the doctrine of "natural depravity." Mr. Parker goes the whole way and completes his theory at every point. And have those immortal words, "Suffer the little children to come unto Me ," no deeper than the accepted meaning?

We must now commend the book most earnestly to every thoughtful reader. With manly humility the author claims that the practical experience of himself and his staff proves that the theory at least looks in the right dircction. He is right, but
the book has an important bearing upon more than the education of our schools.
Nothing more suggestive has been presented in our time to the student of higher education. Any reflecting man must admit that the whole trend of all modern higher education is cmalytical, and that it shows a more and more marked tendency to paralyze creative effort. The book suggests nothing less than a complete theory of human life, and opens out into an inspiring vista of glorious possibilities. It can maintain itself against all pessimistic attacks. Such enthusiasm, far from being impractical, is after all the very life of the world.

## WILL AND SHALL

$\mathrm{O}^{\mathrm{B}}$F all the accepted laws or idioms of the English language there is none, we believe, that is so persistently violated as those which relate to the proper use of the words shall and will, and their preterite and conditional forms, should and would. We refer not to the solecisms of those who make no pretensions to scholarship, but to the usage of men and women of education. As everyone who has the handling of much manuscript from writers of various classes knows, nothing is more common than to find the distinctions in the use of these words-distinctions which are, so far as we are aware, universally accepted by the authorities,-persistently disregarded or misunderstood by lawyers, doctors, clergymen, men of science, even university graduates. Not even teachers, correspondents, and, we dare say, editorial writers, for The Educational Journal, can be excepted from the soft impeachment. We have sometimes felt disposed to question whether it is worth while for grammarians and purists to keep up the fight. We are not sure that the game is worth the candle. It would perhaps be as well to reach a general agreement to give up the attempt to maintain so nice distinctions, and to reach an open understanding that the words in question shall (will?) henceforth be used indiscriminately. But if educated men and women are not prepared for this, surely a determined effort should be made to bridge the gulf which now yawns between the theory and the practice of the majority of fairly educated Canadians. We say "Canadians," because we are writing chiefly for our fellow-countrymen, not by any means to imply that they are less accurate in this and other respects, in the use of language than their cousins over the border. As a matter of fact, we are inclined to believe that the comparison would result considerably in our favor. Many of the writers for the Americgn press seem to pay no regard whatever, save in the most
obvious cases, to the distinctions in question, and the editors, even of many of our educational exchanges, do not take the trouble to correct the mistakes of their correspondents and contributors.

The source of the very common neglect of the grammatical (or should we say philological?) distinction in the use of these two words is, no doubt, to be found in the fact that, simple though the rules laid down to govern such use, may be, their application often cannot be made without a close analysis of the thought to be expressed. In short the distinction is often metaphysical rather than grammatical, or at least the grammatical rule demands for its proper application a nice metaphysical distinction. It is a busy age. Most of us write hastily and are either unable or indisposed to take the time and trouble required to think out the matter. True, if we would (should?) but compel ourselves to do this for a time we should (would ?) soon acquire a facility in making the distinction which would seem involuntary, if not automatic. This is no doubt the case with the few writers of the highest class, such as Mr. Goldwin Smith and a few others in England and America, who constitute the exceptions which prove the rule of inaccuracy.

All this long preamble has spun itself out as preliminary to a short remark we set out to make. We wished simply to call the attention of our readers, or those of them who may not be absolutely certain of their own impeccability in this matter, to an article in our English department, which was reprinted from the Nation in the columns of one of the papers which have been combined to form the Educational Journal, about ten years ago, and which seems to us to present the distinctions and the grounds of them in an admirably clear and practical manner. We think the article will repay careful study by the many who are frank enough to admit that they are not always sure whether shall or will, should or would, is the word wanted to express accurately the thought to be conveyed.

## UNIVERSITY MATRICULATION.

$A^{+}$T the last meeting of the Senate of the University of Toronto, the report of the committee appointed to revise the curriculum for junior matriculation for a period of years subsequent to 1895 was adopted. The following are the important sections:-

All candidates for junior matriculation shall take the following subjects: Latin, English, History, Mathematics, French or German, and either (1) Greek, or (2) the second Modern Language with Physical Science.

The examination may be divided into the following two parts, of which (I.) shall be taken before (II.), and in a different year:
(1) Arithmetic and Mensuration, English Grammar and Rhetoric, Physics, and the History of Great Britain and Canada.
(II.) Greek, Latin, French, German, English Composition, English Literature, Ancient History, Algebra, Geometry, and Chemistry.

The percentage for pass shall be thirtythree and one-third per cent. on each paper at the examination taken by the candidate.

The marks for sight work on each of the "Authors" papers shall constitute at least thirty-three and one-third per cent. of the whole of the marks for the paper.

Candidates for the matriculation examination for 1896 may in 1895 take the first part of the examination on the course prescribed for 1895 on the subjects of the first part.

It is understood that the details of the new courses will be issued by the University Registrar in a few weeks. Principals of schools have, however, in the foregoing announcement, all the data necessary to enable them to organize their Forms in preparation for these very important changes. The provision for 1895, by which candidates for matriculation in 1896 may take the first part on the old courses, that is, on the examination papers of next summer in the subjects of Part I., is of the highest importance. To avoid the difficulties in organization which would otherwise meet them, Principals should take care that the necessary preparation is made for the examination during the coming year. The matriculant who fails on Part I. in July, can, of course, take the University Supplemental in the following September. The candidate who fails at both trials will evidently not be well prepared for promotion to the form in which the subjects of Part II. are to be taken up.
"She does not make you feel mad at all," was the high praise, according to a correspondent of the Journal of Education, accorded by a six-year-old, to her new teacher, on returning from her first day at school. The child's generalization from a day's experience is very suggestive, and affords not a bad criterion of the success of a teacher as a disciplinarian. Do you make your pupils feel mad? If so there is something wrong in your manner or your spirit, probably both. You would do well to inquire into it.

We have in this number two more letters on the subject of underbidding, both of which are well worth reading. We hope for further discussion in the same truth-loving spirit, with a view to reaching, if possible, some definite conclusion, to be pressed upon the attention of the Teachers' Instituites, the Provincial Association and the Government.

## Special Papeps.

## THE PRACTICAL TEACHER.*

## (Concluded.)

With such a grasp of the nature and development of mind, of the genesis and growth of knowledge, and of the nature of knowledge, the educator is fully equipped for studying the principles of practical work. We may now, therefore, consider the teacher as an artizan or skilled worker. What, then, has to be done in teaching, and how does the good teacher do it? The teacher has, as Herbart puts it, to govern, to instruct, and to discipline, i.e., he has to lead the pupil to submit his will and actions to a system which he considers will accomplish the ends of education; he has to bring experience and information to the pupil, so that there may be the best exercise and nourishment for the expanding self; and he has to form in the pupil those habits which will be likely to make his character conform with a high ideal. And first he has to govern, for without order, attention, and systematic effort, there will be little or no education that is good. Here the personality of the teacher is of greal moment. A good pressnce, a commanding voice, a quick eye, and a firm and composed manner are powerful agents in maintaining order. But these are but the mechanical elements in the matter. The true strength of discipline lies in the spirit of it. The evidence of kindly interest in the pupils' welfare and success, a real and manly sympathy with their difficulties and views of things, a consistent endeavor to act justly, a readiness to give every legitimate pleasure and indulgence, and the willinguess to sacrifice oneself in their interests when the occasion demands, are the surest means of conquering the youthful heart and will. These things will create a prejudice in one's favour, which will always stand one in good stead. But even this is not enough, for in no case can it be left to the young to govern themselves to any very great extent. It is a mistake to endeavor to get the young to obey rules and regulations simply because they have a regard and esteem for their teacher. This is to lose the sense of justice, social obligations, and individual responsibility which the discipline of rational obedience should involve. The good teacher will, therefore, be found to demand obedience to reasonable commands on the ground of right and justice. He will, however, remember that though the young can, and should, obey, they have neither the wisdom or experience to estimate the higher value of such a discipline; but they are able to appreciate its real advantages-which should be made clear to them-and they have a keen sense of concrete right and justice. The moral consciousness is developed by right actions before it is determined by right judgments. The wise teacher does not ask a child to be good because it is so good to be good, but because a higher. wisdom has decreed it, and practical results approve it.
Then, again, the practical teacher finds that government is best obtained by prevention. Thus, we shall find that a well-conducted school is a hard-working one. The pupil that is pleasurably employed in doing interesting and profitable work has neither disposition nor opportunity for any thing else just then. This " just then" should be made as permanent as possible. If such is the case with the majority, it is difficult for a minority to do much harm. It is very interesting and instructive to watch the behaviour of a disorderly pupil on his first appearance in an orderly class. His efforts at mischief meet with no sympathy, and he is surprised and perhaps nonplussed. If he persists, he becomes a nuisance to his neighbor, and meets with a direct and emphatic repulse. He is appalled, and thinks the world is wofully out of joint, especially if he then discovers that
*A paper read before the College of Preceptors, Lond
England, in June last, by Professor H. Holman, M.A
he has been carefully observed by his teacher, who suggests that it may be worth his while to devote his energies to worthier objects.

Always there is the resource - unfortunately an inevitable one until human nature is much nearer perfection than now - to compulsion, This will take the form either of bribes or pun ishment, both of which are decidedly immoral, and only justifiable as lesser evils than other consequences. But even this can be used with consideration. kinduess, and sympathy. It should never exclude hope, i.e., there should always be an expressed expectation that there is sufficient self-respect to redeem such a $f$ fall.

Perhaps the most difficult aid to use in governing is that of praise. It is so easy to praise too much; to make it a bribe, which rapidly decreases in value as such; or to reflect upon the real merit of an action by suggesting that it is a surprising success. He is a good teacher who can use praise and blame without abusing them. After all, discipline is best secured by those who, in one sense, think least about it, i.e., by those who are most concerned to make the life of the pupil happy, interesting and active. Geniality, a pretty wit, and tact, are the best antidotes to assistance and rebellion. These are the traits which are seen in the good governor:

When good government is secured, then instruction can be carried out with the greatest ease and effect. In this matter the work of the educator will be to select and arrange the best matter and the best method for imparting knowledge; to illustrate the subject by the fullest and most realistic materials; to guide the observations and judgments of the pupils by skilful questions and suggestions; aud to belp them to sum up their investigations in systematic form. He will supplement the self-efforts of the pupils, and provide sufficient exercise and time for the results to make a clear and permanent impression on the mind. To this end he will specially prepare himself for every lesson. His chief aim during a lesson will be to make the pupil do as much as possible, with the least amount of help from himself. He will get in the knowledge at which he aims by bringing out the learner's powers of grasping and appreciating it, i.e., by taking full account of what is presented, making right judgments about its nature and value, and rightly relating it to previously acquired knowledge. Each of these steps is carefully provided for by the skilful teacher. First the mind is adjusted to receive the new knowledge through recalling into full consciousness all those experiences and ideas which are related to it. This will involve a simple but clear statement of the object of the lessons, put in such a way as to excite the curiosity of the pupils. Then the new matter is presented in easy, connected, and logical steps. The learner will be called upon to do all he can to develop each step under the guidance and with the assistance of the teacher, and will be required to summarize and connect the separate sections as they are completed. As the work proceeds the learner is required to supply similar or analogous facts, and to associate them; and at the conclusion of the lesson he should be able to give a general expression for, or definition of the whole-if it admit of such. In any case there should be the acquirement of practical power as a result of the work, and this should be employed upon suitable exercises and problems.
Suppose, by way of illustration, that the multiplication of a fraction by a whole number is being taught. The nature of a fraction is recalled : it is one or more equal parts of a whole. Then the significance of the conventional symbol for a fraction is re-stated in detail: the denominator to express the relation of each part to the whole, the numerator to show how many such parts are taken. At this point a preparatory demonstration will take place, with a view to showing that, though there are two figures used to express a fraction, the actual parts involved only need one figure, i.c., if $\frac{1}{3}$ of a cube be takeu, there is only one part, one thing,
involved, and this is indicated by the numerator. The mind is now adjusted and prepared for the new knowledge to be presented. The next step is to take the $\frac{1}{5}$ of the cube and ask one pupil to take twice as many, another three times as many, and another four times. There will be no difficulty abont this, as it is a mere matter of simple multiplication. The results are then stated in symbols: twice $\frac{1}{3}=\stackrel{2}{3}$, three times $\frac{1}{3}=\frac{3}{3}$, etc., many other such simple examples will be taken to impress the idea. Then a more complex case is taken, e.g.; ${ }_{11}^{4}$, twice ${ }_{11}^{4}$, three times $\frac{4}{11}$, etc. To illustrate such problems, divided paper is most convenient. The results are tinally expressed by the aid of the multiplication symbol: ${ }_{11}^{4} \times 2=\frac{8}{11}$, etc. It is well to take such numbers as $5,7,11,13$ as denominators to begin with, so as to avoid any possible distraction with regard to reducing to lowest terms.
Thus the idea is presented and elaborated by the guided observation and judgment of the pupils. The whole lesson will be summarized aud generalized in a rule for multiplying a fraction by a whole number, viz. : 'To multiply a fraction by a whole number: multiply the numerator by the number, leaving the denominator as before.' 'The negative element of leaving the denominator alone is expressed because young minds are very strongly impressed with what is forbidden, and very prone to do too much. Next will come the application of the new knowledge - which, if real, will give practical power-upon concrete and abstract problems. Several exercise lessons should follow. The multiplying of a fraction by a whole number by dividing the denominator will be a subject for a later demonstration.
In some such methodical and scientifie way will the true teacher be found to deal with every lesson. Teaching, with him, is a living organic activity : no matter of the pouring in of dead matter into a mechanical receptacle, but the vital assimilation of nourishment in the most complete and normal manner. To teach is to cause the learner to experience, to grasp, to reflect, to assimilate, and to apply.

The subject of discipline (as Herbart terms it), or the formation of moral character, is so large a one, that only a few words can be said about it here. Its objects are to induce habits of selfrestraint, to form principles and habits of right choice, and to give the power and the materials to form a noble character. This is at once the highest and the most difficult part of the teacher's task. As Pestalozzi says : "The nature of a child - what he requires, what elevates and what degrades him, what strengthens and what weakens him - such should be the study of his teacher. Everywhere this is the crying need. For lack of havisg been really educated, men live empty lives aud at death cry aloud that they have not fulfilled the purpose of their being." So Locke, on the education of a gentleman, advises, "Secure his innocence, cherish and nurse up the good and gently correct and weed out any bad inclinations, and settle in him good habits. This is the main point. In this matter the personality of the teacher is paramount. It has been well said that " No bad man can be a good educator." Mr. Currie wisely urges that "The whole of moral education is a mere form, unless guaranteed by the moral character of him who conducts it.
Thus we come to this ultimate fact in mora education, that it is the teacher's character which determines the character of the school not what he does so much as what he is." No greater tribute to a priuciple or a person has ever been paid than when the boys at Rugby were ashamed to tell Arnold a lie because he trusted them. The young are so receptive, so imitative, and so eage to be and do, that the teacher cannot fail to leave an impression of his own character upon their souls. How great, and yet how serious, is the responsibility and opportunity which this gives! "What it was, to come for month or years into daily contact, at the most impressionable time of life, with a man whose every
look and tone and word spoke to us of high aims and resolute endeavor, whose life in the sight of the dullest and weakest of us was plainly based on duty and self-devotion, whom all could absolutely trust, to whom the most timid would naturally turn in trouble or perplexity, whom all could love and venerate without reserve-such an experience it is not likely that one who had ever kuown it could forget or ignore. And to the power of such an influence those who knew it best are least disposed to set a limit. Among boys, even more than among men, it is the one power that transfigures; it gathers grapes of thorns and figs of thistles." (Mr. A. Sidgwick, "On Stimulus.") Such are, indeed, truly great teachers.
These things give but a very incomplete idea of what the true teacher is as a worker. He is an artist at his work. There is the moulding and the making of a man in process, in his work, and he enjoys all the pleasure of creative effort and artistic product. He handles the machinery of his work with true artistic instinct ; so ingeniously is it arranged and worked that friction is reduced to a minimum, there is a feeling of ease and pleasure accompanying a graceful activity, and there is the satisfaction of success and progress. The whole effort is illumined by his cheerfulness, brightness, and alertness. There is a wealth of verbal and material illustration throughout, but no excess, no impression of overloading, but the conviction that nothing could be spared. The good teacher is a stylist in method. He has the graces of form, the ease of action, the power of adaption and concentration, which correct style alone can give. With every appearance of ease and simplicity, there is all the effectiveness of knowledge and art. Such a one handles even a blackboard duster with greater precision, purpose, and success than the mere dabbler in teaching. There is correct form in the attitudes and actions of a teacher as in those of a cricketer. Observe the skilful teacher at classwork: he stands in a graceful and dignified attitude in front of the class, where he can easily see, and be seen by, every pupil, and firmly grasps his class by his steadfast but kindly gaze and firm expression - there is no need of a stern command in stentorian tones. Then when every eye looks at his, because his looks at every eye, he speaks in measured and modulated tones. The pupils are at once interested and attentive, for they listen to that which appeals to them and seems to promise pleasure and profit. The teacher puts vigour, freshness, attractiveness, and sustained interest and power in his (and his pupils') work, for he is a full and ready man - in the Baconian sense. His pupils are responsire, active, and willing, because they are stimulated and encouraged. They are interested and earnest because the teacher is so. Teacher and taught make up a living, active whole. The work is orderly, consecutive, lucid, and definite. There is a fixed aim which the teacher has made clear to himself, and which he makes real to the pupils by carefully graduated and demonstrated steps. There is no element of hurry, or fuss, but a steady and systematic effort and progress, the results of which are wonderingly realized only when the machinery stops and the products are surveyed. In all the work of the educator there is proportion, rhythm, and harmony. A lofty ideal pervades and unities the whole. He is concerned to make not only a noble and powerful, but also a beautiful character, i.e., one which has all the refinement, culture, and grace of which the individual is capable.

The true teacher is one who is full of sweet sympathy for child-nature and child-life, and overflowing with the milk of human kindness for the little ones. He is the true man of feeling. There is no false sentiment, no mistaken indulgence of youthful weaknesses, and no appeal for a cheap popularity with the young, but a generous and discriminatiag appreciation of their likes and dislikes, their capacities and limitations, their rights and privileges, a constant endeavour to see things from their point
of view, an informed and impartial sense of justice and equity in the scholastic monarchy, a real interest in their welfare and wishes. and, that greatest of human virtues, the fellow-feeling which makes us wondrous kind. It is not easy to keep the sympathies of the teens through later life, but it is possible not to wholly lose them, and it is fatal to be in the school world and not of it.

The man of feeling can partake of the more private and personal life of the scholar, and be a real guide and friend to the inner self. The kindly concern for the new boy, to whose affectionate and delicate nature homesickness is little short of a tragedy, will touch the gratefullest chord in his affections, and do more for master and pupil than years of routine care and solicitude. In loco parentis is capable of an ideally beantiful interpretation, and it is truly pitiable that its ordinary application is such an uniortunate one.
But this true sympathy is not all softness. It does not fail to recognize the existence of diseased moral members, and the need of short and sharp remedies. As Mádame Necker says : "It is necessary not to have lived with children to think them all augels." In the process of making human beings of some of them there are many unpleasant deeds to do, many bad quarters of an hour to be passed, and many deep waters to wade through. It will need the truest affection and courage to be kindly cruel to them, and suffer the giving of pain. This is one of the severest tests of the good teacher : firm but generous justice and a prompt and unflinching enforcing of legitimate penalties will be likely to prevent permanent mischief. The appeal to the judgment and interests of those concerned is often successful. To get boys to realize that discipline is as necessary for success in class as in a cricket or football team is generally as easy as, and far more effective than, obtaining impositions. 'There is no discipline so unsparing and inflexible as that which boys exercise over each other in their games.
The good teacher is also a good scholar. Wherever we find great success in the work of education, we find large intellectual powers and ripe scholarship. Past and present headmasters of our great public schools are good examples of this. Much of the finest scholarship of the present generation goes into our schools, and it is proper that it should do so. High wranglers, distinguished classics, scientists, and linguists go into the teaching profession, and are the greatest powers for good in the schools. It is inspiring and chastening for learners to sit at the feet of those who are masters in their particular subjects. There is breadth, depth, siucerity, liberality, and earnestness about the true scholar, and these give intellectual tone and style to his work, which nothing else can give or take away. A reverence for knowledge and truth is fostered in the pupils who come under the influence of the matured learning of a scholar. The influence of the master-mind is an education in itself. The handling of a subject by such a man is as different from that of the unscholarly teacher as is the touch of a Raphael from that of a mere copyist. And there is not only a refreshing stimulus in the attitude and work of the scholar-teacher, but there is a high example to strive after, and a source of authority and staudard of excellence to which beginners may appeal, The good teacher is the last person to suppose that, if he knows the art of teaching, he is therefore fully equipped for teaching. One cannot really know how to teach a subject, in the truest and best sense, until he knows the subject. The 'give me half an hour's start and I will teach any subject you like' person is not a teacher.

It goes without saying that the true scholar is always an earnest student. The attempt to keep up a considerable intellectual export trade without providing for an equivalent importation must result in intellectual bankruptcy. The very nature of real knowledge is to emphasize the extent of ignorance and to demand further
progress in the search for scientific completeness. Provision must be made for keeping abreast of the growth in knowledge. Advance is so rapid and so extended in many spheres of science and art that the speculative hypothesis of one year is often looked upon as a delusion in the next, and the machinery of to-day may be the lumber of to-morrow. Thus, no man can afford to be ignorant of what his neighbor is doing in the world of thought and action. Especially is this true of the practical teacher who really aims at fitting his pupils for the life that now is. The world of education is full of inquiry and discovery. It is hardly likely that we have yet found the ideal method in every department - or that we ever shall until the world stands still, and then we certainly can't -and, therefore, the educator is always investigating for himself, and learning from the work of others. The study of good books, of foreign systems, and of other schools, combined with careful experiments in his own, is an essential part of the work of the successful educator. The special department of learning in which the teacher is particularly interested is also kept fresh and full, and his stock of general information is constantly revised and improved. Thus only does he find it possible to keep in touch and full sympathy with the spirit of the learner. As Dr. Fitch writes:-"The true teacher never thinks his education complete, but is always seeking to add to his own knowledge. The moment any man ceases to be a systematic student, he ceases to be an effective teacher; he gets out of sympathy with learners, he loses sight of the processes by which new truth enters into the mind, he becomes unable to understand fully the difficulties experienced by others who are receiving knowledge for the first time."

It is impossible for us to discuss, or even fully enumerate, all the qualifications which a wellequipped teacher will be found to possess, much less what he would be the better for possessing. It will be well, however, to emphasize what Locke so strongly insisted upon : the teacher must be a man of the world; no mere bookish hermit, but one who knows life, who has played his part in the world, and has studied and understands men and things. It is life, and not the schoolroom, that the teacher has to fit his pupils for; and it is a mistake to suppose that one lives simply because he is alive. The good teacher cultivates in his scholars the gentle art of living : how to make the best and most of one's own life - as life - and that of others. The noble character which shuts itself off from the social world loses an element of greater nobleness. "In the beginning was action," says Goethe, and his gospel of "Do" needs its Decalogue.

One practical consideration still remains: "How, if at all, can all these and the many other qualities be acquired $? "$ Let us at once recognize that many of them cannot be acquired. The essence of the truly great teacher is his own individuality, and this is never wholly the result of, or subject to, systems and method; never wholly, but always somewhat. Matter no more exists without form than form without matter, In the world of things, and each of them determines and is determined by the other. Systematic knowledge and systematic art will always secure reasonable efficiency and will perfect original capacity. Therefore the wiser teacher will obtain these.

The next question is: How will he obtain them?' The scientific knowledge can best be obtained, as in other subjects, under the tuition of experts. The practical knowledge can be obtained in only schools, and will be best obtained under skilled guidance. Lastly, 'When should he obtain them $P$, Again, much car be obtained only whilst actually teaching. But-and this is vital - it can often only, and always best, be obtained by one who has learnt how to obtain it. Briefly, he who proposes to teach should at least have so much preparatory training as would teach him how to learn to teach. This, the knowledge and power to successfully equip oneself, may be regarded as the very
foundation stone of the qualifications of a practical teacher.
In conclusion, much is expected from the teacher, but much also is given. To but few is it given to deal so nearly with the very-life and soul of the national life, to mould and fashion the destinies of nations, and to make the history of the individual and the race. We do well to magnify our office; but we do better to make ourselves worthy of it. We are called to a rich reward in the grateful affections of our pupils, in the satisfaction of our own consciences, and in the appreciation of those who understand and rightly value our work. Let us make our calling and election sure.
--Educational Times.

## Mathematies.

All communications intended for this department should be written on one side of the sheet only and Seaforth, Ont.

## CORRESPONDENCE.

North Hastings, Umfraville, references only. No reply.
Miss Lillie E. Penny, Galetta, sent neatly written solutions of Nos. $75,76,78,79,82,85$, $86,87,89$ and 90 ; and our best thanks are due for the trouble she has taken to help her fellowteachers.
F. G. Pearce, Welcome, Ont., writes thus : "I deeply sympathize with Miss M. J. W. in her struggles with the problems in the P.S. Arith. I would like to help her if I could . . I enclose the answers as corrected in some of the newer books. . ." These answers are No. 82, $113 \frac{1}{4}$ gal. ; $84, \$ 5.70 ; 85,19$ cords, $64 \frac{9}{10}$ cub. ft. ; 87, 297 ; $88,3087 \mathrm{mls} ., 6$ rods, 3 yds.; 89 , $\$ 8670 ; 91,6186$ tons, $10738 \frac{83}{83}$ lbs.

We trust that F. G. P. may in turn receive help from this column.
S. P. M., Oxford, asks for solutions of the Public School Leaving Arithmetic. Will some of our enterprising teachers see that the wish materializes into accomplished fact? A large number of schools in Western Ontario have pupils doing this course for 1895 . Can anyone tell the best book for this examination? Please name it.
C. B. M., Stevensville, sends reference only ; no reply.
M. M., Woodstock, illegible writing, undecipherable mystery.

Subscriber, Hibbert. Your problems totally unreadable.
J. McCormick sends two problems from $H$. Sch. Alg. that have been solved before. See back numbers or send for private answer.
H. F. Relyea. No text-books are prescribed for Specialist's certificates. Ask the Registrar of Toronto University, J. Brebner, B.A., for curriculum. If you wish a closer definition of the work send to Hutchinson \& Co. for copies of University Examination Papers-fifty cents per set. For particular information and advice address President Loudon, or Prof. Baker, or the Editor of this department. All the examinations you mention are conducted by the University, not by the Education Department.

Our correspondent, "B," Lot 57, P. E. I., sends problems 93 to 100 , inclusive. We hope they will meet with a generous response.
D. Robertson, Warkworth, thinks that the solutions given to No. 80 and 81 might be simplified thus :

$$
\begin{array}{cccc}
51 \frac{2}{2} \mathrm{ft} . & \text { throw a shadow of } 7 \mathrm{ft} \\
\therefore 5 \mathrm{H}_{12} & " & " & 6.2 \mathrm{ft} . \\
\text { And } 12 & " & " & 16 \mathrm{ft} . \\
\therefore 6 & " & " & 8 \mathrm{ft} .
\end{array}
$$

The simplification takes place at the expense of "begging the question." It is necessary to prove that the length of the shadow is proportional to the length of the stick. To exemplify this it is only necessary to look at the following problem: If a circular board 12 ft . in diameter gives a shadow at a certain hour of the day
covering 10 sq. ft., how many square feet of shadow will be cast by a board 6 ft . in diameter? D. R. will find that the quantities are not proportional in the simple, but in the duplicate ratio. Prove all things; hold fast that which is true.
W. Prendergast, B.A., Seaforth, sends coucise solutions of Nos. 75, 76 and 77. He also contributes a general proof of a trigonometrical formula, of which only a particular solution is given in the text-books in common use. Thanks!
R. C. T., Baltimore, asks for a fuller explanation of the method of solution to question 6, part a, Primary Algebra, as given in the issue of Sept. 15th. The solution given October 1st may be more intelligible to him. If not we refer him to pages $47,48,49,50$; also 86,87 , 88 of The Public School Algebra, Gage \& Co., Toronto, 1894, where he will find the whole matter carefully explained and examples worked out.
W. Park, Newton Robinson, very kindly sent solutions to Nos. $82,83,84$ and 86 . If "Heaven helps those who help themselves," how much more will Heaven help those who help others!
A. J. Shea, Pendleton, sends his solutions of Nos. $80,83,85,87,90$ and 91 . On behalf of the public school teachers of Ontario we return him hearty thanks.
F. C. Gillis, Oakwood, took the trouble to write an explanatory letter to the Journal enclosing solutions of Nos. 78, 79, 82, 86 and 90. He says that in the latest editions of the Public School Arithmetic six of the answers pointed out by Miss M. J. W. have been "corrected in a small leaflet at the beginning" of the book. Two others have not been corrected and he agrees with Miss M. J. W. that they are not correct. Here is a teacher with the true professional spirit, ready to assist his co-workers in the great field.
Miss M. L. H. writes : " It may be a help to Miss M. J. W. to know that there are at least two editions of the P. S. Arith. and that the latest one has corrections of twenty-five answers given wrong in the previous edition. She also very kindly encloses solutions of several questions, which are largely the work of two of her pupils. Does not this show that the spirit of self-help is still alive among us?

Miss Eliza Ridley, South Mountain, solved Nos. 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, and deserves our thanks for the pains she took.
Myles Mahoney and Thomas Hydon, of St. Cecelia's School, Toronto, sent solutions to seven of these questions. They deserve our hearty thanks, but we hope they will not write on both sides of the paper next time.
In regard to Miss M. J. W's questions the sum of the matter seems to be that 25 of the answers given in the first edition of the book were not correct and F. C. G. thinks that the answers to 83 and 92 are still wrong. He believes the answers ought to be $\$ 20.08 \mathbf{1}^{7} 5$ and $\$ 2008.12 \frac{1}{2}$ respectively. With regard to No. 92 one friend points out that "lumber less than an inch thick is taken as an inch thick," and thus gets the answer given $\$ 2677.50$. It would be well for those who have the early editions to send to the publishers for the slip containing the corrections and thus save themselves further trouble. It would take all our space to publish the solutions to these questions that present no great difficulty. Miss M. J. W's answers are nearly all correct. In No. 90 she has not hit the correct method; but she is sure to see the mistake and get the correct answer, 19.8587 cub. ft . Deduct the thickness from each end of each dimension-not en bloc.

Remark.-The volume of correspondence drawn forth by M, J. W's letter shows several things directly and indirectly. (a) It has served to prove that the Journal is a useful medium of self-help anoog its supporters and deserves to be well sustained. (b) It shows that a very large number of teachers are im-
bued with a sincere desire to be of service to their fellow-workers in the grand field of elementary education, and this without hope of personal benefit or reward. (c) It prores that the professional spirit is growing among the teachers of Ontario and gives promise of a coming day when they will heartily unite to place their profession on a higher level and a better financial basis. ( $d$ ) It is very gratifying to the Editor of this Department to find so much interest taken, and it is (e) a great encouragement to the younger readers of the Journal to find themselves in a brotherhood (or rather sisterhood, since the sisters now are in the majority), ready to extend the helping hand of practical sympathy to those who show a desire to do their work thoroughly and well.

If all the teachers in Canada would co-operate as heartily on all the great questions relating to our noble work, a better day would speedily dawn upon the public schools, and public school teaching would no longer remain the worst paid profession in this country. Brethren and sisters, let us study the power of Union as exhibited in Law, Medicine, Dentistry, Pharmacy, etc.

## SOLUTIONS.

No. 75. By W. P.-The possessor of the annuity in question will receive $\$ 300$ at the end of each year for the next 4 yrs., the present value is therefore sum of the present values of $\$ 300$ due in 1, 2, 3 and 4 yrs. respectively, and is equal to

$$
\begin{aligned}
& \frac{300}{1.06}+\frac{300}{1.06^{2}}+\frac{300}{1.06^{3}}+\frac{300}{1.06^{4}} \\
= & \frac{300}{1.06^{4}}\left\{1.06+1.06+1.06+^{1}\right\} \\
= & \frac{300}{1.06^{4}} \cdot \frac{1.06^{4}-1}{1.06-1} . \\
= & \$ 1039.53+
\end{aligned}
$$

No. 76. By the same.-By final value the author probably means the sum to which $\$ 750$ deposited at end of each year for 9 yrs. at $7 \%$ would amount.

This sum $=750\left(1.07^{9}+1.07^{8}+\ldots 1.07+1\right)$ $=\$ 8983.50$.
No. 77. By the same.-The annual interest on $\$ 5625$ at $8 \%$ is $\$ 450$, consequently that sum in cash at the time the annuity begius would be as valuable as the annuity, and the present value of annuity would therefore be $\frac{5625}{1.08^{15}}$ or $\$ 1773.23+$.
No. 78. By F. C. G.-From the data we easily get the equation :
$\frac{3}{4}\left\{\frac{2}{3}\left(\frac{x}{2}+1\right)+1\right\}+1=12 \frac{1}{2}$. Multiply throngh by 4 , and $x+3+4=50$.

$$
x=41 \text { gallons. Ans. }
$$

No. 79. By the same.-

$\therefore$ Loss on 60 eggs
1 d. Ans. 60.

## PROBLEMS FOR SOLUIION.

No. 94.-A person having lent $\$ 3000$ for 2 years at 8 per cent., payable halt-yearly, wishes to receive his interest in equal portions and in advance. How much ought he to receive every half-year?

No. 95.-What sum of money paid down will discharge a debt of $\$ 8000$ due in two equal half-yearly instalments, interest being reckoned at 8 per cent. per annum?

No. 96.-A semi-circular plot of ground whose radius is 12 yds. has inside the circumference a path 2 yards wide. The rest of the space is a flower bed. Find the size of the bed.

No. 97.-I buy a farm of 80 acres and sell $\frac{3}{4}$ of it for $\frac{3}{5}$ of the cost of the farm. I then sell
the remainder at $\$ 60$ per acre and neither gain nor lose by the whole transaction. Find the cost of the farm.
No. 98. By selling goods at $\$ 171$ I gain as much per cent. as the goods cost me. Find the cost price.
No. 99.-If a man lend money at the nominal rate of 8 per cent., payable half-yearly in advance, what is the real rate of interest?
No. 100. -A makes B a present of $\$ 100$ on condition that he shall expend it in cows, sheep and geese; cows at $\$ 10$, sheep at $\$ 1$ and geese at $16 \frac{2}{3}$ cents each, so as to have just 100 in the whole. How many of each must he purchase?
No. 101.-Three circles, each 40 rods in diameter, touch one another externally. What is the area of the space enclosed between the circles?

## Examination Papers,

## EAST VICTORIA PROMOTION EXAMINATIONS, JUNE 21st AND

## $22 \mathrm{ND}, 1894$.

class ili.-ARIThmetic.

1. How many animals are included in the following statement of Canadian Live Stock?

Horses. Cattle. Shecp. Swine. Totals.
Prince Edward Is.
$\begin{array}{llll}42,475 & 120,794 & 175,498 & 52,681\end{array}$
Nova Scotia.
New Brunswick.
Quebec.
Ontario.
Manitoba.
British Columbia.
Territories.
Totals.
2. Find the cost of 720 boards, each 14 ft . long, 8 inches wide, and 11 inches thick, at $\$ 12$ per $M$.
3. Find total cost of the following : 26 yds . Silk at $\$ 1.45 ; 4$ yds. Linen at 15 cts.; 21 yds . Lining at 20 cts. $; 4$ yds. Muslin at 11 cts.; 2 doz. Buttons at 25 cts.; 12 yds. Flannel at 38 cts.; 5 yds. Cotton at 14 cts.; 2 pr. Gloves at $\$ 1.25$; $3 \frac{2}{2}$ yds. Ribbon at 42 cts.; 1 Silk Handkerchief at $\$ 1.45$.
4. A grocer mixes 15 lbs . of Coffee at 27 cts., 3 lbs. at 35 cts., and 3 lbs. at 40 cts . What is a lb. of the mixture worth ?
5. What will it cost to plaster a room 32 ft . long, 18 ft . wide, and 13 ft . high, at 12 cts. a sq. yd., allowing 200 sq . ft. for doors and windows?
6. Add nine millions and six ; eight hundred and four thousand and ninety; eighty thousand eight hundred; one hundred and one thousand one hundred and ten; one million twenty thousand five hundred and ninety. Give answer, (a) in figures, (b) in words.
7. From April 8th at 9 a.m. to November 18 th at 5 p.m. (a) How many hours? (b) How many minutes? (c) How many seconds? 8. The road from Bobcaygeon to Kinmount is 18 miles long and 66 ft . wide. How many acres of land does it contain?
9. Find the cost of 4444 lbs . of Hay at $\$ 8.50$ a ton.
10. How many cubic inches in a block of stone two feet six inches long, two feet three inches wide, and five feet four inches high?
9,$5 ; 10,5 .-1,20 ; 2,10 ; 3,20 ; 4,5 ; 5,10 ; 6,10 ; 7,10 ; 8,5 ;$
HIGH SCHOOL ENTRANCE EXAMINATION, 1894.
english literature,
Examiners :
§J. F. White.
(John Seath, B.A.
A.
"Oh ! green," said I, are Yarrow's holms, And sweet is Yarrow's flowing! Fair hangs the apple frae the rock, But we will leave it growing.

O'er hilly path and open strath.
We'll wander Scotland thorough ;
But, though so near, we will not turn Into the dale of Yarrow.
" Let becves and home-bred kine paitıke The sweets of Burn-mill meadow;
The swan on still Saint Mary's Lake
Float double, swan and shadow!
We will not see them, will not go,
To-day, nor yet to-morrow ;
Enough if in our hearts we know There's such a place as Yarrow.
"Be Yarrow stream unseen, unknown It must, or we shall rue it;
We have a vision of our own; Ah, why should we undo it ?
The treasured dreams of times long past We'll keep them, winsome Marrow ! For when we're there, although 'tis fair, 'Twill be another Yarrow.
"If care with freezing years should come, And wandering seem but folly;
Should we be loath to stir from home, And yet be melancholy;
Should life be dull and spirits low,
'Twill soothe us in our sorrow,
That earth has something yet to show,The bonny holms of Yarrow."

1. State the circumstances in which the above stanzas are supposed to be spoken.
2. Explain the meaning of the parts in italics.
3. (a) Explain the meaning of the italicized words in the following :-"Yarrow's holms" (1. 1), "Float double" (1. 12), "winsome Marrow" (1. 22), "freezing years" (1. 25).
(b) Why does the poet say "'Twill be another Yarrow," l. 24?
(c) Give clearly the meaning of the last stanza.
4. Give an outline of another piece you have read from the same author.

## B.

On the fifth day an uproar of unearthly yells from seven hundred savage throats, mingled with a clattering salute of musketry, told the Frenchmen that the expected reinforcement had come ; and soon, in the forest and on the clearing, a crowd of warriors mustered for the attack. Knowing from the Huron deserters the weakness of their enemy, they had no doubt of an easy victory. They advanced cautiously, as was usual with the Iroquois before their blood was up, screeching, leaping from side to side, and firing as they came on ; but the French were at their posts, and every loop-hole darted its tongue of fire. The Iroquois, astonished at the persistent vigor of the defence, fell back dis. comfited. The fire of the French, who were themselves completely under cover, had told upon them with deadly effect. Three days more wore away in a series of futile attacks, made with little concert or vigor ; and during all this time Daulac and his men, reeling with exhaustion, fought and prayed as before, sure of a martyr's reward.

1. (a) State briefly the events that led up to this attack.
(b) What were the effects of this contest?
2. State brietly what the above paragraph describes.
3. Explain the meaning of each of the italicized parts.
4. What is the difference in meaning between
(a)
$\left\{\begin{array}{c}\text { Unearthly yells } \\ \text { and } \\ \text { Loud Shouts. }\end{array}\right.$
(b)

A crowd of warriors mustered,
$\left\{\begin{array}{l}\text { and } \\ \text { A body of soldiers assembled. }\end{array}\right.$
$\left\{\begin{array}{c}\text { Three days more wore away, } \\ \text { and }\end{array}\right.$
(c) Three days more passed away.

## C.

Give clearly the substance of the following, bringing out fully the meaning of the italicized parts:
(a) Thy crystal stream, Afton, howlovely it glides And winds by the cot where my Mary resides; How wanton thy waters her snowy feet lave, As gathering sweet flow'rets she stems thy clear wave.
(b) "Richard was soon absorbed in the melancholy details which had been conveyed to him from England, concerning the factions that were tearing to pieces his native dominions, . . . . the oppressions practised by the nobles upon the peasantry, and the rebellion of the latter against their masters, which had produced everywhere, scenes of discord, and, in some instauces, the cffusion of blood."

## D.

Quote any one of the following :
"The Bells of Shandon." First four stanzas.
"Ring Out, Wild Bells. First four stanzas.
The stanza in "The Forsaken Merman" describing the effort to induce Margaret to return.
The passage in "Elegy Written in a Country Churchyard," beginning "Perhaps in this neglected spot is laid," and ending "Their lot forbade."


## HISTORY.

## Examiners: $\left\{\begin{array}{l}\text { A. B. DAvidson, B.A. }\end{array}\right.$ John Deairness.

Note.-Candidates will take any two questions in Brilish History and any four in Canadian.

## I.-BRITISH HISTORY.

1. Briefly describe the important changes brought into England by the Nurman Conquest.
2. Give a short history of any three of the following: (a) Simon de Montfort, (b) Cardinal Wolsey; (c) Mary, Queen of Scots, (d) Oliver Cromwell, (e) Gladstone.
3. Wuite a brief sketch of any two of the following:
(a) The troubles of the British with Napoleon.
(b) The British Corn Laws and their Repeal.
(c) India in Victoria's reign.
(d) Two important events in Victoria's reign.

## iI.-Canadian history.

4. Where were the Iroquois, Algonquin and Huron Indians located when the French and English settled in America, and to which of the white races did they join themselves respectively, and why?
5. What was the condition of things which led to the passing of the Quebec Act, and what were its most important provisions?
6. How are the legislative bodies of the Dominion and of Ontario respectively constituted, and what are the duties of each?
7. State clearly the circustances which led to the North-West Expeditions under Wolseley and Middleton.
8. What are the nature and purpose of (a) The National Policy, (b) The Ballot, (c) Prohibition Plebiscite?

## geography.

Examiners: $\left\{\begin{array}{l}\text { J. J. Thliey. } \\ \text { Cornelius }\end{array}\right.$

1. Define peninsula, cape, oasis, plateau, frith, watershed, delta, glacier, longitude, trade wiuds, summer solstice.
2. Where and what are the following :Guiana, St. Louis, Magellan, Sable, Canso, Costa Rica, Anglesey, Elba, St. Helena, Madras, Crimea, Tiber?

3, Give the position of the following places and tell for what each is famous:-Montreal, Chicago, New Orleans, Liverpool, Birmingham, Glasgow, Belfast, Lyons, Hamburg, Florence, Canton, Lucknow.
4. Name and give the use of the circles marked on a map of the world.
5. (a) What commerce is carried on by Canada with China and with Australia?
(b) Over what routes does this commerce pass?
(c) What advantage do we derive from the Canadian Pacific route in our trade with China?
6. Show how the principal occupations of the people are related to the position and natural products of the following:
(a) The Maritime Provinces of Canada,
(b) Ontario and Quebec,
(c) Manitoba and the Northwest Territories, (d) British Columbia.

## Primary Department.

## NOVEMBER. <br> coleridge.

The yellow year is hasting to its close ;
The little birds have almost sung their last,
Their small notes twitter in the dreary blast.
The dusky waters shudder as they shine ;
The russet leaves obstruct the straggling way Of oozy brooks which no deep banks define,
And the gaunt woods in ragged scant array,
Wrap their old limbs with sombre ivy-twine.

## THE LOWEST CLASS.

hhoda lee.
An old yet suitable name for the lowest division of the lowest class in an ungraded school came to my notice not long ago. It was called the " Receiving Class," presumably because into this class the new-comers are received. The name ordinarily heard is simply " Lowest Class," and it is of this section I wish to speak to-day. Big-eyed, wondering little creatures, they supply on first entering endless interest and amusement to the others more accustomed to the ways of school.

The most difficult to manage because of their strangeness to the order and routine of school, as also hardest to teach, they are nevertheless always a most interesting class, though one with which, more than any other, we need both sympathy and patience. Only the other day a teacher remarked to me that she got out of patience more frequently with her baby-class, as she called it, than any other, adding too that she never felt more ashamed of herself. She admitted that the reason for it was that she was too anxious about their progress - she wished them to go quicker than they actually could and the usual results followed; and that is one error in teaching the lowest class. They will soon enough get into the ways of school and quickly enough pick up the work, but it must be a gradual initiation, and above all things a happy one. It is most desirable that first impressions of school should be desirable ones.

The other error is one which more frequently occurs in ungraded schools where there is so much to be done in so little time. Here the lowest class is apt sometimes to be crowded out as being of little importance. That is a very great mistake to say the least. Of necessity a great deal of seat work has to be given, and as it is difficult to get enough variety the work becomes monotonous and tiresome. But even in the press of work of an ungraded school, an encouraging word, an occasional smile, frequent rests and change
of work, will do much to overcome the difficulty.
The same fault, but with infinitely more discredit, occurs in graded schools, where, in the desire to "work up" a second class, or have an unusually bright highest class, the little ones are neglected. The ambition in regard to the higher classes is right in itself, but decidedly wrong when gratified at the sacrifice of the lowest.

It is most important that good leginnings should be made. No one can teach long and not be convinced of the power of habit.
" Ill habits gather by unseen degrees As brooks make rivers, rivers run to seas."
A bad habit when once formed, though it seems ever so trifling, is one of the most difficult things to eradicate. It it were only a question of saving time it would repay us to watch most carefully the first work of the child. That it is more than mere time-saving I need not affirm.

Let us try to realize the importance of the work of the "Receiving Class," and avoid any unconscious neglect. Keep a list of "busy-work" specially suitable for them, and arrange to have as much variety as possible. Make collections of numbers, letters, pictures, business cards, etc. Obtain a supply of beans, split peas, shoe-pegs and wooden slats for use in number, drawing, and other lessons. The pupils in the senior classes might be asked to make bags for these. I have always found the practice of asking the other pupils to do something for the little folks to be a very good one. It promotes good feeling between the classes and develops a spirit of co-operation that is always desirable.

In regard to the length of lessons for the lowest class I would recommend them to be always short and brisk. Have two short ones in preference to a long one. Far more will then be accomplished, as young children have not the power of continued concentration beyond a certain time.

Be always cheerful, happy, and hopeful with your new-comers, and above all patient, and the receiving class will be the most interesting and satisfying of all.

## METHODS OF TEACHING .COALESCENCE OF SOUNDS TO BEGINNERS. <br> rhoda lee.

Suppose the power or sound of six letters to have been taught - $m, a, t, s, p$, and $c$.
I. Make a large letter in chalk on each slate in the class at the board. The children hold the slate over the chest so that the letter which they are supposed to represent may be clearly seen. The teacher sounds the word mat. Those who represent any one of the sounds contained therein step forward or on the platform and arrange themselves to form the word.
II. Teacher gives a word such as sam or stamp and asks one scholar to pick out those who are required to form the word. The letters are arranged as in Exercise I., and the class sounds the word to see if it is correct.
III. The teacher arranges three or more
letters (children) before the others, those remaining in the class telling her the word.
IV. Each of the letters is placed in a little house on the black-board.
(a) Teacher points to $c, a, p$; children recognize and tell her the word.
(b) Teacher gives a word such as must, camp, etc., asks a scholar to point to, or knock with the pointer at, the doors of the houses in which the letters are.
(c) Children write the word the teacher gives.
V. Teacher sounds words, leaving space between the letters, short at first, but gradually getting longer. Children recognize and give the word.
This exercise is most economical, as a great many words may be given in a short time. It is useful, too, at any stage of the work, and may be given with advantage in every lesson until such time as word recognition becomes automatic.

## FOR REPRODUCTION.

## alec's bank.

Alec was a little boy who lived in the country. His uncle Simon often came from town to see him. Once he brought him a gold dollar, and said, "Here, Alec, put this in the bank, and by the time you are grown, you will have several more."

Now Alec had never seen a great house with the word "Bank" printed on the dorr in gilt letters, but he had often played on the bank of the pretty brook, which sparkled and danced through his father's farm. He knew very well, too, about planting seeds, and waiting for them to send up little green sprouts which were, after a while, to be apple or peach trees.

So he ran with his gold dollar down to the brook, and dug a hole in the soft bank, and put the bright piece of money into it. He hardly liked to cover it out of his sight, but was it not going to take root, and grow up a tree, having great branches all covered with shining dollars? Yes, he believed he could go out and gather a hat full of them, as his father gathered pears from the tree by the side of the door.
He went several times, that day, to look at the spot where he expected the tiny green sprout to come up by and by. But after uncle Simon had gone, mother said, "Alec, what did you do with your dollar?"
"I put it in the bank," said Alec.
"Why, what bank?" said his mother, surprised.
"In my nice bank by the brook, and, mother, when it grows up a big money tree, you shall have ever and ever so many dollars-a whole apron full."
"Why, what is the child talking about: Show me the place, Alec."

She dug into the bank where he showed her, but whether he had forgotten the exact spot, or whether some one had seen him put the dollar there, and taken it away, the poor little boy never knew. His pretty gold piece was gone, and though he went many times, hoping that he would find a money tree growing by the brook, the only fruit that came of his planting was a sad disappointment.

## CARELESS ROBBIE.

by A. b. $\mathbf{y .}$
"Robbie, do take Carlo out of the house," said mamma.
"Please, mamma, let him stay, said Robbie. "It's too cold to play out of doors, and I haven't played with him in most a month, I guess."
"O Robbie, dear, don't exaggerate; it was only yesterday morning I let you keep him in the house, and he chewed up baby's red shoe so he can never wear it again. You may keep him in just half an hour, and be careful to watch him and not let him break anything;" and mamma went on down stairs to help Bridget make a new dessert for dinner, for Uncle Jack and Aunt Annie were coming to spend the day.

Robbie and Carlo played quietly on the floor for about five minutes; then Robbie heard the hand-organ-and-monkey man just outside the window, and he ran out, just for a minute, to see the monkey and forgot all about Carlo. The monkey danced and played soldier with a small stick-gun, and then passed around his funny red cap for pennies. Just as Robbie was dropping his penny in the cap, a carriage drove up and, Uncle Jack and Aunt Annie stepped out. He ran up and spoke to them. "Come on in ; mamma's busy," he said. So he ushered them into the sitting room. But what a scene was before them. The small table was overturned, and a handsome vase that had been on it was broken: a picture of baby was chewed up so it could not be recognized; and last but not least, he had pulled down mamma's pretty headrest, a present from Aunt Anne, and was now chewing and tearing it to pieces.

Mamma had heard them coming, and now came up, but when she saw the confusion she was about speechless. She had papa send Carlo to the country, however, and will not allow Robbie to have another dog until he can take proper care of him.

## Charcoal.

What is its color?
Is it heavy or light?
Is it porous or closely formed?
Is it tough or brittle?
Can it be easily made fine like powder ?
Will it burn?
Does it make much flame when it burns?
From what is it made?
Why is it called char-coal? (Because wood partially burned is said to be charred.)
How is it make? (Some one should study this up and make a drawing of it upon the blackboard, and explain how small logs and short branches of hardwood are piled in a stack and nearly covered with a layer of earth, with small openings at the top and on the sides while it is being lighted, and closed after the wood is sufficiently burned.)
For what is charcoal used? (Sometimes for fuel, for filtering or cleansing water, for clearing sugar, for making crayons, for making powder, etc.)

CLASS RECITATION.
HOW THE LEAVES CAME DOWN. susan coolidge.
I'll tell you how the leaves came down, The great Tree to his children said,
"You're getting sleepy, Yellow and Brown, Yes, very sleepy, little Red; It is quite time you went to bed.
" Ah ! " begged each silly pouting leaf, - Let us a little longer stay ;

Dear Father Tree behold our grief, 'Tis such a very pleasant day, We do not want to go away."

So just for one more merry day, To the great tree the leaflets clung,
Frolicked and danced and had their way ; Upon the autumn breezes swuns, Whispering all their sports among.
"Perhaps the great Tree will forget And let us stay until the spring,
If we all beg and coax and fret. But the great tree did no such thing ; He smiled to hear their whispering.
"Come, children all, to bed," he cried ; And ere the leaves could ur:'e their prayer He shook his head and far and wide, Fluttering and rustling everywhere, Down sped the leaflets through the air.

I saw them ; on the ground they lay, Golden and red, a huddled swarm, Waiting till one from far away, With bed-clothes heaped upon her arm, Should come to wrap them safe and warm.

The great bare tree looked down and smiled, "Good-night, dear little ones," he said; And from below each sleepy child Replied, "Good-night," and murmured, "It is so nice to go to bed."

## For Friday fiternoon.

## TIMOTHY.

helen gray cone, in st. niciolas.
Timothy grows in the tangle tall,
Between the road and the gray stone wall; From its long green stalks upreaching high Its long green fingers point to the sky; And some turn purple, and some look tanned To a ruddy brown, like a sunburned hand, Bending and beckoning, to and fro,
As the breeze runs by through the clovers low, And the redtop ripples, feathery-fine, And the daisies shake, and the buttercups shine, Stirring whenever the light wind blows, Under the warm sky Timothy grows.

Timothy goes where the blown grass bows, Sturdily trudging behind the cows;
His hard little feet are red and bare,
And his brown face laughs 'neath his tow-white hair.
As blue are his round eyes, boyish-quick, As the ripe blueberries he stops to pick; And his new front teeth are sharp and small, Like the chipmunk's he chases along the wall. And whistling and following over the hill, While the cow-bells clink in the evening still, Where in the tangle his namesake grows.Under the bright sky Timothy goes.

## OUTOVPLACE.

There's a very strange country called Outovplace
(l've been there quite often, have you ?)
Where the people can't find the thing, they want And hardly know what to do.
If a boy's in a hurry, and wants his cap, Or a basin to wash his face,
He never can find that on its nail, Or this in its proper place.

His shoe hides far away under the lounge ; His handkerchief's gone astray;
Oh, how can a boy get off to school,
If he's always bothered this way?
Oh, a very queer country is Outovplace(Did you say you had been there?)
Then you've seen, like me, a slate on the floor, And a book upon the stair.

You think they are easy to find, at least !
Oh, yes ! if they would but stay
Just there till they're wanted; but then they don't ; Alas! that isn't the way.
When a boy wants his hat, he sees his ball, As plain as ever can be;
But when he has time for a game, not a sign Of bat or of ball finds he.
Sometimes a good man is just off to the train (That is, it is time to go),
And he can't put his hand on his Sunday hat: It surely must vex him, I know.

If somebody wants to drive a nail,
It's "Where is the hammer, my dear ?"
An so it goes, week in, week out,
And truly all the year.
How 'twould gladden the women of Outovplace, If the boys and girls themselves
Should wake up some morning determined quite To use hooks, closets, and shelves!

## A LESSON IN ETHICS.


THE THREE RIDERS.
Three nders set out for the temple of Fame, Each booted and spurred and equipped the same.
The first rode forth at a rattling pace,
Like a jockey who wins an exciting race.
The second set out with caution, slow,
So that, when need was, he might faster go.
The third rode steadily, quietly on,
At a quick jog trot he could reckon upon.
And which do you think will the winner be;
The hare, the tortoise, or number three?
The first one soon broke down of course,
He saved the saddle, but lost his horse;
The second met the regular fate,
Dallied too long, and was just too late.
The third, I grieve and regret to say,
Did not get there, for he lost his way.
He thought so much of his regular trot,
That to look at the signs he quite forgot.
See how strangely things befall.
Another, not thinking of fame at all,
Who was on his way to the breadfruit tree,
To provide for his wife and children three,
Went straightway into the temple of Fame,
And innocently asked its name!
They answered him. With a quizzical face,
He remarked : "It's a most uncomfortable place."
'Tien he went on to the breadfruit tree,
And home to his wife and children three.
The moral ? Well, if you can find it.
Write it out, for I shan't mind it.
-Tudor Jenks, in Christian Union.

## A PROBLEM IN THREES.

by eudora s, bumstead.
If three little houses stood in a row, With never a fence to divide,
And if each little house had three little maids At play in the garden wide,
And if each little maid had three little cats (Three times three times three),
And if each little cat had three little kits, How many kits would there be?

And if each little maid had three little friends With whom she loved to play,
And if each little friend had three little dolls In dresses and ribbons gay,
And if friends and dolls and cats and kits Were all invited to tea,
And if none of them all should send regrets, How many guests would there be?
-St. Nicholas.
The long looked for Composition book by Alexander \& Libby, has just been issued by The Copp, Clark Co., Ltd. It is very different from the old style books on this subject; one critic has suggested that the title "Composition Made Easy" would have been more suitable. The principal features of the book are a profusion of carefully selected models, to which the student's attention is directed by examination paragraphs and practice lists. Teachers and paragraphs with this in their hands need no longer students with composition hour. A fuller notice will appear in the Journal at an early date.

Coppespondence.

## "EXPERIENCE" CRITICIZED.

To the Editor of the Edecational Journal:
Sire:--With your permission, I wish to tres pass on your valuable space, to make a few remarks on an article entitled "The lnfantry," by one proudly signing himself "Experience," in your last issue. I do not wish to criticize the writer with regard to the many faults he has so ably pointed out in this department of our educational system. Much of what he says in that line is but too true. Neither do I intend to question the feasibility of "practical remedies" for the same, so "plain" (to him), though exception might quite reasonalby be made to both on some points. But when a writer of experience (?) uses such epithets as "inexcusable meanness," "absurd thoughtlessuess," "infantry," "teacherfactories," "raw recruits," senseless young recruits," etc., in referring to respectable young men and women in a respectable profession, it men and women in a respectable profession, it allowed to raise a voice in defence of the poor "llowed to raise a voice in defence of the poor "senseless" cannot defend themselves.
Now, while it must be admitted that it is a deplorable fact that "some" of our young people entering the teaching profession to underbid; that they, in some instances, do dis place better teachers ; that they do not get sullicient professional training (for which, who is to blame? Not they, surely ?) ; that they are in a sense all "raw recruits" and "green"; and that they have many other faults common to the human race; it is anything but a fact that they are "senseless," and no man with any degree of respect for himself, or for his fellow-being's feelings, would apply such a term to any class of men, not to speak of a class in which there are those of the gentler sex. If "Experience" applies such a term to the recruits, what would he use to designate the gentlemen forming the many Boards of Examiners, who have atijudged the "senseless" ones as qualified to instruct the rising generation? Surely they are entitled to a much more distinguished title:
But are the young teachers "senseless"? We think not. Some may be, such are perhaps found in all classes, even among men of "experience,"(?) but who will be so "senseless" as to condemn the church for the sin of one member" There is one at least who will, it seems. Some may also underbid; but is underbidding confined to young teachers? Ask the trustees of some of our rural schools. Who or what encourages and fosters this underbidding? Is it not the system that authorizes so many more to teach than are really required to fill the positions? Then why blame the individual, and according to the logic of "Experience," the whole class, for the sin of the system? Surely this is both "mean" and "senseless!"
Then, again, "Experience" seems to think that in every case the young teachers "displace better teachers," never taking into consideration the fact that many of the " 1225 better teachers" were lawfully disqualitied. This may be the fault of the system, but certainly not of the "infantry." But do they always displace better teachers? It seems unnecessary to say that they do not. Age and experience are, or should be, of considerable value to anyone, especially to a teacher; but sometimes they have the effect of making him a lazy, routine-working pedant, without the wholesome, commendable ambition of his younger brother. The writer, during several years' experience as a teacher, has many times heard men of high professional authority, say that they have found the best schools in charge of young ladies between eighteen and twenty years of age. The same has been as often seen in our educational journals, from inspectors, Model School teachers (not secondclass men either), and from other worthy sources, quite as reliable as "Experience." Now I do not preteul to say that it might not be better to raise the age for entering the profesletter to raise the age for entering the profes-
sion to twenty-one, provided they should then be qualified to teach for life, not for fiye years as "Experience" suggests, upon passing the required examinations ; but we have the opinions of worthy men in favor of the unfortmate "minors," and let us be at least just to them.
Besides all this there is another side to the question. Does "Experience" ever think that many of the "infantry" are young men and women of limited means, who, perhaps, have gone into debt to educate themselves for their
chosen profession? Does he think of what failing to obtain a situation means to those? If, when so pressed by stern necessity (a "necessity" under existing circumstances), a poor, "senseless minor" does underbid. "in order, to get a start in the world," would anyone, with the least charity or fellow-feeling for a "brother in distress," call even that one unfortunate in distress," call even that one unfortunate "mean" or "thoughtless," not to mention the such is too often the case; but let us find the source of the disease before we apply the remedy, "lest we offend where we fain would heal."

It seemed altogether unnecessary for " Experience" to mention that he was not a teacher. No teacher would speak as he does of his co-workers. If he has spent thirty years in studying this problem, and knows it so thoroughly now, we would advise him to spend the next thirty, if that will not carry him beyond the allotted time of man, in studying decorum of speech, and in the cultivation of a more charitable and just disposition.
Thanking you for your valuable space,
I am, yours sincerely,

## Fair Play.

## "'THE INFANTRY."

To the Editor of the Educational Journal:
Sir,-I am glad to notice that "Experience" has taken hold of the infantry question, as he terms it. It did not come too soon, and I hope that the teachers of this province and the EDEcational Journal will not let the matter drop until they have brought about by some means the changes that must be made before the teaching profession in Ontario is raised to such a standard as it should have. Some of the facts mentioned by "Experience," which to you seem incredible, are indeed facts. There are at present in the hands of my own trustees, applications for the school I am teaching, although there has been, as yet, no word about changing. One of these applications from a male student at a model school, asks $\$ 125$ less than my present salary. Four other school boards in this immediate neighborhood have received applications in the same way. -If " Experience belongs to some other part of the province than this, the facts tend to show that this underbidding is a general thing. Have the teachers not a reason for crying out? Is teaching any longer worthy of the name, "profession "? Has the temple in which the nation should be moulded become a house of merchandise?
"Experience" would lessen the number of model schools. Yes, lessen them all at once. What is the need of them? Are there two classes of pupils in our public schools-some which require graduates of normal schools, and others which require modelites to teach them? It seems to me extremely absurd to have these two classes of training schools. If normal graduates are better than modelites, why not let the country have the use of them? It would be ridiculous if the system in vogue in Ontario in training public school teachers were applied to other professions. Supposing some one proposed to turn out two classes of lawyers, doctors and ministers, how would the idea be received? If. then, it is necessary that in these professions there be one standard, and that the best, how much more is it necessary in the teaching profession. I believe that caudidates for public-school teaching should be required to take, at least, the Senior Leaving examination, and should then spend a much longer time in professional training than they do now, in the very best kind of training institution that can be had -call it model or normal school. There caunot be two bests. After that I am not particular as to what limit is put on the age.
The teachers of this province should take the matter in hand, meet, deliberate and act. Mature a plan and press it on the attention of the department ; if need be, appoint deputations to wait upon the proper officials; tight, fight, and-win.

Teacher.

## Question Drawer.

N. E. M. "Ouida" is the pen name of Miss "ouise de la Ramé, a popular English novelist. "Ouida" (pronounced wé-da) is said to be a childish mispronunciation of Louisa. We are not aware that any detailed biography of her has yet been written, but no doubt a sketch of her life and writings would be found in any recent edition of a good dictionary of authors.
C. H. I. Your question, which is considered the best dictionary for school-room use, cannot be answered directly, as no doubt each of the leading dictionaries of the day has its admirers. The "Imperial" is beyond question a very valuable book, for those who can afford so expensive a work. The new dictionary, of which the second and concluding volume has just been announced, by Funk $\mathbb{N}$ Wagnalls, is a very elaborate work and has been produced at an enormous cost in money and labor, and can scarcely fail to take a high rank. Our own opinion, formed however, without extended comparison, is that if you want simply a handy and comparatively cheap dictionary (three or four dollars) you can hardly find a better than the "Concise Imperial"; while if you can afford a larger and completer work in one or two volumes, (ten to fifteen dollars) it is doubtful if there is a better than Webster"s new "International." We have lately purchased one of the latter for our own use, and are more than, pleased with it. Its "Pronouncing Gazeteer," " Noted Names in Fiction,' etc., are very useful features. The faults in pronunciation, etc, of the earlier editions of Webster are eliminated, and much valuable matter added.

## Book Notices, ete.

Ciemical Theory for Beginners. By Doctors Dobbin and Walker, Tniversity of Edin burgh ; pp. 210, crown 8 vo. Macmillan \& Co.
The twenty chapters herein contained cover the ground satisfactorily. A good series of practical exercises should be added.

Problems in Arithmetic. By C. Clarkson, B.A. The Public Sch ol Al!ebra. By the same author. Teachers' edition, 60c.; Pupils' edition, 25 c. Gage \& Co., Toronto.
These books are the only ones in print that contain full sets of the Entrance, Public School Leaving, and Primary Examination Papers, in combination with skeleton solutions and answers.

The Cinadian Accountant. By S. G. Beatty and J. W. Johnson, F.C.A.; 10th edition, revised and enlarged; pp. 369, 8 vo., $\$ 2.00$. Ontario Business College, Belleville.
This is a very complete set of lectures and exersises, by which any intelligent person can master the principles of book-keeping ; it is also a valuable book of references on commercial law and business rules. It is well bound and beatifully printed, and is well worth the price. **
Methods of Teaching. By A. N. Raub, Ph. D. Raub \& Co., Philatelphia. School Manafement. By A. N. Raub, Ph. D. The School-Room Guide. By E. V. De Graaf, A.M. C. W. Bardeen, Publisher, Syracuse. All three " carry coals to Newcastle," and "short weight." The "raison d'étre" of the first two is probably indicated by the fact that at the time the first was written the author was also principal of the Central State Normal School, Pennsylvania. One wonders how the author can have the effrontery to place before men and women students such twaddle as that in the first mentioned.

The Roman Pronunciation of Latiu. By Frances E. Lord, Professor of Latin in Wellesley College. Ginn \& Co., Boston. A thoroughly good book-the best brief exposition of the so-called Roman method and the grounds upon which it is based. An occassional "gushing" phrase, such as "the honey-
tongued orators and divine poets of Rome," does not detract from the real worth and interest of the book. It is to be noticed that the author declares against the $w$ sound of consonantal $u$ $(v)$, and is doubtful on a $a$, giving a choice between the sound of ea in pear and the sound of aye. It is to be very much regretted that there is no agreement on this continent upon either of these points.

Gildersleeve's Latin Grammar; third edition, revised and enlarged. By B. L. Gildersleeve and Gonzalez Lodge. University Publishing Co., New York.
All who know the old edition of this grammar will heartily welcome the new. Indeed, Professor Gildersleeve's name will be sufficient. It may be confidently predicted that this new edition will eventually supplant the best grammars now in use in the schools. The brevity and simplicity with which the latest philological results in syntax are stated are truly admirable. For a fair test of the quality of the whole book let anyone examine the author's treatment of the vereor constructions, or the fine chapter on metres. He will be a courageous man who will attempt another Latin Grammar in our generation. The book is all that Professor Gildersleeve's name would lead us to expect. The publishers, too, are to be congratulated upon this excellent specimen of their bookmaking.

## Literary Notes.

E.L. Kelloga \& Co., New York and Chicago, have re-published "First Learnt at School," by' S. B. Sinclair, B.A., now of Ottawa Normal School. This is a high compliment to a Canadian school-book with which many of our readers are no doubt familiar.

Two notable educational articles are to appear in the November Popular Science Monthly. The one on Preparation for College by English High Schools, written by John F. Casey, of the Boston High School, shows what boys who (nter Harvard without Greek are doing. The other is the first of a series on Manual Training by Dr. C. Hanford Henderson, who is well known to the renders of the Monthly.

There is no magazine that maintains a more uniform or higher degree of literary excellence than the old, well-known, weekly eclectic, Littell's Living Age. Its selections are taken from the leading foreign quarterlies, reviews and magazines with the truest judgment, and in its variety there is something for every cultivated taste. To busy men and women who wish to be informed in regard to current English periodical literature, and have the best papers, the most representative, profitable and entertaining, culled for them by a competent hand, The Living Age is indispensable. New subscribers for 1895 are promised the thirteen weekly issues for the current quarter free. Address, Littell \& Co, Boston.

The leading article in The Forum for November is "The Political Career and Character of David B. Hill," by an anonymous writer, who will attempt to make an independent measure of Senator Hill's position and influence in national politics. In the same number ExSenator Edmunds discusses the question of the Nenator Edmunds discusses the question of the noteworthy article from a high constitutional authority, and a man who has himself had long senatorial experience. Among other articles are "Thackeray's Place in Literature," by Frederic Harrison ; "The Temperance Problem: Past and Future," by Dr. E. R. L. Gould-a review of the results of prohibition and high license, and an argument for the Gothenburg system ; "The Contented Masses in the West," by Chancellor J. H. Canfield, of the University of Nebraska; "How the Infant Death-Rate Was Reduced in New York," by Nathan Straus; 'The Wage-Earners' Loss in the business Depression," by Samuel W. Dike; and, "Facts pression," by Samuel touching a Revival of Business."

Witi the November number the Arena concludes its tenth volume. The opening paper in this issue, which contains 164 pages of reading matter, deals with "The Religion of Emerson," by W. H. Savage. Kuma Oishi, A. M., Ph. •D., a well-known Japanese scholar, writes on "The Causes which Led to the War in the East." Congressman John Davis contributes a paper called "The New Slavery." A student of occultism considers and criticises the Thibetan papers of Dr. Hensoldt, under the caption of "The Brotherhood of India." Catharine H. Spence writes on "Effective Voting the only Effective he Freeland niversity Martha Louise Clark deals suggestively with "The Relation of Imdeals suggestively with to Pauperism and Crime." Rev. Byron becility to Pauperism and Crime. Rev. Eyron Preached." C. J. Buell takes up the pressing difficulties involved in "Immigration and the Land Question." Dr. Henry A. Hartt, and Dr. J. M. Peebles, M. D., two orthodox Christian scholars and medical men, contribute cpposing views on "The Bible and Modern Spiritualviews. on "The Bible and Modern Spiritual"The Century of Sir Thomas More," which he thinks presents certain striking parallels in its literary and social aspects to our own time. Thomas E. Will, A.M., has a timely subject in "Political Corruption; its Methods and How to Defeat it." Walter Blackburn Harte, winds up the number with a good laugh in a humorous essay called "Advent of the Young Man."

The Popular Science Monthly for November begins a new volume. First comes a fully illustrated account of The Glaciers of Greenland, by Prof. Angelo Heilprin. The recent unlucky trip of the Miranda has made Greenland a region of much present interest. There are two notable educational articles in the number. In Preparation for College by English High Schools. Mr. John F. Casey tells what boys who enter college withont Greek are doing. Dr. C. Hanford Henderson contributes the first of two articles on Manual Training, in which he shows what a well-planned manual training course consists of. The Cobra and other Serpents are described, with illustrations, by Mr. G. R. O'Reilly, who has lived among snakes in various parts of the world, and is able to correct several popular errors concerning their habits. This number contains also the recent address of the Marquis of Salisbury upon assuming the presidency of the British Association for the Advancement of Science. There is an admirable little scientific temperance lecture by Dr Justus Gaule, under the title Alcohol and Happiness. A description of The Swiss Watch Schools is given by Theodore B. Willson Redonda and its Phosphates are described by Fred W. Morse. W. T. Freeman calls attention to analogies and Homologies in animal and vegetable life. Something of the Chemistry of Cleaning is explained by Prof. Vivian Lewes. There is an account of the career of Philibert Commerson, "The King's Naturalist," while the subject of the usual Sketch and Portrait is Sears C. Walker, astronomer of the United States Coast Survey in its early days. New York: D. Appleton \& Company. Fifty cents a number $\$ 5$ a year.

## SOME THINGS THAT TROUBLED ME.

It was a district school and my first experience in teaching. There were, of course, many things that troubled me, and equally of course one of these things was whispering. I was not rash enough to forbid it altogether, but I knew that most of it was entirely unnecessary, that it was wasted time, and made confusion, and I was anxious to stop it. I tried various mild expedients during the first week without much success. The next Monday morning I was ready with a new plan.
The school started off nicely and the second recitation was well under way when I noticed a boy near the back of the room beginning a whispered conversation with his neighbor. I stopped the recitation, and said pleasantly to the culprit, "Johnny, wait a minute, please." Then, addressing the school, I, said quietly, "You may lay aside your work." They looked surprised but obeyed promptly. I then said to them, "Johnny Brown wants to whisper, and as we can't very well carry on the school-work and attend to Johnny's whispering, we will give our undivided attention to Johnny while he whispers." Everybody looked at Johnny, and Johnny
grew red in the face, and made an attempt to pick up his book; but I said,"Now, Johnny, we have stopped our work to give you a chance to whisper, and we are waiting for you." Johnny essayed a smile, but it was a very sickly one. He wriggled about on his seat, and the effort to continue the whispering while we were all watching him was a hard one. The sound of his own voice in the stillness that had fallen upon the school, seemed to startle him, and he stopped before he had finished the first sentence. "Have you finished, Johnny?" I asked, and Johnny said "Yes."'"You are sure that there is nothing more you need to say?" Johnny was quite sure. I looked at the clock and said pleasantly that we had lost five minutes of the time we had for school-work but that of the time we had for school-work but that
Johnny must have thought he had something to say of more importance than the school-work, or he would not have troubled us. Without further comment, the work was resumed, and I was troubled no more that day by whispering.
I had occasion to apply this treatment three or four times during the next two weeks, but in no case twice to the same scholar. At the end of that time the habit of whispering seemed to me to be practically cured. But, you may ask if they did not whisper without my knowing it when my back was turned. It may be they did, but I am sure they did not disturb the work of the school to any extent, and as I had never forbidden whispering, I did not worry about it B. in Western Teacher.

In getting together suitable material for Reception Days, Special Days, and exercises of all kinds, difficulties vanish in the reading of E. L. Kellogg \& Co.'s (New York) catalogue of books, cantatas, etc. All the best published are kept by them at lowest prices. For Columbus Day they furnished more material of this nature than all other firms together. Nowhere else can these books be found in such variety, and at such low prices. To anyone answering this advertisement, and sending 10 cents, a copy of Hughes' "How to Keep Order" will be sent with the catalogue.

Canada, all hail! The school authorities of Ontario, in addition to the usual preparatory work, require that the following selections be memorized before admission to the high schools:
"The Bells of Shandon."
"To Mary in Heaven."
"Ring out, Wild Bells."
"Lady Clare."
"Lead, Kindly ,Light."
"Before Sedan."
"The Forsaken Merman."
"The Three Fishers."
"To a Skylark."
"Elegy in a Country Church-yard."
Think of it, in these days of much teaching and, some say, little learning - that so many grood things should be so securely lodged in the memory of all pupils promoted to a High School. -Penn. School Journal.

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## Official Calendar

OF THE Educational Department

## November:

1. Last day for receiving applications from candidates not in attendance at the Ontario School of Pedagogy for special examination to be held in December.

## December :

Io. County Model School examinations begin.
II. Ontario School of Pedagogy examinations at Toronto begin.
19. Written examinations at Provincial Normal Schools begin.

Selections for Literature.

## Entrance.-1895.

## Fourth Reader.

Lesson I. Tom Brown.
Lesson V. Pictures of Memory.
Lesson X. The Barefoot Boy.
Lesson XVIII. The Vision of Mirza.First reading.
Les on XX. The Vision of Mirza.-Second reading.
Lesson XXIII. On His Own Blindness.
Lesson XXVI. From "The Deserted Village."
Lesson XXXII. Flow Gently, Sweet Afton.
Lesson XXXVII. The Bell of Atri.
Lesson XLII. Lady Clare.
Lesson LXVIII. The Heroine of Vercheres.
Lesson LXXVI. Landing of the Pilgrims.
Lesson LXXXIX. After Death in Arabia.
Lesson XCI. Robert Burns.
Lesson XCIV. The Ride from Ghent to Aix.
Lesson XCVI. Canada and the United States.
Lesson XCVIII. National Morality.
Lesson CI. Scene from " King John."

## Selections for Memorization.

## Fourth Reader.

1. The Bells of Shandon, pp. 51-52;2. To Mary in Heaven, pp. 97-98; 3. King out, Wild Bells, pp. $121-122$; 4. Lady Clare, pp. 128-130; 5. Lead Kindly Light, p. 145; 6. Before Sedan, p. 199; 7. The Three Fishers, p. $220 ;-8$. The Forsaken Merman, pp. 298-302; 9. To a Skylark, pp. 317-320; 10. Elegy, written in a country churchyard, pp. 331-335.

## Public School Leaving.-1895.

 High School Reader.XXXI. To a Highland Girl.
XXXV. The Isles of Grecce.
LI. Horatius.
LII. The Raven.
LVI. To the Evening Wind.
LXVII. The Hanging of the Crane.
LXXIX. The Lord of Burleigh.
LXXXI. The "Revenge."
LXXXI. The" Reveng
LXXXII. Herve Riel.
CII. A Ballad to Queen Elizabeth.
CV. The Return of the Swallows.
CVIII. To Winter.

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All books and other articles which can be conveniently sent by mail will be forwarded, post-paid, on receipt of price. Maps, Globes, and other goods too heavy or bulky to be sent by mail, will be forwarded by express, charges to be paid by the person addressed.

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    Co., New York.

