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## Editorial 1 Rotes.

The National Educational Association of the United States is to meet this year, the first week in July, in Denver, Colorado. Preparations are already being made for the vast gathering expected.

Have you a humane association of any kind in your school? If not, what are you doing to counteract the tendency to purposed or thoughtless cruelty which is so characteristic of many boys, and, we fear, of some girls? What are you doing to cultivate and develop the God-given sense of pity, gentleness, and tenderness to the weak and defenceless, which so refines and ennobles the childnature? If you are doing nothing in either way, are you not neglecting one of the most vital parts of your great work of character-forming ?

Recent statistics are said to show that in the United States, as a whole, there are more boys than girls in the elementary schools, and more girls than boys in the secondary. In the public secondary schools there are nearly fifty per cent. more girls than boys, while in the private secondary schools there are nearly twentyfive per cent. more boys than girls. In the Normal Schools, there are 26,725 women and 12,412 men students. This represents the tables turned with a vengeance. We can remember when girls were not admitted to the secondary
schools of Ontario, save to a few specially constructed for them, on an easy and superficial pattern.

A GOOD deal is being said and written in these days about the newly-discovered (?) faculty, or quality, or method, or whatever it may be, of apperception. The following, for which we are indebted to the contributors' columns of an exchange, will make the subject as clear as-as-as -" anything," to the mind of many a perplexed young lad or girl, marching forward along the beaten but arduous way towards the coveted "Third." It is but " a partial truth," we are told, to say that " apperception is the reaction of the old against the new." "The essential element of apperception would seem to be this integration of one's otherwise unrelated experiences, the massing of the mental life, the interrelating and linking of parts, the converging of the virtue of all particular experiences into each, thereby enriching the whole."

IT is said that plans are being devised in Brookline, Mass., whereby parents and teachers can be brought together to consult on educational questons. Some advantages might flow from such a consultation. Parents and teachers should most certainly consult together, and that frequently. But the most effective consultations will always be found to be those in which the consulters are made up simply of the parents of a given family and one or more of their children's teachers. If the parents are sensible they will give the teacher many hints in regard to the individualities of their children, which may be of the greatest service. If the teacher is sensible, he may be of great service to the parents. The interests of both parties are the same at bottom, and, if they can get near enough together to gain one another's full confidence and sympathy, the children can hardly fail to be greatly benefited. Wise parents, especially those whose children are troublesome, should give to those children's teacher, if he or she is a true teacher, a confidence somewhat similar to that they would give to their physician, and vice versa.

We should be sorry to say anything that might possibly prejudice the mind of any reader against the Boys' Brigade movement, which is now being pushed somewhat vigorously in Canada. When we note the kind of men who are enthusiastic in favor of the movement, men whom we know to be actuated by the best of motives, we are sometimes moved to pause and reconsider the ground of our objections. We advise our readers to study both sides of this, as of every other important question, and form their own conclusions. But from our knowledge of the boy nature, we cannot see any good reason to change our strong impression that the military evolutions, handling of weapons, etc., are all calculated to stimulate the imagination on the side on which it rather needs repression; and to lead him to set before him ideals which are quite out of harmony with the altruistic and philanthropic principles which lie at the base of Christ's ethical teachings. These conceptions of the influence and tendency of the Brigade methods are so well brought out in the following clever parody, clipped from an English paper, of a familiar Sunday-school hymn that we cannot refrain from giving it to our readers:

Dedicated to the Church Military. Air: ". I want to be an by M. E. beECh.
I want to be a soldier, And with the soldiers stand,
A cap upon my forehead, A rifle in my hand.
I want to drill for service, With military skill,
And master modern tactics, The most approved, to kill.
I want to face a battle, Where bristling sabres gleam, And hear the wounded shrieking, And see the life-blood stream.
1 want to wear a starry coat, And ride a prancing steed, And write my name in history By some heroic deed.

We'll help the Church to march in line With this "progressive" age;
Ring out the old, ring in the new, With fighting on the stage.
Rule out the patient Nazarene, Rule out the Golden Rule, And base our creeds and faith upon The military school.
We'll file around the pulpit steps, With spear, and sword, and gun, And sing and shout in Sunday school, "Fight on ! fight on ! fight on !"

## Englisb.

All articles and communications intended for this department should be addressed to the Englisi EDifor
EDUOATIONAL Journal, Room 5, 11 Richmond Street Webt, Toronto.

## A LESSON IN PARAGRAPHING.

by m. A. watt.

"I am going to write a word on the blackboard, boys and girls, and you are to tell me what you think when you see it first. Tell me your thought in one word. Ready."

Miss Cheery wrote on the board the word "summer," and immediately a forest of hands waved in the air, and sparkling eyes were fixed upon their teacher's face, for they well knew the power of a well-directed gaze. Miss Cheery had a way of indicating who was to speak by nodding her head towards the pupil, who lost his chance to answer if his attention wandered.

Quickly the teacher wrote, on the left-hand side of the well-cleaned blackboard, the words given by the children, "Warm, flowers, vacation, cool, fishing, swimming, rowing, sailing, paddling, camping, picnics, racing, roller-skating, skipping, bees, swinging, shooting, games, thunderstorms, birds, playing, cheerfulness, singing, etc." Words of commendation fell very often from her lips as she wrote. She believed in a word of praise. "More harm is wrought," she often said, "by stinting praise than by a free but judicious dispensation of it, especially with young children."
"Now, that is fine. I am pleased with that list," she said, "but I want something else. You have all heard of the little boys and girls who live in Lapland and other places where such a thing as our summer is unknown. Now, suppose one of those children were to visit us, to-day, what would you tell him about summer? I mean what would you tell him the very first of all? No, not 'picnics' first, for he would wonder how you could sit outside to eat your dinner. Yes, 'warm' would likely be the first thing. Choose out the words in the list already on the board and I will put them here on this side of the line." Drawing a line, she wrote on the right of it, the words, in a column, "Warm, flowers, thunderstorms, birds, fruit, sunshine, bees, jolly, cheerfulness," etc., checking the list as she wrote.
"Now, I shall write down the things we do in summer that make the summer so pleasant in this climate."
In a second column she wrote: "Fishing, swimming, shooting, skipping, riding on horseback, riding on bicycles, camping, picnics, ball, paperchase, sailing," etc.
"What days are there in summer which make summer a very happy time for little boys and girls, and which we would be sure to tell our little Laplander about?"
Again, in a third column, Miss Cheery wrote : "Queen's Birthday, Garden Party night, Dominion Day, Excursion Day, Holidays."
"Well, here we have three columns, and it would be very good if we had a heading to put above each one. Can any one tell me what would be suitable for the first one?"
After a little trying, they decided upon "A Description of Summer" for the first ; "Sports of Summer" for the second; and "Pleasant Days of Summer" for the third.
"Now, I believe we all could write a very good composition on 'Summer.' But it is getting too late to write on all three topics, so, perhaps, we had better choose one topic to write on to-day. To-morrow, we shall take the subject up again, if we do well to-day. Who will write 'A Description of Summer'? Very well, begin writing. Who would like to take 'Sports of Summer'? Very well, you may begin your work, too. And who would like the 'Pleasant Days' best? All but Mamie? What is it, Mamie?"
Mamie wants to write on all three, and so she is allowed to make three separate stories. No time is being wasted, and the stories are ready when the time is up. Several are read by the writers, on each topic, before the work is changed.
Next day the words were ready on the board, having been written there by a boy who had had the honor of writing them in the teacher's "Comsposition Book" the previous day. (The said "Composition Book" is a scribbler in which the best, most original, or striking compositions are rewrit
ten by their proud authors; there are some "poems" as well as prose articles inscribed in careful round hand on its pages.)
"First of all, children, we must take our Readers," and a page was named on which is a marked example of paragraphing. The subject of the first paragraph was quickly found, of the second, and so on with each paragraph.
"Can any one tell me when a new paragraph is begun?" Miss Cheery asked, and the answer was given that it was when the subject was changed.
"How does the writer of this story let us know that he is changing the subject, even before we read what he says?"

The indenting of the first line was then noticed, the distance from the edge of the paper was measured, and a deduction made as to what would be a convenient distance-measurer, when a slate was to be written upon, instead of printing on paper. The width of the fore-finger was decided upon, the books were returned to desk, and the slates were prepared for work; the title was written, "Summer," and the children began to write. Miss Cheery found that their chief error lay in writing the titles of each paragraph, thus making three stories, instead of one in three parts. A reference to the Reader cured that. The best stories were copied in the "Composition Book," and a readinglesson period was spent in reading original work instead of the usual lesson ; each child coming to the front of the room and facing the class as he read. This plan may not be new to most teachers, as, indeed, it is not original with the writer, who has adopted the plan, with more success than any other ever used, the interest of the pupils being aroused and their pride stimulated by the active share they take in the preparation of the skeleton of the theme. Besides this, the spelling of the more difficult words is before them; their vocabulary is also enlarged, each individual having the vocabulary of the class from which to choose.
An example of the work done :

## bruno and the pig.*

Mrs. Summers had a Newfoundland dog, it was a mere puppy. Mrs. Summer petted the dog, she liked it very much. But, one day, Mr. Summers brought home a pretty little pig, pretty enough, she thought, to take into her lap. She used to pet it a lot more than the dog. So the dog used to nip the poor little piggy.

One day, when Mrs. Summers was about her work, she heard a loud squeal, she ran out as quick as she could, and there she saw poor little pig stuck fast in a great puddle of mud, and Bruno came running back as if to say, I've fixed that little dunce now, haven't I?
She made Bruno go back and fetch him out, so off he scampered, and when he came back he brought back the dirtiest little thing you ever saw.
She had to get some warm water and a broom. And all the time she was washing him, Bruno laid his head on one side, his tongue half out, and I almost saw that dog laugh.

## A HUMBLE SOUL.

## by paul bourget.

(Translated from the French for The Educational Journal.)
The heavy tramway coach which unites the station at Montmartre, Paris, with that of the Arc de l'Etoile is about to start. On this cold February afternoon but one place remains vacant, that next to the last on the left, a narrow seat, scarcely visible, between an enormous woman of the middle class, who holds upon her knee a black leather bag, and an aged man wearing a ribbon in his buttonhole, probably an old officer, whose bilious complexion, hard blue eyes, and thin lips, denote the poor sleeper and the one who would inevitably cry out, "Are we never going to leave ? . . ." Just as he utters these words in a querulous tone, the coach, which was already moving, stops again. A short, corpulent man enters hurriedly, pushed in, rather than assisted, by the conductor. He seizes a strap overhead with one hand, while he carries in the other a lawyer's bag, shabby and worn, and stuffed with books. He makes his way without regard to knees which he knocks, feet which he

[^0]treads upon, and umbrellas which he upsets, and "Enally reaches the woman and old man. With an "Excuse me," which no one deigns to notice, he takes his seat between these two formidable neighbors. One thumps him with his elbow, the other, owing to her dimensions, obliterates him. "Ex"cuse me," says the newcomer, turning to the left. "Excuse me," he says, turning to the right. But the coach glides along, drawn by its two iron-gray horses, towards that boulevard made up of artists, small tradesmen, and working-people, who exhibit in their numberless bric-a-brac shops thousands of engravings of the first emperor-Oh ! the cruel irony of the end of glory! Yet the man with the bag has settled himself as well as he could, opened his bundle at his last work, and brought forth about thirty pages, folded across and at the sides. From the pocket of his overcoat, roughly bound with galloon, and greasy at the collar, he has drawn a pencil, and pushed back his tall silk hat, battered and without nap. His hair is over-long, his beard unkempt, his heavy boots are muddy, his trousers bag at the knee, his black cravat, which encircles a paper collar, masquerading as linen, is frayed. The stains on one of his hands betoken the recent, use of the pen, and when he turns over one by one the leaves, on which he traces in pencil cabalistic signs, his inquisitive fellow-travellers may read, "Vanaboste Institute, Latin exercise." The man with the bag is a professor, one of the saddest of the erudite species, a free professor as they call him, not having a place in a State college, and forced to live by private tutoring. This free professor is but fifty-two years old. One would readily take him to be sixty, so much does he show the wear and tear of his anxious life. For example, he rose this morning at five, without noise, for fear of rousing his wife, has dressed himself without a light, using the only pitcher of water, the only soap, and the only comb which belong to the household. Before six o'clock he, walked from the Avenue des Gobelins, where he lives, for economy's sake, to a boardingfouse in the street known as the Vielle-estrapade. From six to seven, he heard the lessons of and taught several pupils who take the courses at the Lyceum Louis-le-Grand. At eight, he presided at the desk of the Vanoboste Institute, recently removed, since it has increased, to an old hotel in Montagne-Sainte-Geneviève street, situa ted "between courtyard and garden," as the prospectus says, which fails to add that this garden consists of a square of ground as large as a pocket handkerchief, where three sickly acacias grow and where the sun never penetrates, so overshadowed is it by the neighboring houses. The professor's entire breakfast has been a roll in form of a crescent, costing one cent, and munched as he hastens along by the sombre walls of the Pantheon. At ten o'clock, he will go back home, where there will be four scholars to instruct by twos until half-past twelve. It is now three, and he has had time since breakfast to follow another course at the St . Cecilia School, a young ladies' academy, where his age allows of his being admitted. There are still five lessons to give-three before dinner, two after - and his day will be done. The coach proceeds,
stops, slows, stops again, then gets under way once stops, slows, stops again, then gets under way once more. The professor's pencil is busy making marginal notes on the copy, tracing $m s$ 's which signify mistakes in sense, $f$ 's meaning faults in language, $m i^{\prime} s$ mistaken interpretation, and $f \sigma^{\prime} s$, the very frequent $f o$ 's signifying faults in orthography. And as he corrects his copy, this old slave of unattached instruction dreams of the reputation he is about to make. Claude Larcher, the writer, now so well known, has procured him lessons with a Russian lady in Paris for a short while. He is to give lessons for an hour four times a week to her little boy, who is somewhat pale and gentle. He is only to read and write at his dictation, and for this hour they are to give him thirty francs! Never before has the free professor been paid so much. He fondly indulges a dream, which is, to take advantage of the occasion to lay aside a little money that he may enjoy with his wife, after twenty-seven years of marriage, two weeks at the seashore. He has never yet been able to do it. His expenses have always been so heavy, yet he has always worked hard. At the age of nineteen, not having passed at the Normal School, he became a schoolmaster to prepare for his degree. Having received it, he married the daughter of one of his colleagues, and, of course, there was the furniture to pay for his first child had to be educated, then the second third, and fourth. Now, his two elder daughters
have married; one, to a business man, the other to a lawyer, two of his former scholars. As there was no fortune to bestow, the father has contracted to give them each a thousand francs a year. Of the two boys, one has just graduated from the military school of St. Cyr, and the father allows him, too, a thousand francs. This is the mother's doing, to
avoid por and avoid partiality. Somewhere, off in the country, there is an old aunt, who would die but for the three hundred francs he sends her. Besides, he has brought home his wife's mother. This all counts up, and the professor is paid on the average only four francs per lesson, sometimes three, sometimes five, less often six, and rarely, very rarely, seven. The lessons to the Russian lady's boy are an unexpected windfall, the more so that the Montparnasse line allows him to reach his pupil and return for twelve cents, without losing extra time, thanks to the system of rails which permits of his writing without being jostled. He has a pleasant smile, this excellent father, "HO," as he is called by the Vanaboste boys, who jeer at his personal carelessness, while applying to him the chemical properties of water. Little he cares that his neighbors squeeze him to their uttermost, that his fellow-travellers eye him with scorn or opprobrium -him, his bag, and exer-
cises. He seen cises. He sees in imagination a little bit of Norman coast-as it is pictured in the illustrated papers, for he has never left Paris. He sees the ocean, he sees "Mamma," his wife,seated on the shorebeside as waves of the purpureum mare, the purple sea,
as his beloved Virgil.... And when the as says his beloved Virgil $\ldots .$. And when the
coach stops at the Arch, after crossing the Seine,
and coach stops at the Arch, after crossing the Seine,
and slowly ascending the long, rough Marceau avenue, it is with a light step that he flies towards the hotel, rented ready furnished, in the street of Bel-Respiro, where lives the Russian lady, little
Andreate Andrew's mother. He forgets to wipe his feet as he enters the portal, and the liveried lackey who has just announced him, like any tradesman, by
striking the striking the bell twice, says to a fooman, who has lingered at the door, "That fellow just coins money-doesn't do a stroke-yet he won't even pay for a carriage to come here with clean boots. The old miser, humph!"
Ah! that worthy soul!

## CORRESPONDENCE.

H. M.C.-In Second Reader, p. 84,
"We laugh at the cuckoo
A-coo-cooing to her tit,"
the word "tit" means little bird, her young "Coo-coo! coo-coo!" etc., p. 28, is intended to reJ. MCV, -The Constitution established in 1795 (the third year of the Fear 3 was that lic), entrusting the government to a modified republican administration consisting of a council of Ancients of 250 members, sanctioning the laws, a council of Five Hundred preparing them, and a Directory of five meinbers. Ascii was the name of a nation (see Pliny II., 73) in
whose country the sun stood overhead, so that objects cast no shadow. The other name you give is illegible : please repeat with context. If you mean "antoci" (Greek antoikos), the word denotes those living in the same latitude in the opposite hemisphere.
(1) Brictius, Bishop of St. Maria de Palled Saint Brice (Bryce): cuted under the Emperor Dion Maria de Pontano, perseof Constantinus. His day is the gth of July. (2) Briccizes, Bishop of Tours, 400-444, whose name became celebrated in England as well as in France. His day is to death in 659 for (3) Brixius, a holy woman put Flemings. in 659, for harboring a missionary to the reference is Her day is the $12 t h$ of November. Your reference is probably to (2), as this saint's name is pre-
served in the calen M.L.-IIe sat by of the Anglican Church.
M. L. -IIe sat by (near) me. By (through, by the judge of nature by (by means of the the difficulty. We plant by (having hold at) the roots. He pulled up the A.H.C.—T
term applied to the coast main (i.e., mainland) is the Mosquito coast (Central America), the north coast of Darien, Colombia, and Venezuela as far as the LeeWard Islands. Some have applied the term (Worcester, Geographical Dictionary) to "that part of the Atlantic
Ocean which washes the Ocean which washes the northern part of South AmerDarien." Longfellow had Islands to the Isthmus of wrote the "Wreck of had the latter idea when he first "Had sailed the Hesperus,"
hut later returned to the more thish main,"
"Had sailed to the Spanish main."

## C.

"The applause of listening senates to command. . Their lot forbade."

## The infinitive " to command" is dependent on "for-

 bade," which it modifies adverbially.ln the sentence, "When he received pieces of poetry which he thought had worth in them, he rewarded the writer," ihe principal clause is, "He rewarded the writer,' ihe principal clause is, "He rewarded the
writer"; it is modified by the adverbial clause, "When poetry (which had worth in them)," which contains the relative clause, "which had worth in them," qualifying "pieces." The clause "he thought" is a parenthesis logically modifying " which had worth," but grammatically a distinct independent principal statement.
In " What is the use to keep this lazy steed ?" "to" connects the infinitive (noun) "keep" with the noun "use" (cf. "use of keeping "). In "Let him go feed," "feed" is the infinitive depending upon "go," one of the verbs to which the infinitive joins without preposi-
tion. tion.
E.O.W.-The preparation for Senior Matriculation English should be Earle's Philology and Lounsbury's History of the English Language. For Shakespeare, use Rolfe's edition and the special treatment of Richard II. in Dowden's "Mind and Art of Shakespeare," and in Hudson's "Life, Art, and Characters of Shakesp eare." For Composition you must practice yourself in writing essays, for which no special book can be recom. mended. In Rhetoric, study first Genung's "Ele. ments of Rhetoric" (Briggs, Toronto), and, if possible, try Bain's Rhetoric and Alexander-Libby's "Composition for Models" (Copp, Clark Co., Toronto). Study the examinations of past years to see the scope and aims of the study.
A.H.M.- In a future number of The Journal the question of the parsing of "as" will be treated in a special article. We are quite aware that the grammars pronounce "as" in "Such books as you read" a relative pronoun.
In the sentence, "She is to be queen," the notion of "is to be" is not that of simple futurity, as in "she will be," but a notion of inevitableness, of predetermination, so that we cannot call " is to be" properly a future tense $=$ "will be."
M.T.-" I will go if you do," and "This surprised him, because she was usually cheerful," are complex sentences.
The clause "that he . . . . up," in "He was so fascinated that he refused to give it up," is an adverbial clause modifying " was fascinated."
T.H.R.-There is frequent confusion over the position of the Long Sault Rapids. This arises from the fact that there are two rapids of the name; the one, the most famous, on the St. Lawrence river, the other, referred to in the extract, "Heroes of the Long Sault," from Parkman's "Old Régime"-a "formidable rapid called the Long Sault,- where a tumult of waters, foaming among ledges and boulders, barred the onward ing among ledg
The "evening chime" in the "Canadian Boat Song" is the melodious sound of the church-bell rung at evening.
In "The Raven,", the lines, "Wretch, il cried, thy God hath lent thee," etc., refer to the speaker himself.

## Tbints and Thelps.

## COMING LATE.

I often think of my early experiences away back there in the country. The schoolhouse was a frame building, about $30 \times 45$ feet, sparingly covered with white paint, and having a large double porch protecting the two doors--though only one of them was in actual use. Alongside was a pe-culiar-looking woodshed. You have often noticed that the careless man who delivers the wood very often knocks off boards when he is piling it in. To prevent any such accidents, the rural trustees had sheeted the shed from within, so that the framework of the building was outside, and this suggested to the visitor the idea that a cool nor'-wester had turned it inside out. But there was plenty of good beech and maple there, and it was not spared on the bitterly cold days.
It was in the middle of winter, which was a severe one. Consequently, I was not greatly surprised when I found some of my scholars a little tardy in appearing some mornings. However, as this continued, not diminishing even when the days became milder, I found 1 must consider ways and means for its prevention. My predecessor, I learned, would not allow any to enter during the opening exercises, and in some instances would send the offender home. Neither of these courses
seemed worthy of adoption. I do not admire this home-sending business, and think it a crime to make pupils stand out with the temperature unpleasantly near the zero point. I had rather suffer a little annoyance myself than punish in this manner.

Of course, my first method was a very gentle one. I would ask each the cause of his lateness, and impress on him the inconvenience given to all. He would promise better performance; but, not having enough to keep the memory fresh, too often, unfortunately, was it forgotten. So I found some other expedient must be adopted.
First, I thought of making all those who were late lose their recess for the day, but this deprivation of the breathing-space seemed inadvisable, and at that time the scheme was not put into execution. Instead of this, it appeared to me that if the fact of their delinquency was kept before their eyes, they would not forget so easily. Accordingly, when any one came in late, I would give the time and the offender would write his name on the blackboard in a space headed in Gothic letters "LATE." But the smaller ones could not write their names in a creditable fashion-some not at all-and I was obliged to enter these myself. This soon became tiresome. It was not as effective as I desired, and, moreover, I did not wish in such a public manner to thrust continually their faults before any of them. Most of them were conscious enough of their little misdeeds without having the finger of scorn, or fault-finding, always pointed at them. They would soon become accustomed to it ; the old story would be repeated :
"Vice is a monster of so frightful mien," etc. So this method in time was discarded, and then I fell back on cutting off the recess. This seemed to work fairly well, and was continued for a while, but again my pity for the boys and girls sitting within the schoolroom, when they should be out playing, made me dissatisfied. This time I decided to detain after four o'clock. The rule I guided myself by was that any one losing time at the beginning of the day must make it up at the end. The minimum detention was ten minutes, and double the time behind nine o'clock shouid be put in after four. Of course, this was not a cast-iron law ; none of my regulations were. My scholars understood well that exceptions exist to every rule- except the moral law-and recognized reasonableness when it was there. Hence, after dismissal, I would do what little work I had, and then would take each scholar in turn, going to them.
"Well, Johnnie," I would say, "how much were you behind?"
"Five minutes, sir."
"And why? Could you not have got here that much earlier?"
Very generally, when treated in this friendly, personal way, the scholar would acknowledge his fault and make an honest promise to do better. If he had a really satisfactory excuse, I would at once let him go, with a little moral reflection about lateness in general, and what it might be worth to him.
The method worked admirably. The boys and girls in the country much dislike going home alone, and five minutes would generally entail this upon them-almost as well as fifteen minutes. A little personal chat in a kindly way always has a beneficial effect.
Ever after I introduced this method of making the punishment fit the crime, very little lateness occurred, and a cordial spirit was felt throughout the school.

## "IF A BODY FINDS A LESSON."

## Tune-Coming thro' the Rye.

If a body finds a lesson Rather hard and dry;
If nobody comes to show him, Need a body cry ?
If he's little time to study,
Should he stop and sigh ?
Ere he says: "I cannot get it!"
Ought he not to try?
If a body scans a lesson
With a steady eye,
All its hardness he will conquer-
Conquer by and by.
Then how neatly he'll recite it, Fe'er again he'll say ;
Ne'er again he'll say: "I cannot!"
But will go and try.

## The Educational Journal

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## Editorials.

## THE CONVENTION.

WE give large space in this number to a pretty full report of the late Convention, which has been prepared specially for our columns by Mr. John Spence, principal of Clinton Street School, in this city. Many matters of much interest were discussed, both in the general meetings, and in those of the sections. Some of these may come up for further comment in subsequent numbers of The Journal. For the present the report itself will afford abundant matter for thought, and makes a sufficiently large draught upon our space. Yet we feel sure that every wideawake teacher will be glad to have the opportunity of gaining, by a few hours of careful reading, a tolerably comprehensive knowledge of the best that was said and done at this great parliament of Canadian teachers.

The attendance at the Convention was gratifyingly large. In so far as one of the benefits of such annual meetings is to fix the attention of the newspapers, and of the public who live so largely by them, upon the great work which is being done by and through the educational institutions of all grades throughout the country, it was somewhat unfortunate that the Convention should have happened to take place just at a time when the attention of all was aroused and fixed upon other exciting
questions- though those, too, were not remotely connected with education, and involved fundamental educational principles. A result of this coincidence, which could not, of course, have been foreseen, was that very much less space was available in the daily papers for the report of the proceedings of the Convention than would have been given to the subject at another time. Nevertheless, we shall, probably, be safe in saying that, considered even as a convention, the usefulness of which is sometimes estimated largely by the degree in which it attracts public attention-certainly considered in regard to the importance of many of the subjects under consideration, and the knowledge and ability with which they were handled-the Convention was, in the parlance of the day, a great success.

## UPPER CANADA COLLEGE.

T'HE revolution which is just now in progress, or, at least, being attempted, at Upper Canada College is of interest to the public. This institution always has been, and still is, a Provincial institution. We have for many years maintained that its existence as such is an anomaly which should not be continued. Whatever the case may have been in the past, the college is no longer needed, even in connection with the Provincial University, seeing that the High Schools and Collegiate Institutes now afford ample and unsurpassed facilities for preparation for the University. But so long as the college is supported in part by public funds, it should be subjected to Government control. Above all, it should not be allowed to pass under the control or be kept up for the special benefit of any particular church or class. Upper Canada College has always been largely a class school, but it seems to be just now in danger of becoming more markedly so than ever. A few years ago, on its removal to its present site, or thereafter, the Education Department consented to a change in its management whereby either four or five, we forget at the moment which, of the nine members of the Board of Management are now elected by the "Old Boys," or former students of the institution. This board, with a view to obtaining a free hand in making certain changes which it thinks desirable, has taken the radical course of notifying all the present masters, from the Principal downwards, that their services will not be required after the close of the current term. This summary dismissal is naturally regarded by the principal, Mr. George Dickson, B.A., as a
gross injustice. A number of influential friends from Toronto and Hamilton waited on Sir Oliver Mowat, a few days since, to ask for a full investigation on Mr. Dickson's behalf. This the Premier did not grant, being unwilling to interfere with the administration of the board to whose hands the college has been committed. So far as statistics are concerned, Mr. Dickson is able to show a better record of attendance, fees, and university honors, during the nine years of his administration, than that of any similar previous period, and no charge of misconduct or immorality has, so far as we know, been made. So long as the institution belongs to the public, the public should see that no injustice is done to faithful public servants. But it is of even more importance to see to it that a public institution of this kind be not permitted to pass insensibly under the control of any class or denomination, a result which it is freely said is likely to be the outcome of the changes now being made. The college was originally a Church of England school. It has been that in a large measure through all its history; not that all denominations have not been equally free to partake of its benefits, but rather, we suppose, because of old associations and traditions, and, perhaps, because its ideals and methods of government and discipline were more in accordance with those prevailing in certain church circles. We have no objection to this. In fact, we should like to see the old school kept up, but not at the public expense. It is no longer needed as a Provincial school. Let it be sold to the wealthy members of the English Church, if they desire it. They will then be in a position to preserve its traditions and spirit, and make what changes they wish in its staff and management. But let not injustice be done to the old masters, and let not public funds be diverted to denominational or class uses. An investigation should be insisted on as a matter of justice to the staff and the public.

It is told of the late Dr. Francis Parkman, the historian, that a friend met him one day walking along the street leading a street boy with either hand. "What in the world are you doing, Parkman ?" asked his friend. "I found that Johnny here had eaten all of the apple instead of dividing with his little brother. I am going to buy another for the younger boy, and make Johnny watch him while he eats it." This is said to show that Dr. Parkman had a strict idea of justice. Suppose you tell this story to your class, some Friday afternoon, and ask them what they think of it. What do they think would be its probable effect upon the selfish culprit? Upon the wronged boy? Can they think of any variation of the treatment which might have had a better effect upon either or both? Suppose Dr. P. had given an apple to the little fellow, and encouraged him to share it generously with his selfish brother?

THE EDUCATIONAL ANNIVERSARIES
The second annual meeting of the Dominion Educational Association and the thirty-fourth meeting of the Ontario Educational Association were held in the Education Department Building on Tuesday, Wednesday, and Thursday, the 16th, 17th, and 18 th of April.

A very much increased attendance was present at the opening sessions, and the various departments and sections were soon at work. A varied and interesting programme had been prepared for each section, and a lively and sustained interest in all the departments indicated that the teachers of the different classes and subjects, from the kindergarten to the university, were fully alive to the importance of their work and were determined to gain the greatest possible good from the meetings.
Eminent men and women in the educational arena had been secured from all parts of the Dominion and the United States, to take subjects of the highest educational importance and interest to the country. Among the names of distinguished educators, outside of the Province of Ontario, were Dr. McKay, Chief Superintendent of Education in Nova Scotia; Mr. Parmalee, Secretary of the Protestant Schools of Quebec; Dr. Adams, Principal of Bishop's College, Lennoxville, Quebec; Dr. Rexford, Principal of the High School of Montreal ; the Hon. Jas. Baker, Minister of Education for British Columbia ; M. E. Archambault, Principal Boys' High School, Montreal ; Dr. Hall, of Truro, Nova Scotia; G. J. Oulton, of Dorchester, New Brunswick ; Dr. Robins, Principal of McGill New Brunswick ; Dr. Robins, Principal of McGil
Normal School, Montreal ; and A. E. Winship, M.A., editor of the New England Magazine. Added to these outside celebrities, there were, from our own province, the Hon. G. W. Ross, Minister of Education, and the most distinguished educators in our Universities, Collegiate Institutes, High Schools, Public Schools, Kindergartens, and Training Schools. Never before in the history of education in Ontario have there been so many distinguished persons present, all taking an active interest in the educational problems and theories of the age.
Perhaps one of the most noticeable features of the meeting was the esprit de corps manifested among the different sections. No one section seemed to feel that its particular work was more important than all others, but a general feeling seemed to be exhibited by the immense gathering that the work of each teacher was of paramount importance. The various sections agreed in acknowledging that, united, they made an organic whole, of which no part could be injured or neglected without serious detriment and loss to the whole organism. There was not the senseless jealousy seen on former occasions, and no one tried to belittle the work or members of any department, lower or higher than his own. At the same time, each section devoted its efforts towards the elimination of useless ideas, and the acquirement of the fullest information concerning possible improvements.

Too much praise cannot be accorded to the general secretary, Mr. R. W. Doan, for the pains he took to answer the thousand and one interrogatories fired at him from all sides of his little table, and the perfect urbanity which distinguished him from the opening of the meeting till its close.

## the evening meetings.

On Tuesday evening the proceedings partook of the nature of a reception and a conversazione. Shortly after eight o'clock the beautiful hall of the Education Department was packed by an interested throng of teachers and their friends, while on the dais were grouped a large number of eminent educationists. The Minister of Education for Ontario, the Hon. G. W. Ross, President of the Dominion Educational Association, occupied the chair. He first called on Mayor Kennedy, of Toronto, to welcome the assembly on behalf of the city. Mayor Kennedy, on rising, was greeted with tremendous applause. He expressed his and ime at being privileged to address so large and important a gathering, though he confessed to a feeling of trepidation at the thought of a humble layman like himself being required to welcome in a speech so literary a gathering. He went on to assure the ladies and gentlemien present that he took the greatest possible interest in performing the duty allotted to him, and he felt safe in assuring them that the whole city of Toronto felt honcational parliament of Ontario and of Canada.

He then dwelt extensively on the numerous social intellectual, and financial advantages the citizens derived from the annual gathering of the teachers of the province. A short and eloquent description of the growth and the beauties of Toronto followed. Mayor Kennedy gave statistics to show how much money was spent in Toronto annually on education. Higher education cost over $\$ 400$, $\infty 0$, while the Public Schools, with their 30,000 pupils, cost over $\$ 300,000$. Text-books, which are supplied free to pupils in Toronto, cost about a cent a week per pupil. He contrasted the difference between the cost of educating children and paying for the support of criminals in the different prisons. The difference was markedly great, and elicited rounds of applause. In ringing words he spoke of the labors and researches of the late Rev Dr. Ryerson and his successors in charge of the educational interests of the province. The im portance of the work of the teacher could not be estimated. At the close of the civil war in the United States the government determined that the first necessity that arose in connection with the newly-acquired freedom of the slaves was to establish schools to educate the emancipated negroes. The mayor discussed fully the absolute need of educating the masses of the people, in whose hands rests the power of shaping the government and laws of democratic countries. In concluding a brilliant speech, he referred humorously to the municipal institutions of Toronto and its assessed value of $\$ 145,000,000$, which, in some persons' minds, was highly inflated.

Mr. Lazier, of the Trustees Department, the President of the Ontario Educational Association, was next called, and spoke of the various educational interests represented in the meeting. He thought it a grand thing that the teachers of every department of school work, from the kindergarten to the university, had united with them the trustees of the province whose, main duty it was to furnish the "sinews of war."

President Loudon, of Toronto University, read a carefully-worded address of welcome to the teachers and trustees, in which he emphasized the relations necessarily existing among the various classes of schools. The interdependence of one upon another was fully recognized, and he emphatically declared that any injury to, or detriment in, any one class of schools reacted upon all the others. He expressed his approval and appreciation of the reorganization of the Ontario Educational Association, including, as it now does, every branch of educational work. He closed his interesting paper by asserting that the kindergarten was just as important in its place as the university.
On behalf of the Dominion Educational Association, the president, the Hon. G. W. Ross, rose to reply to the addresses of welcome tendered by the preceding speakers. For fifteen or twenty minutes the eloquent speaker held the large audience in closest attention while he spoke of the vast body of teachers engaged in the different schools of the Dominion. He said there were over 23,000 teachers in Canada, 8,800 of whom were engaged in the schools of Ontario. He outlined the objects of the Dominion Educational Association, chief of which was to cultivate a national spirit in the breasts of Canadian children. He desired every child to feel that his interests were not narrow and provincial, but wide and national. Another important feature was to try to nationalize the provincial systems. Thus by fostering and developing the national spirit, and harmonizing and unifying educational thought and teaching, it would be possible to lift our boys and girls on to a broader plane of thought and activity. The glory of the country, as well as its hope, rested largely in its schools. The whole power of the teachers of the Dominion should be concentrated to raise the teaching profession to the standard of the learned professions. He declared there was no aristocracy among the teachers, as all, from the lowest grade to the highest, were noblemen of the first rank. The importance of the teachers' work was aptly and eloquently described. He declared that if he were allowed to make the school teachers there would be no need of laws, as their moral influence would be so great that the youth trained by them would be law-observers and never law-breakers, but would be of the highest type of character. He described the effect of the spread of education in England and in other countries, and showed how, as the education of the masses was gradually developed, there was as steady a decrease in crime
and pauperism. Ignorance breeds vice and beggary, while education strengthens purity and raises its recipients to comfort and elegance.
Col. Baker, Minister of Education for the Province of British Columbia, vividly described the beauties of scenery and climate of the Pacific province and the magnitude of its resources. The C.P.R. had made communication and transportation easy. He declared that his province paid more customs duties per capita than any other province of Canada by 200 per cent. He painted in glowing words the excellence of the harbors and the proximity to Japan, China, and the great Pacific States of the American Union. The great advantages of British Columbia, her wealth and resources, destined her to become the predominant partner of the Dominion. In the absence of the Hon. Mr. Sifton, of Manitoba, Col. Baker delineated the expectation of the great western territories becoming the granaries of Canada, and the differences of sentiment and feeling of the people of the different provinces. He urged the necessity of seeking to bury all discordant differences in the effort to weld all the provinces into a great and harmonious nation.
Mr. Parmalee, the Secretary of the Protestant Schools of Quebec, gave a humorous description of the state of education in our great sister to the east. One remarkable feature was his statement that the French people spoke the English language better than the English inhabitants spoke French. He spoke very highly of the generous and courteous treatment given to the Protestant minority schools by the Catholic Government and Council of Public Instruction. He apologized for the absence of his superior officer, Hon. Mr. Ouimet, on the ground of old age and ill-health and Mr. Ouimet's resignation of office as Chief Superintendent of Education for Quebec.
Dr. McKay, the Chief Superintendent of Education in Nova Scotia, was the last speaker for the evening. In a witty speech, he referred to his province as the producer of great and brilliant men, and said she was like a necklace of pearls ornamenting the person of her sister provinces. The meeting was then dismissed by the Minister with the intimation that the various departments of the building were open for the inspection of the visitors. For an hour or more the rooms and halls were thronged by the visitors, who examined with eager interest the equipment of the museum. Groups were found in different parts of the build ing renewing old friendships and forming new ones. The band of the Royal Grenadiers discoursed sweet music, and "all went merry as a marriage bell" till eleven o'clock, when the guests dispersed to their respective places of abode, and one of the most interesting meetings ever held by the association was brought to a close.

## WEDNESDAY EVENING.

This meeting was held in the Women's Christian Guild Hall on McGill street, near Yonge street, the president of the Ontario Educational Association, Mr. Lazier, in the chair.
After prayer by Chancellor Burwash, the chairman called on Dr. McKay, of Nova Scotia, for his address on "Great Reforms."

The first part of this paper was an advocacy of changing our system of weights and measures. He showed how much easier and more natural was the metric system than the one in vogue, and outlined a plan showing how the change could be made simultaneously in all parts of the British Empire without causing much trouble or confusion. A few weeks' study in the various schools of the empire would be sufficient to familiarize every one with the change.

The second part of his paper dealt with spelling reform. He advocated the natural method. All silent letters should be eliminated. Many of these had been added to words through ignorance and a mistaken analogy. The great length of time and tremendous effort made to collocate correctly the letters in words were referred to at great length. From carefully-compiled reports he showed that at least two years in every child's school life were wasted in overcoming the difficulty of our irregular spelling. Given the natural method of spelling, a child would have twenty-five per cent. more time to devote to the study of nature. Phonics take only forty characters, while our alphabet of twentysix letters has over five hundred sounds. He said the word "scissors" was capable of 480 different ways of spelling, though fortunately he did not enumerate them. Many of the irregularities were
exposed, and the weary drudgery of learning to spell was feelingly adverted to. He wound up an address of over an hour by advising that a system of shorthand be introduced in all the schools.
The Rev. Dr. Adams, of Lennoxville, Quebec, then read a paper on "College Discipline", in which he entered into the origin and meaning of the words "college" and "discipline." He then outlined the various kinds of disciplinary training in foreign countries, as well as our own, from earliest times to our day. The only discipline of any value was that whirh enabled boys and girls to govern themselves and led them into the highest paths of virtue.

Many of the audience now began to leave the hall, owing to the lateness of the hour, and weariness from having already listened to two very long papers, though the programme for the evening was not nearly finished.
However, no sooner did the ringing tones of Dr. Winship, editor of the New England Magazine, fall upon the ears of the assembly, than there was a dropping into seats again, and the gentleman had the satisfaction of knowing that what he was saying was sufficiently strong and interesting to hold an already fatigued audience to the finish of one of the very best speeches of the session. His subject was "Educational Tendencies of the Age," and was an eloquent exposure of the fads that have so long run the American schools. He believed they had in his country about come back to common sense. Specialization without the ability to specialize was the great curse. He wanted broad teaching, and great things taught instead of narrow, small things. He ridiculed cranks and conservatives among teachers, and told an amusing incident of a visit he paid to a school whose principal had given him a terrible castigation by letter. This teacher's fad was number. He said the boys in a certain grade did not know the number " 5 ," and took Mr. Winship to see them. When the principal asked the boys one after another if they knew "s,", they unanimously agreed they didn't. Mr. Winship, whose eye had caught a boy feeling some marbles in his pocket, immediately said to him, "My boy, how many marbles have you in
your pocket?" "Sixteen, sir." "I'll give you a your pocket?" "Sixteen, sir." "I'll give you a said the boy, and the marbles and coin soon changed owners. Mr. Winship turned smilingly to the discomfited principal, who glowered at the boy and said to him, "Didn't you tell me you didn't know " 5 '?" "Yes, sir," said the boy;"I don't." In scorching terms the eloquent editor stated that, at the coming meeting of the National Educational Association in Denver, not a single teacher's name was to be found on the programme. He believed in the teacher having and exercising individuality. Every teacher should be the leader in his own school, but one of the kind whose leadership was unseen and unfelt. The teacher should have power to alter rules and regulations to suit the different circumstances that continually confront him. Rules are for the children, and not vice versa.
At the conclusion of Dr. Winship's address most of the teachers and trustees left the hall, but the election of officers was on the programme, and the president called for nominations. The election resulted in the choice of Prof. Baker, of Toronto resulted in the choice of Prof. Baker, of Doronto
University, for president ; Mr. R. W. Doan, of Toronto, for secretary ; and Mr. W. J. Hendry, of Toronto, for treasurer.
Mr. Manley, of Jarvis Street Collegiate Institute, then proposed a motion recommending the Minister of Education to draft a scheme of "Superannuation or Annuities" for the teachers of the province. After a short discussion the motion was laid over for another meeting, owing to the fact that only a very few persons were present.

## ThURSDAY EVENING

This meetung was held in the theatre of the Education Department, and the Hon. G. W. Ross occupied the chair.
Col. Baker, Minister of Education for British Columbia, read an excellent paper on the "Diagnosis of Brain Power." He spoke of the deep debt of gratitude the country owed to the Hon. G. W. Ross for his successful labors in forming the Dominion Educational Association, and thereby bringing into communion the leaders and moulders of educational progress in Canada. Since the inception of the Dominion Association, a feeling of union of sentiment and purpose had been engendered among the public school teachers of this great
country. To this vast body has been entrusted the fitting of our children for citizenship and all the important duties of political, social, and commercial life in Canada. The effect of the example of the noble lives of the army of educators upon the lives of the children who are daily brought into personal contact with them was fully shown, and from it was deduced the necessity of securing the very best talent and purest examples in the world. Children's habits of life, action, and thought are largely what the public school teachers make them.
He argued that though a small minority of our people believe in confining the instruction of the masses to the three " $R$ 's," the great majority now, at any rate, believe in spending public money to cultivate the intellectual and moral faculties of the future men and women of the state to the highest possible pitch of perfection and development, as in this way only can the greatest good be secured for the nation, as well as mankind in general. Every child has a thirst for investigating the mysteries of the unknown and we ought to render him all the assistance we can to enable him to prosecute his enquiries to the fullest extent. The invention of the printing-press and the improvements of our own time have vastly facilitated the means of investigation and learning. The demand for free education has grown stronger the more the appetite has been fed and stimulated, and the yearning of the great first apostle of free education, King Alfred, has become an accomplished fact.
Although so much has been accomplished, there is yet a great field to explore. While knowledge has been fostered and accumulated, the science of education is yet in its infancy, and the intellest of great men is now being concentrated upon the discovery of the mind's processes. Just how and when the faculties can best be developed is a subject of vast importance and one worthy of the most careful thought and investigation of every school teacher and educator. In this latter part of the nineteenth century, there is a tendency towards separating every form of religious teaching from the course of instruction, in order to pander to the sectarian jealousies of different creeds. The effect is to fail signally in elevating the moral nature as rapidly and surely as the purely intellectual. In France, where the schools are free and education strictly non-religious, the growth of crime keeps pace with the growth of education, and the cry goes up that education is filling the prisons. On the other hand, in England, where religious education of an unsectarian character has been given since 1870 in the free national schools, there has been a wonderful decrease of crime. The number of persons in prisons has fallen from 12,000 to 5,000 , the juvenile offenders from 14,000 to 5,000, and pauperism has decreased 50 per cent.

Competitive examinations and the multiplicity of subjects in the curricula are the causes of the deplorable practice of cramming. The object of our system of education is to develop the latent talent of the boy or girl and to make him or her the best citizen. It should refine him and make him practical, that is, useful to himself and his fellows. It is said that we over-educate our children and make them despise the callings of humble life. The dignity and healthfulness of labor are lost sight of, and there is a rush towards the professions. This may, to a certain extent, be true, but it is a fault in the system that can be removed, and is not a result of mind training.
Col. Baker declared that in Ontario, thanks to the indefatigable and intelligent exertions of the present Minister of Education, we have a system nearly perfect, with its Kindergartens, Training Schools, and Technical Schools. But, no matter how perfect the equipment and machinery of the school, it is the brain power of the teacher behind these that maker the schools a power for good. The first and most difficult task that confronts the teacher is the necessity of understanding the many different minds under his charge. A misapprehension may produce the most deplorable results, while a just conception may be the road that will lead to the goal of perfect intellectual and moral development. Therefore, every teacher should, before taking charge of a class, have made a long and persistent study of the brain and nervous system. He should know, as fully as possible, the best means of arousing mental activity, and should understand the laws of heredity. A preliminary part of the professional training of every teacher should be the study of anatomy, embryology, and neurology, to be followed by training under experts $n$ the diagnosis of brain power. Anatomy and
neurology will show how impressions upon the eye, the ear, and the skin are transmitted by the nervous system to the delicate, sensitive brain, to be stored up by the memory for future use. The learned lecturer then traced the connection between man and all placental animals. The highest ape brain is only about half the size of the lowest human brain. There are certain similar practices between man and the ape. Gorillas and chimpanzees make beds to sleep in in trees and put on nightcaps and cover up their bodies. They sleep with their hand under their head just as children sometimes do. He recommended sleeping on the hand to cure insomnia. There is also the climbing tendency of children. These tendencies seem to point to a common ancestry. Some wild tribes of human beings sleep in trees and make their beds just like the chimpanzees. If tendencies cling to man through countless ages, how strong must be the tendencies inherited through our immediate ancestors : To show how careful teachers should be in their diagnosing, Col. Baker related a story of a boy in one of the great public schools of the motherland. The boy was apparently so stupid that the masters had given up in despair, and were about to send him home as incapable of acquiring knowledge ; but when the nouse tutor went to impart this decision to him, he was surprised to find the boy absorbed in a great natural history, and subse quently learned that he spent his play-hours in the library and museum, studying works of natural history. He communicated his discovery to the school authorities and begged them to give the boy another chance. The tutor had his way and took him in charge. Eventually the seemingly stupid boy became one of the most brilliant graduates of the school.
One of the most difficult problems for the teacher is to understand perfectly the nervous organization of his pupils. These are as many and as diverse as the number of children under his tutelage. If he has abundant and enlarged sympathies, he will sooner gain the confidence of his pupils, and will be able to do exceedingly more for them than one de ficient in this essential quality.
Col. Baker concluded a brilliant and interesting address amid enthusiastic applause.
J. M. Harper, M.A., Inspector of Superior Schools, Quebec, read an interesting paper on "Some Pedagogic Fallacies." He described the work of inspection in Quebec, and then exposed the weaknesses of systems of education. He deplored the narrowness of provincial systems which refused to recognize the certificates of one province in another. If a Dominion Bureau of Education were formed, this evil might be removed without infringing on provincial powers. Examinations were denounced in scathing terms, and he stated that it was far more important that the teacher should be able to speak his mother tongue correctly than to name the islands in the European archipelago. Oral teaching should be used wherever possible. Rules of grammar were classed as "grammar grubbing." Teachers should not confine themselves so much to rules, and they should try to make their teaching more intelligent and intellectual and less of the machine character. After having learned to read and write, the child should be taught the power of the mind and the value of the memory and of close observation. If this were done, the child would grow up an intellectual being, and not a mere machine of book learning. The importance of the library was too often overlooked, and the child should be taught to read and depend upon himself, so that after leaving school he would continue his reading, and thus complete himself the education begun in school in his youth
Mr. G. J. Oulton, of Dorchester, New Brunswick, read an able paper on the "Brotherhood of Teachers." He dealt with the qualifications of teachers, and urged that steps be taken by the educational authorities of the different provinces to make the qualifications similar throughout the country, and then teachers would be eligible for appointment in any province. All positions in the higher schools and universities should be open for teachers who possessed the necessary qualifications and every facility and inducement should be held out to teachers to qualify themselves for the high est positions.

These evening meetings concluded the meetings of the general association, but there was one afternoon meeting convened by the Minister-of Education for the purpose of hearing his explanations of the proposed programme of studies. He did not go into details, but contented himself with outlin-
ing the general features of the new programme, and with stating the reasons that had caused the changes proposed. He referred to the fact that in our system it was necessary to keep the Public Schools in line with the requirements of the High Schools, and the latter in touch with the University. As the University changes, or has power to change, its curriculum in quinquennial periods, it has become necessary to change the programme, because the University is making a radical change in its courses of study.

The main changes proposed were to abolish the 50 per cent. maximum exacted at the examination, and to raise the standard of the examination papers By the proposed change, it will be necessary and sufficient for a candidate to make the $331 / 3$ per cent. minimum on each paper.

The first form examination shall consist of Drawing, the Commercial Course, Geography, Botany, and Reading.

The second form examination shall be divided into two parts, to be taken separately or together, as the candidate wishes, in one or two years. The first part to consist of English Grammar and Rhetoric, Arithmetic and Mensuration, History of Great Britain and Canada, and Physics; and the second part to consist of English Composition, English Literature, Algebra, and Geometry. These examinations will give a Primary certificate, and in some subjects, especially Arithmetic, it will be of about the same difficulty as the present Junior Leaving Examination. Owing to its greater difficulty, it is proposed to make the certificate to be of six years' duration.

The third form examination shall consist of English Composition, English Literature, Algebra, Geometry, Ancient History, Latin, Greek, French, German, Chemistry. To entitle a candidate to a Junior Leaving certificate, he must pass or have passed the examination in all the subjects of the first form and in the subjects in part one of the second form, and all the subjects of third form except one, Modern Language or Greek. In case a candidate takes both Latin and Greek, he is exempt from the Chemistry examination. The Hon. Mr. Ross said the object of so much language study for the Junior Leaving Examination was intended to matriculate the student for any course he chose to take in the learned professions.

The examination for the fourth form shall consist of English Composition, English Literature, Algebra, Geometry, Trigonometry, and English and Ancient History for the first part, and Latin, French, German, Greek, Physics, Chemistry, and Biology for the second part. To obtain the Senior Leaving certificate, the candidate must pass or have passed the examination in first form, and the first part of the examination for the second form, and English Composition, English Poetical Literature, English and Ancient History, Algebra, Geometry, Trigonometry, Latin, French or German, Physics, with (a) Greek, or (b) the second Modern Language, or (c) Chemistry and Biology.
The Minister said that it was intended to lengthen the Model School and Normal School terms to one year each, and to establish a third Normai School. He hoped to be able to do this next year. The effect of the raised standard and extended time at the Model and Normal Schools would be to give a better educated and better trained class of teachers for the Public Schools, as well as being, on the average, about two years older. Any candidate holding a Junior Leaving certificate would be permitted to attend the Normal School and be given a life certificate on completing his course, without having previously attended
the Model School.

College and high school department.
This department held its first meeting on Wednesday, the 17th, at 9.30 a.m., with the president, Dr. J. A. McLellan, in the chair.
The most important feature of the morning session was a paper by Dr. McLellan, on "Co-ordinaof paramount impotran." He showed that it was of paramount importance for the teacher to have a knowledge of psychology, because without it he is
sure to blund sure to blunder. This is the teaching of experience, instruction and doubts the value of psychological mstruction and training. It is a lack of such
knowledge that causes teachers to make so many knowledge that causes teachers to make so many
mistakes in the management of their pupils. lack of good, sound judgment of their pupils. The tion in the men and women of to-day is due to ents. Ang on the part of their teachers and parents. A truly great teacher may by intuition and
sympathy attain to great power in his profession' but for the ordinary teacher the help of the science of psychology is absolutely imperative to attain to success. Empiricism is always dangerous, but it is especially so in education, because the evil effects of wrong methods and blunders cannot be appreciated. It is a wrong conception to feel that, because the universe is one and complete, we should teach all things together, as, if followed, it leads us into absurd positions. Our psychology must be founded on the results of experience and the guidance of reason and judgment.
On Thursday morning, after the election of officers, Dr. Burwash, of Victoria University, read an able paper on the "Economics of Education in Ontario." The proper education of the youth of our country should be the first objert of all the people, and this education depends on the home, the school, and the church, together with the press. All of these have their share, but it is with the school that teachers have to do. It is frequently claimed that it costs too much to educate our children, but the best and cheapest place to secure an education is at home. No country ran be civilized except by educating its citizens, and, if we have to import our professors and teachers from foreign countries, it costs a great deal more than it does to maintain our universities and high schools, which supply us with able and trustworthy instructors. Hence a strong university is a fundamental necessity of national life, and no country can make a wiser investment of its funds than in endowing and maintaining one of the highest excellence. Its influence on the life and character of the nation rewards the outlay many times.

Dr. Winship, of the Neze England Age, spoke for a short time on the able paper of Chancellor Burwash.

MODERN LANGUAGE ASSOCIATION.
The president, Professor Squair, of Tcronto University, opened the meeting at ten o'clock on Tuesday morning, and remarked that this was the ninth meeting of the Modern Language Association, which was the oldest of the kind in Ontario. His inaugural address was on the subject of "French Poetry since the Romantics." He proceeded on the principle that literature must be considered in connection with national life, and is a true manifestation of it. He first dealt with the Romantic movement at the beginning of the present century, and then showed how the altered conditions brought in a new school of literature, less lyric and less subjective than its predecessor, but wider and more accurate. He analyzed the poems of Leconte de Lisle, and contrasted them with the work of the classicists and romanticists. This poet was treated as typical of the tendencies of the French poetry of the period, and numerous quotations were given in illustration. The position of Prudhomme, Coppie, and M. de Heredia in connection with the period was defined.
An address in French by M. Queneau, in discussion and amplification of the subject, followed. This was a new feature in the proceedings, and was much appreciated, as the speaker is an ex-professor of literature in a Parisian college, and hence quite at home in the subject.
Mr. Radcliffe, of London Collegiate Institute, read an interesting and instructive paper on the late "Report of the Committee of Ten" on English in the United States. The bearing of this report on the teaching of English in Ontario was shown, and a plea was made for more attention in the schools to the etymology and history of the language. Composition, the history of Literature, and other topics were referred to, and a prolonged discussion ensued.

Mr. Dales, of Kingston, read a research paper on the French Tragic Drama, a development study from Corneille to Victor Hugo. The model of the seventeenth century drama was shown to be professedly the Latin drama of Seneca, though at times the poet rose superior to his model. The eighteenth century was then briefly sketched, and the orig in of the Romantic movement was graphically described. This movement completely overturned all the principles of the older drama. This paper was followed by a conference on "Supplementary Reading," led by Mr. Pakenham, Principal of Brockville Collegiate Institute, and Mr. Hogarth, of Hamilton Collegiate Institute.
The association met again at three o'clock on Wednesday, and Miss G. Lawler, M.A., of Harbord Street Collegiate Insticute, Toronto, read a paper on "The Function of English Poetry in the

High School." She made an earnest and eloquent plea for the greater developnent of the resthetic feeling and sentiment of the pupils. The paper dealt also with some technical matters regarding the kinds of poetry prescribed for the various forms.

Mr. A. W. Wright, of Galt Collegiate Institute, then read a paper on the "Influence of French on Broad Scotch." A large number of vocables was traced, and many interesting and usually unsuspected relationships between the two languages were pointed out.

A motion was carried to the effect that it is a matter of regret that any attempt should be made to remove grammar from our senior classes. This motion was introduced by Mr. Libby, of the Jameson Avenue Collegiate, Toronto, because of the Minister of Education's proposed change in the curriculum.

The association reassembled at 2 p.m., on Thursday, and Mr. Marshall, of St. Thomas Collegiate Institute, read an interesting paper on "Certain Illogical Constructions in English." He referred first to the prevalence of evoluionary methods of investigation, and the bearing of this on the evolution of language was shown. Notwithstanding the development, there are yet certain illogical constructions to be found in our language. These should be classified according to the fallacy involved. On the whole, evolution in language tends to greater clearness, range, and precision, but expressions or idioms still remain which do not conform to universal logic, and remain as examples of inaccurate thinking.

Miss Marty, of St. Thomas Collegiate Institute, then read an excellent paper on "Some of the Tendencies of the German Literature of the Nineteenth Century." The germ of these tendencies was found to exist in the literature of Goethe in his efforts towards the modernization of literature and his revolt against literary conventionality. Heine was the next great reformer in the same line. His efforts in the foundation of the school of "Das junge Deutschland" were referred to and the more prominent members of this school were analyzed in their literature, and it was shown how they combined so effectively idealism and realism. Freitag's "Soll und Haben" was the triumph of realism. Then the influence of Ibsen, Zola, and Tolstoi on German extreme realism was stated. The dramas of Hauptmann and Sudermann were analyzed to show how the naturalistic spirit has infused itself into the German literature of the present day. The paper was very highly appreciated.
Mr. W. H. Fraser, the secretary, was appointed to represent the association on the executive of the Ontario Educational Association and the College and High School Department.
Prof. Reynar read a valuable paper on "Chaucer's Mind and Art." He said Chaucer's language was English, as contrasted with Anglo-Saxon and Nor-man-French. Chaucer was Saxon in conscience and Frenchman with his imagination, in his best qualities. This was largely due to his early experience. His mind was moulded by his life as page and soldier, by his extended travel, and his thorough study of French and Italian literature. His refinement and morality, as compared with his times, were markedly great. The professor next discussed' the question of Chaucer's religion as to whether he was a Roman Catholic or a FreeThinker. In social sympathies he was an aristocrat, though aristocracy was not so exclusive then as now. As an author he was and is our great master of narration and description. Though the great age of the drama had not yet come, Chaucer was highly dramatic as well as highly humorous. His verse has been very much overrated by some critics, but he was, however, the first great English master of versification. Though he had predecessors and masters, he introduced eighteen new forms of verse into our literature. This aspect of the poet's work was extensively analyzed and illustrated by quotations.
Mr. J. Jeffries, of Peterborough Collegiate Institute, read an excellent paper on "Aims and Methods in the Teaching of English Grammar," but, unfortunately, we have been unable to obtain a synopsis of it.

## the science association.

Mr. Chant, of Toronto, read a paper on "Work and Energy." He laid great stress on the acquisition of clear impressions concerning the fundamental units of expression and their proper use. He showed how to teach them to beginners and
how to drill on them. He then discussed the method of teaching the various formula used in measuring work, energy, and force, and their application in a few typical cases.

Mr. Stevenson, of Perth Collegiate Institute, (?) then read a paper on "A Wider Botany." He advocated an extended study of botany for æsthetic enjoyment, as well as for its practical and disciplinary values. By reference to the information contained in agricultural bulletins issued from the experimental stations, he showed how much could be done by the teaeher in disseminating accurate scientific knowledge of great use to the farmer if this subject were taken up in the public schools as it should be. Mr. Stevenson, as a teacher of both languages and science, strongly expressed his views in reference to the much greater relative value of the latter as a culture subject.
A general discussion, led by Principal Kirkland, of Toronto Normal School, then sook place on the "Training of Science Teachers." Mr. T. H. Smith introduced a discussion on the topic, "Is Senior-Leaving Physics to be Experimental?" He advocated a definite number of experiments in Physics to be conducted by pupils themselves, and said that each school should be supplied with all necessary appliances and apparatus for these experiments. He further suggested that this experi-
mental course would render the examinations in mental course would render the examinations in Physics more definite and accurate. The work would be eminently more satisfactory and uniform, and would fix the examiners' choice of questions to some extent.

## mathematical and physical association.

The honorary president, Prof. Baker, gave an address on "The Life of Sir Wm. Hamilton," the great mathematician. The lecture was listened to with profound interest, as very few present were aware of the wonderful genius of the subject of the address.
Mr. DeLury, the president, then delivered an address on "Text-books and the General Progress of Mathematics in Secondary Education." He advocated the formation of committees to report on these matters from year to pear. A committee was appointed to report on the best methods of carrying out the suggestions of the president respecting the preparation of certain reports to the association.
Mr. Thompson read a paper on "The Proposed Regulations," and showed quite clearly that Mathematics had been greatly debased, particularly so in Arithmetic, and that the foreign languages had been elevated to an extraordinary degree. In the discussion that followed great astonishment was expressed that no member of the Mathematical Asoociation had been consulted in the preparation of the new proposed programme. The members discussed the best means of strengthening the mathematical side of the curriculum, and a committee was appointed to prepare a resolution to submit to the Minister of Education.

## the classical association.

This assoctation has adopted the principle of devoting a portion of each annual meeting to papers all bearing on some particular aspect of classical study, and appropriately for this, the first year of the plan, all the papers, with one exception, related to Cæsar as the subject of study. He was dealt with as a writer and a military and political leader.

Mr. Kenner, of Peterborough Collegiate Institute, read a paper on "Cæsar as a General." He dwelt on his versatility, the difficulties he had to overcome, and the completeness with which he fulfilled his task. The best proof of his success is shown by the fact that the empire he organized remained as the foundation of western civilization.
Mr. W. J. Fenton, in his paper on "The Imperfect Tense in Cæsar," pointed out that much more delicate differentiation of function is possible than is commonly found in the ordinary teaching of this tense. He urged that tense relations receive as much attention as modal relations.

Mr. E. W. Hagerty, of Harbord Street Collegiate Institute, Toronto, read a paper on "The Broader Characteristics of Cæsar's Style." In Cæsar the style is the man. He is, in both character and style, refined, yet manly; firm, but magnanimous; many-sided and versatile. He spoke and wrote as he fought.
Mr. D. J. Jolliffe sketched "Zenophon" as a
eader, showing how, in his masterly retreat, he
displayed consummate tact and skill, and fertility in resources.
Prof. Hutton, commenting on the paper, dwelt on the difference between the conditions of ancient and modern warfare, pointing out particularly how, with the ancients, tact and eloquence and the power to inspire one's soldiers were of greater importance in a general than in the days of Gatling guns and torpedoes.
Prof. Dale read a paper on "The Literary and Historical Significance of Cæsar's Commentaries." He showed the importance of Cæsar's writings in the development of Latin prose style, noting how pre-eminently be represents the pure Roman perfection without any admixture of Hellenism, or of labored rhetoric. The significance of Cæsar's conquests in Gaul was then touched on, and it was shown-how important was this part of his work which made France in later centuries the centre of western civilization, which itself is based on Cæsar's efforts to form a nation out of a sovereign city.

Mr. D. Thomson read a paper on "Certain Grammatical Difficulties in Cæsar." He gave statistics of his usage of the oblique cases.
The last afternoon was spent in discussing the proposed changes in the courses for High School examinations and teachers' certificates. The chief point under discussion was the proposal to drop all language options, and make science compulsory for all candidates for primary certificates, while at the same time there will be a rendency to make this certificate, by its proposed extension to six years or for life, the common certificate of the Public Schools. Further objection was raised to the proposal to drop the provision for 50 per cent. on the total, on the ground that the pupil, instead of aiming at an average of 50 per cent., would be satisfied with an average of $331 / 3$ per cent.

## PUBLIC SCHOOL DEPARTMENT.

Mr. McAllister, of Toronto, presented the report of the committee appointed last year to wait on the Minister of Education to lay before him certain resolutions of the association. The report maintained the necessity of extending the time of teachers at the training schools to one year, that interim certificates be granted, and that holidays be granted to rural teachers to attend the Ontario Educational Association.
Mr . McQueen, of London, the president, gave an address, in which he urged that committees appointed to wait on the Minister of Education do so as early as possible, so as to have his replies printed and placed in the hands of the teachers. The " Pamphlet on the Defects in the Educational System" had been distributed among the members of the legislature, the county councils, school trustees, and county associations. He claimed that true culture could not be obtained by raising the standard, as it would lead to cramming. Raising the age limit would produce better results, as it would check rapid preparation and allow time for supplemental reading.
Mr. McMaster, of East Toronto, read an able paper on Entrance Examinations. He urged the advisability of more oral answering. The kind of questions given to the pupils in daily lessons is the best test of the teacher's ability. He claimed that as the primary candidates are judged partly on their term record, so should the candidates at the Entrance examinations be credited with their school record. Considerable fault was found with the style of questions given on the History paper, many of them being quite beyond the mental grasp and understanding of the young boys and girls who wrote for admission to the High Schools. He stated that the pupil's success did not depend very largely on his ability to pass the examination, but much more on whether the High School needed pupils to fill the seats. If crowded, few candidates passed ; if not, many did. The object of education was to teach pupils to help themselves. He advocated giving the pupil an elementary knowledge of the sun, stars, earth, and the formation of rock. Boys and girls need not attend a High School to acquire a liberal education. It could be secured as well, if not better, in the Public Schools. Mr. Eddy, of Claremont, then read a paper on "Entrance Examinations." He argued that Public School teachers should read the answer papers of Entrance candidates, and gave many incontrovertible reasons to sub-
stantiate his arguments stantiate his arguments. Since High School teachers
read the answer papers of their pupils at the departread the answer papers of their pupils at the departmental examinations on the ground that they are daily engaged in the work and know what should be expected of High School pupils, so should Public School teachers read Public School pupils' answers on Public School ex-
aminations. They are more competent to value the immature answers because they are in sympathy with the pupils and familiar with their style of answering, and far better able to judge the pupils' knowledge and development than the High School masters who are familiar with maturer and better developed minds, and are accus tomed to fuller and more logical answers. Very often the High School inasters are more influenced by the numbers in their school than by the answers of the candidates. Hence they are unable to mark with that uniformity that is desirable. Again, there are so many sets formity that is desirable. Again, there are so many sets
of examiners that there will be just as many standards of fitness required. This evil can be overcome by making one examining board for each county or inspectoral division or a combination of divisions. The one set of exam iners would be a guarantee of uniformity, at any rate. The board of examiners should consist of the inspector or inspectors and teachers chosen from the Public Schools of the district or county, to be changed as deemed advisable. In this way the trifing remuneration paid to able. In this way the trifling remuneration paid to Entrance examiners would be divided among teachers who
most need the assistance of the from twenty to sixty dollars that the High School masters each make annually at this examination. This sum, while only a trifle com pared with the salaries of High School teachers, is more than the widow's mite to the poorly paid Public School teacher. No one can seriously doubt the ability of the Public School teachers to mark these answer papers on account of lack of scholarship. It goes without argument that a teacher who is qualified in point of scholarment that a teacher who is quabified in point of scholar
ship to teach the work of Public Schools is equally competent to mark the answers of his pupils. Mr. Eddy's paper was well received by the association, and his arguments readily accepted.
Mr. Strachan, of Rockwood, read a paper on "The Public School Leaving Examination." He claimed that this examination is as difficult as the "Primary Examination." In a criticism of the curriculum, he said there were too many poetical selections pre"Interest" and that only percentages dealing with "Interest" should be taught. The supplemental questions in the "Public School Arithmetic" were declared even more ridiculous than the book itself. He thought the whole of the High School History too much for the class, and preferred Canadian History with the Brunswick Period of British History, and thought this limitation of the subject would give far more satisfactory results. In 1894 the first and the last question on the History paper were unreasonable. The Grammar was History paper were unreasonable. The Grammar was
beyond the eomprehension of Public School pupils, and the questions were couched in language beyond the development of the candidates. The teachers are anxious to have a fifth class in their schools, but the papers for their examinations hitherto have been far too difficult. It was decided to have this paper printed.

The association, after a spirited discussion, adopted a report recommending that one-half the value of the Arithmetic paper on the Entrance be given to commercial Arithmetic paper on the Entrance be given to commercial
questions, and two-thirds of the value of the History paper to Canadian History questions.

The following resolutions were adopted :
(a) That the Model and Normal School term be extended to at least one year.
(b) That candidates for the Model School hold at least a junior leaving certificate.
(c) That the amount given by the townships to each section be $\$ 200$, and $\$ 100$ additional for each assistant teacher.
(d) That candidates for admission to the profession be not less than twenty-one years of age.
The following resolution of the "Toronto Teachers' Association" was unanimously adopted by the section: "That no teacher should be empowered to teach in our Public Schools who has not had the requisite professional training, and that, therefore, the granting of professional cerlificates to teach in our Public Schools to those students who pass successfully through the School of Pedagogy, without a professional training, obtained by attending a Normal School, is contrary to the best interests of Public School education in Ontario."
Mr. J. H. Putnam, of Ottawa, read an interesting paper on "The Country Schools." He said that the country districts that really need the ablest teachers are the very places where the poorest teachers are found, because of the low salaries paid. Trustees should aim at securing Normal-trained teachers. The country schools have healthy, invigorating surroundings, and offer an inexhaustible mine for the study of Natural
History. The pupils in the History. The pupils in the country have their spare moments occupied in work, and this training of the hand assists in the training of the eye, and helps to develop a
taste for drawing and kindred studies. Manual traintaste for drawing and kindred studies. Manual training develops originality, and the country pupil is surrounded by the work necessary to develop this originality to the widest extent. The country teacher, with his numerous classes, has no opportunity or time to "spoon-feed" his pupils, and, as a result, his pupils are more self-reliant. The High School teachers say they can distinguish pupils from the country by their power to do original work. The great hindrance to efficiency in the country schools is irregularity of attendance. A serious drawback in these schools is lack of magazines to interest a boy in reading. Mr. Putnam advised holding entertainments to provide funds for establishing a school
library and purchasing magazines. The best schools in Ontario are found in the progressive country districts.
"Mr. Young, of Guelph, read an interesting paper on "Conservatism in the Teaching Profession."

MODEL SChool SECTION.
Mr. J. J. Tilley, Inspector of Model Schools, addressed the association on the advisability of establishing a "Reading Circle" for Model School principals. The recommendation was adopted, and a committee appointed to select the books.
Mr. Tilley introduced Mr. Hayes, representative of the Appleton Co., who addressed the teachers on the price of books. For the number required, he would deliver them in Toronto, all charges prepaid, at twenty per cent. below retail prices.
The committee appointed by the Training Department to wait on the Minister of Education, to lay before him the qualifications deemed necessary for the mastership of a county Model School, was instructed to press on Mr. Ross the desirability of giving teachers holding certificates as Model School masters the right to be county inspectors.
The section decided to use in their Reading Circles Felix Addler's " Moral Instruction," Painter's "History of Education," Baldwin's "Psychology applied to Education," and White's "School Management." The book selected for students to read was Preyer's "Infant Mind."

## Kindergarten department.

After transacting general business, the president, Miss Macintyre, of Toronto, read the report of a committee appointed to report on the "Standard of Admission to the Kindergarten Training School." After consultation with the Hon. Mr. Ross, it was decided to recommend that not lower than a primary certificate should be accepted as the standard for such admission.
It was also decided to prepare a blank form in which the directress should keep a record of the assistants' work during the year, and this record should be taken into account in case a candidate should fail at the written examination.
A new syllabus is to be prepared and placed in the hands of the directresses in time for the work of next year.
From the president's address, it was decided that all programmes should unite in a progressive spiritual ideal, and that each kindergartener should suit her work to her special conditions. A sequence of color development was devised to be used in all the schools, and, in order to assure clear perceptions, a neutral background should be used. The decorations of the room should be as artistic as possible, and should be the children's own work. The foundations for these decorations should be the best pictures procurable. The kindergarten should be such as would awaken a conscious ideal in the child's mind, and deal symbolically with the problems which show the struggle in the child's nature.
Miss Bolton then gave ar address upon "Morning Talks in Kindergartens," dealing with the sympathetic development of songs from the children by means of home experiences.
The Hon. Mr. Ross gave an address on the "Growth of Kindergartens," and was followed by Dr. Adams, of Lennoxville.
Miss Laidlaw, of London, then read an interesting paper upon "What the Child Says and Does."

## Sliatbematics.

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

## SOLUTIONS.

The following solutions were sent by Miss Lillie E. Penny, Galetta. Other solutions are on hand, and will be published as fast as space is available.
No. II. I do not understand which three sides are meant.
If two sides and one end,
$40^{\prime}+40^{\prime}+24^{\prime}+16^{\prime}=120^{\prime}$
Area of platform $=120 \times 8=960 \mathrm{sq} . \mathrm{ft}$.
Flooring is $\mathrm{I} \frac{1}{4}$ inches thick
$\therefore 960 \times \frac{5}{4}=1200 \mathrm{ft}$. of lumber is required.
Ends and one side,
$24+24+40+16=104^{\prime}$
Area of platform $=104 \times 8=832 \mathrm{sq}$. ft .
Flooring is $\mathrm{I} \frac{1}{4}$ inches thick
$\therefore 832 \times \frac{5}{4}=1040 \mathrm{ft}$. of lumber required.
No. 12.
I step requires 20 inches
24 steps require $20 \times 24=480$ inches
48 o inches $=40$ feet
2 feet extra
$\overline{42}$ feet required $=14 \mathrm{yds}$.
14 yds. at $\$ \mathrm{r} .25=\$ 17.50$. Ans.

No. 13. ist $=\frac{8}{3}$ times 3rd. 2nd $=\frac{8}{5}$ times 3 rd.
8 times 3 rd $+\frac{8}{5}$ times $3 \mathrm{rd}+3 \mathrm{rd}=474$
$\frac{49}{15}$ of $3 \mathrm{rd}=474$
$3 \mathrm{rd}=90$
$\frac{8}{5} 3$ rd or 2 nd $=144$
$\frac{8}{3} 3$ rd or $15 t=240$.
ist part $=240$
$\left.\begin{array}{l}\text { 2nd part }=144 \\ \text { 3rd part }=90\end{array}\right\}$ Answer.
No. 14. A., B., and C. have equal shares, $\therefore$ each owns $\frac{1}{3}$ of ship.
A. owns $\frac{1}{3}$ of ship. Sells $\frac{1}{3}$ of $\frac{1}{3}=\frac{1}{9}$ to D., and now has $\frac{2}{9}$ of ship.
B. owns $\frac{1}{3}$ of ship. Sells $\frac{1}{4}$ of $\frac{1}{3}=\frac{1}{12}$ to D., and now has $\frac{1}{4}$ of ship.
C. owns $\frac{1}{3}$ of ship. Sells $\frac{7}{5}$ of $\frac{1}{3}=\frac{1}{15}$ to D., and now has $\frac{4}{15}$ of ship.
D. has $\frac{1}{9}+\frac{1}{12}+\frac{1}{15}=\frac{47}{180}$ of ship. He dies and leaves $\frac{1}{3}$ of $\frac{47}{180}=\frac{47}{540}$ of ship to each.
A. has $\frac{2}{9}+\frac{47}{540}=\frac{167}{50}$ of ship.
B. has $\frac{1}{4}+\frac{47}{540}=\frac{18}{54} 2$ of ship.
C. has $\frac{4}{15}+\frac{47}{540}=\frac{19}{540}$ of ship.
B.'s + C.'s $=\$ 37,300$
$\frac{188}{3} \frac{2}{0}$ of ship $+\frac{19}{\frac{1}{4} 1}$ of $\operatorname{ship}=\$ 37,300$

$$
\frac{373}{540} \text { of ship }=37,300
$$

value of ship $=54,000$
A.'s share, or $\frac{167}{84}$ of ship $=16,700$. Ans.

No. 15. $\frac{7}{5}$ of cost $=\$ 28$. Cost $=\$ 20$.
For \$1, 20 oranges are bought. For $\$ 20,400$ oranges are bought. Ans.

No. 16. In 60 min . he walks $\frac{35}{100}$ miles.

$$
\begin{aligned}
& \text { In I min. he walks } \frac{35}{100 \times 60} \text { miles } \\
\therefore & \text { in } 70 \mathrm{~min} . \text { he walks } \frac{35 \times 70}{100 \times 60} \text { miles. }
\end{aligned}
$$

Area mowed $=1056$ sq. yds.
length $\frac{35 \times 70}{100 \times 60}$ miles $=\frac{35 \times 70 \times 1760}{100 \times 60} y d s$.
$\therefore$ breadth $=1056 \div \frac{35 \times 70 \times 1760}{100 \times 60}$ yds.

$$
=1056 \times \frac{100 \times 60}{35 \times 70 \times 1760}=123 \mathrm{yds}
$$

No. 17.
A. invests $\$ 3 \frac{1}{2}$ for 5 months, $\$ 17 \frac{1}{2}$ for I month.
B. invests $\$ 4$ for 5 months, $\$ 20$ for I month.
A. withdraws $\frac{1}{2}, \therefore \$ 1 \frac{3}{4}$ remain for 7 months, $\$ 12 \frac{1}{4}$ for $I$ month.
B. withdraws $\frac{2}{3}, \therefore \$ 1 \frac{1}{3}$ remain for 7 months, $\$ 9 \frac{1}{3}$ for 1 month.
A. has $\$ 17 \frac{1}{2}+\$ 12 \frac{1}{4}=\$ 29 \frac{3}{4} \quad \$ 29 \frac{3}{4}+\$ 29 \frac{1}{3}=\$ 59 \frac{1}{2}$
B. has $\$ 20+\$ 9 \frac{1}{3}=\$ 29 \frac{1}{3}$
$\therefore \frac{29 \frac{9}{2}}{59 \frac{1}{2}}=$ A.'s share, and $\frac{29 \frac{1}{3}}{59 \frac{1}{2}}=$ B.'s share.
$\frac{29 \frac{3}{4}}{59 \frac{1}{2}}$ of $\$ 7090=\$ 3570 \quad 7090-3570=\$ 3520$.

> A.'s share $=\$ 3570$
> B.'s share $=\$ 3520$

No. 18.
A. sold $\frac{3}{5}$ of a ship, received $\frac{80}{100}$ of $\frac{3}{5}=\frac{9}{2} 5, \therefore \frac{64}{25}$ still due.
B. sold $\frac{2}{5}$ of a ship, received $\frac{20}{100}$ of $\frac{2}{5}=\frac{2}{25}, \therefore \frac{8}{25}$ still due.

$$
\begin{array}{ll}
\frac{8}{25}-\frac{6}{25}=\frac{2}{25} & \begin{array}{l}
\frac{2}{25}=\$ 4000 \\
\frac{25}{25}=\$ 50,000, \\
\text { selling price of ship. }
\end{array}
\end{array}
$$

No. 19.
Area $\quad=33 \times 27=891$ sq. ft .
and gable peak $=12 \times 13 \frac{1}{2}=162$ sq. ft.
$9 \longdiv { 1 0 5 3 }$ sq. ft.
117 sq. yds.
117 sq. yds. at $42 \mathrm{c} .=\$ 49.14$.
No. 20.
A. goes 100 yds. while C. goes $90 \frac{1}{4}$ yds.
A. " 400 " " C. " 361 yds.
B. goes 200 yds. while C. goes 190 yds.

B. " 95 " " C. " $\frac{95 \times 95}{100}=901 \mathrm{yds}$
$\therefore$ A. beats C. 39 yds. in a 400 -yard race.

No. 21.
A. received $\frac{2}{5}$ of sum, $\therefore \frac{3}{5}$ of sum remained.
B. " $\frac{2}{3}$ of $\frac{3}{5}-\$ 20=\frac{2}{5}$ of sum $-\$ 20, \therefore \frac{1}{5}$ of sum $+\$ 20$ remained.

But C. received remainder $=\frac{3}{4}$ of $\frac{2}{5}$ of sum. $\frac{3}{10}$ of sum $=\frac{1}{5}$ of sum $+\$ 20$.
$\frac{1}{10}$ of $\operatorname{sum}=\$ 20$

$$
\text { sum }=\$ 200
$$

No. 22.
$\frac{1}{9}$ of s. p. $=$ gain. $\quad \frac{8}{9}$ of s. p. $=$ cost

## s. p. $=\frac{8}{8}$ of cost.

$9 \frac{3}{8} \%=\frac{3}{32}$ loss, $\therefore$ s. p. would be $\frac{29}{3} \frac{9}{2}$ of cost.
$\frac{9}{8}$ of cost $-\$ 35=\frac{29}{3}$ of cost.
$\frac{9}{8}-\frac{29}{3}$ of $\cos =\$ 35$
$\frac{7}{32}$ of $\operatorname{cost}=\$ 35$ cost $=\$ 160$
s. p., or ${ }_{8}^{9}$ of cost $=\$ 180$

Cost, $\$ 160$. Selling price, $\$ 180$.
No. 23.
$\$ \mathrm{I} .25$, cost of 1 sq. yd.
$\$ 44.44 \frac{4}{9}$, cost of $\frac{4444^{4}}{125}=35 \frac{5}{9}$ sq. yds.
$35 \frac{5}{5}$ sq. $\mathrm{yds} .=\left(35 \frac{5}{9} \times 9\right) \mathrm{sq} . \mathrm{ft} .=$ area.
Length $=355 \times 9 \div 16=20$ feet.
Perimeter $=2(16+20)=72 \mathrm{ft}$.
24c., cost of papering I sq. yd.
$\$ 20.16$, " " " $\frac{2010}{24}=84$ sq. yds.
Area of walls $=84 \mathrm{sq}$ yds.

$$
\text { length }=72 \mathrm{ft} \text {. }
$$

$\therefore$ height $=84 \times 9 \div 72=10 \frac{1}{2}$ feet.
Height of room $=10 \frac{1}{2}$ feet.
Length of room $=20$ feet.
No. 24.
A. invests $\$ 7$ for 3 months, $\$ 21$ for I month.
B. " $\$ 8$ " 3 " $\$ 24$ " 1 "
A. invests $\frac{3}{4}$ of $\$ 7=\$ 5 \frac{1}{4}, \therefore$ he now has $\$ 12 \frac{1}{4}$ for 3 months, $\$ 366_{4}^{9}$ for I month.
B. invests of $\$ 8=\$ 6 \frac{2}{3}, \therefore$ he now has $\$ 143$ for 3 months, $\$ 44$ for I month.
A. withdraws $\frac{1}{2}$ of $\$ 12 \frac{1}{4}=\$ 6_{8}^{\frac{1}{8}}, \therefore$ he now has $\$ 6 \frac{1}{8}$ for 6 months, $\$ 36_{4}^{3}$ for I month.
B. withdraws $\frac{1}{2}$ of $\$ 14 \frac{3}{4}=\$ 7 \frac{1}{3}, \therefore$ he now has $\$ 7 \frac{1}{3}$ for 6 months, $\$ 44$ for I month.
A. has $\$ 21+\$ 36_{4}^{3}+\$ 36_{4}^{3}=\$ 94 \frac{1}{2}$ ior 1 month.
B. " $\$ 24+\$ 44+\$ 44=\$ 112$ " ${ }^{1}$ "

Total, \$206 $\frac{1}{2}$
$\therefore$ A.'s share $=\frac{94 \frac{1}{2}}{206 \frac{1}{2}}$ of $\$ 1652=\$ 756$
and B.'s share $\frac{112}{206 \frac{1}{2}}$ of $\$ 1652=\$ 896$.
A.'s share, $\$ 756$.
B.'s share, $\$ 896$.

## PROBLEMS FOR SOLUTION.

## SENT IN BY VARIOUS CORRESPONDENTS.

No. 53. A pole 20 feet high and 8 inches in diameter has a rope coiled around it from the top to the bottom ; the coils are 1 foot apart. If a man attach the end of the rope to his foot, and uncoil it by walking around the pole and keeping the rope tight, how far does he walk ?

No. 54. A mixture of black and green tea, weighing 16 pounds, is worth $\$ 7.75$. If the proportions of each are interchanged, the mixture will be worth $\$ 7.45$. The black tea is worth 40 cents a pound. Find the price of the green tea.
No. 55. Two points are situated on opposite sides of a given straight line. Find a point in the straight line such that the straight lines joining it to the two given points may make equal angles with the given straight line. Is it always possible?

No. 56. If $\frac{a}{b}=\frac{c}{d}$, prove that $\frac{a x+b}{c x+d}$ has always the same value, whatever be the value of $x$. [Solved November, 1893. See p. 186, No. 81 of that volume, or send for private reply.]

No. 57. A is a given point within a circle. Draw through A a chord which shall be divided in medial section at A.

No. 58. A man pays $\$ 35$ at the beginning of each year for 20 years. At the end of the zoth year he receives $\$ 1,000$. Find the rate, interest compounded annually.

No. 59. Find the number of tons of hay in a mow $19 \mathrm{ft} . \times 17 \mathrm{ft} . \times 8 \mathrm{ft}$. 10 in . In one corner is a stairway 6 ft . high, 3 ft . square at the base, the rear side being the diagonal of the oblong. In other words, the stairway is half $6 \times 3 \times 3$.

No. 60. The population of a city in 1850 was 7,600 ; in 1870 it was found to be 9,196 . If the increase per cent. was the same during first decade as during the last, what was this per cent.?

No. 61. If the increase in the number of male and female criminals is $2 \frac{1}{2}$ per cent., while the decrease in the number of males alone is $7 \frac{1}{2}$ per cent., and the increase in the number of females is rol per cent., compare the antecedent numbers of male and female prisoners.

No. 62. Each edge of a cube is diminished by 1 of itself. By what fraction of itself is the volume diminished? Is the answer to this problem wrong? If not, please solve it.

No. 63. The difference between the radii of the front and hind wheels of a carriage is 6 inches. What are the lengths of these radii, if the front wheel makes 50 revolutions more than the hind one in going a mile ?

No. 64. The sides of a quadrilateral field are $20,30,25,32$ chains respectively, and the diagonal joining the first and third corners is 40 chains. Find its area in square yards.
No. 65.
Prove $\tan ^{-1} \frac{1}{1+a}+\tan ^{-1} \frac{1}{1-a}+\tan ^{-1} \frac{2}{a^{2}}=n \pi$
No. 66.
Prove $\tan ^{-1} a+\cot ^{-1} a=(2 n+1) \frac{\pi}{2}$
No. 67.
Solve $\tan ^{-1} a+\tan ^{-1} B+\tan ^{-1} r=\pi$.
No. 68.
Solve $\tan ^{-1} \frac{1}{x-1}-\tan ^{-1} \frac{1}{x+1}=\frac{\pi}{12}$
No. 69. Prove that

$$
\begin{gathered}
\tan \frac{-1 a-\sqrt{a^{2}-4}}{2 \sqrt{a+1}}+\tan ^{-1} \frac{1}{\sqrt{a+1}}+\tan \\
\frac{-1 a+\sqrt{a^{2}-4}}{2 \sqrt{a+1}}=n \pi+\frac{\pi}{2}
\end{gathered}
$$

No 70. Solve

$$
\begin{aligned}
x^{5}+y^{6} & =178 \sqrt{3} \\
x^{2}+y^{2} & =10 x y
\end{aligned}
$$

No. 71. Solve

$$
\begin{aligned}
x^{\left(x^{2}+y^{2}\right)}=y^{\frac{8}{8}} \\
=y^{\left(x^{2}+y^{2}\right)}=y^{\frac{2}{6}}
\end{aligned}
$$

No. 72. Solve

$$
\begin{gathered}
x^{2} y-4=4 x^{\frac{1}{2}} y-\frac{1}{4} y^{3} \\
x^{\frac{3}{2}}-3=x^{\frac{1}{2}} y^{\frac{1}{2}}\left(x^{\frac{1}{2}}-y^{\frac{1}{2}}\right)
\end{gathered}
$$

[N.B.-This was solved in April number, 1893, which see.]
No. 73. Solve $x y(x-y)=a^{3}$

$$
\begin{aligned}
& y z(y-z)=b^{3} \\
& z x(z-x)=c^{3}
\end{aligned}
$$

No. 74. Solve $x^{3}+y^{3}+z^{3}=3 x y z$

$$
x-a=y-b=z-c
$$

No. 75. If a line PA, PB, PC divide the angles $A, B, C$, of a triangle into parts $a, a_{1}, b, b_{1}, y, y_{1}$, respectively, such that $a=b=y=w$, prove cot $w=$ $\cot A+\cot B+\cot \mathrm{C}$.

No. 76. Perpendiculars $A, A_{1}, B, B_{1}, C, C_{1}$, to the plane of a triangle $A B C$ are erected at its angular points, and their respective lengths are $x, y, z$. Show that if $\Delta$ and $\Delta_{1}$ be the areas of $A, B, C$, and $A_{1} B_{1} C_{1}$,
then $\triangle_{1}^{2}-\Delta^{2}$

$$
\begin{gathered}
=\frac{1}{4}\left\{A^{2}(x-y)(x-z)+B^{2}(y-z)(y-x)+C^{2}(z-y)\right. \\
=\frac{1}{4}\left\{a_{1}^{2}(x-y)(x-z)+B_{1}^{2}(y-z)(y-x)+C_{1}^{2}(z-y)\right. \\
\quad(z-x)\}
\end{gathered}
$$

No. 77. ABCD is a quadrilateral inscribed in a circle, the diagonal $\mathrm{AC} . \mathrm{BD}$ meet in E , show that $\frac{E A}{a d}=\frac{E B}{a b}=\frac{E C}{b c}=\frac{E D}{c d}$; hence find the lengths of the diagomals

No. 78. The height of a cloud is calculated from its observed elevation " $a$ " at a certain point, and the depression $b$ of its reflection $b$ at the surface of a lake $h$ feet below the point of observation. If there be a small error $e$ in the observed value of " $a$," prove that the consequent error in the calculated height of the cloud will be sh. $\sin .2 \mathrm{~b} \operatorname{cosec} .{ }^{2}$ (b-a) feet.
No. 79. Stuart and Moss enter into partnership Stuart contributes $\$ 5,000$ more capital than Moss. At the end of 5 months Stuart draws $\$ 2,500$ of his capital, and 2 months later Moss increases his investments by $\$ 2,500$. At the end of their first year of partnership their assets exceed their liabilities by $\$ 24,800$, and, on dividing their net gain in the ratio of their average investments, Stuart's interest in the business is found to exceed that of Moss by $\$ 46$ I.54. Find the amount of the original investment of each.

No. 8o. An elliptic flower bed is described by means of a string $16^{\prime}$ long passing over two pegs $6^{\prime}$ apart. What is the area of the bed ?

## CORRESPONDENCE.

W.V.D., Treherne, Man. Your problems were overlooked, but came out in the April issue. Thanks for your encouraging words; but as there are less than 300 teachers in Ontario holding firstclass certificates, and over 8,000 who have not yet climbed to that level, The Journal must recognize this fact as one of the conditions under which it exists. If it were possible to devote more attention to your work, we would gladly oblige you.
J.W.G., West Osgoode, Ont., sends a problem which will appear in due course. Meantime it would be a good investment for this friend and others who wish to attain a teacher's grasp of the principles of arithmetic to order "Girdlestone's Arithmetic," or some such book containing a fuller treatment of the subject than the ordinary school text-books.

Lucian, Bath, Ont., sends two questions. The second was solved for a correspondent some months ago.
M.C., Wabash, Ont., asks for two solutions in arithmetic. If she had any standard book on mensuration, the difficulties would soon vanish. Would it not pay every teacher to get such a book? The questions will come out in turn.
S. McC., Guelph, would like to have the method of solving annuities well éxplained immediately. Quite so; we have had many other letters to the same effect ; but it is hardly reasonable to expect common text-book work in this column. Every higher algebra gives the theory, which is comparatively simple, and every year a large number of such questions has been solved in this department of The Journal. See back numbers, or send for private reply.
W.N.C. asks a question about the solidity of a frustum. His solution is correct ; but the process is not the most concise. A very good book for him and many others who write to us would be "Chambers' Mathematics"-cheap, comprehensive, and yet concise.
S.G., New Dundee, Ont., sends a problem that has been discussed several times before. See back numbers.
J.H.P., Owen Sound, one of our ablest contributors, sends two problems, and asks, in regard to No. 2 in the March number, whether the result given by "Trustee" is correct. He thinks that "the distance from $E$ to $B$ "ought to mean the straight line BE. Perhaps he is right ; the other interpretation makes the problem much simpler, and may be the one meant by the author. Can any of our readers find the length of BE from the given data? Please try it thoroughly.
R.B.H., Greenwood, Ont. Your statement of the question is not clear; try again.
A.H., Bolsover, Ont. Both your problems have been solved previously.
H.A.S., Elora, Ont. See last answer. Thanks for your confidence and kind words. All such letters do good, and we need them all.
S.H.C., Renfrew. Your duplicate received after the problems had appeared. Sorry for the disap-
pointment, but we cannot answer half the inquiries we get as promptly as we wish.
H.W.W., New Lowell, Ont. Your sixteen problems in algebra and trigonometry received. See answer to W.V.D. above. Apply to some qualified person near home for assistance ; failing that, send for personal answer. It does not seem probable that we can reach your problems in time to be of much use to you. Many thanks for your encouraging words. It is pleasant to know that in some cases, at least, this paper is fulfilling its mission.

The following acknowledgments bear internal evidence of the zeal, ability, and kindly disposition of some of our correspondents. It will be noticed that some who have done a great deal of excellent work are so modest that they have not given their names even, nor their P.O. address. In case there were some point about which we wished to inquire of them, we could not reach them. This is carrying modesty too far. All correspondents should enclose the name and address, even when these are not meant for publication. It would do many a weary and discouraged teacher good to see the huge pile of manuscript, all neatly and carefully done, that has reached the editor. As a practical expression of goodwill, this heap is very encouraging to all who wish to see the teacher's position elevated and his calling ennobled in public estimation. When the teachers of Canada join hands across the continent and heartily give many hours of hard work to assist one another, when we see them filling ten or fifteen pages of foolscap with careful solutions for the benefit of other teachers whom they have never seen, we may surely believe that the great brotherhood is becoming more than a mere name, and that very shortly this hearty and unselfish union will bear the fruit of important results. In the meantime, we respectfully suggest that every teacher should do all in his power to promote this enthusiastic spirit of self-help. If every one who receives help from these solutions would write "Thank you" on a card, and send it to the contributors whose names we are able to give below, that would be one means of promoting the feeling of comradeship.
J. S. Thomas, Waterloo, Ont., sent well-arranged solutions to Nos. 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 3I, $32,33,34,35,36,37,38,40,41,42,43,45,46,47$, 48, 49, 50, 51, 52.
J. W. Brown, Canaan, solved 11, 12, 15, 16, 23, 50.
W. M. Bradley, Beeton, 12, 13, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24,..25, 26, 28, 34, 42, 45 .
G. E. Pentland, Kimberly, Ont., 11, 12, 13, 14, $15,16,17,18,19,20,21,22,23,24,25,26,27,28$, $29,30,32,33,34,37,38,39,4 \mathrm{I}, 42,44,48,49,50$.
W. F. MOORE, Dundas, II, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 28, 29, 30, 32, 33, $34,37,40,41,42,46,47,49,50,51,52$.
Lillie E. Penney, Galetta, II, 12, 13, 14, 15, $16,17,18,19,20,21,22,23,24,25,26,28,30,32$, $34,4 \mathrm{I}, 43,48,50,5 \mathrm{I}, 52$.
W. R. Brown, West Lake, $7, \mathrm{I}_{3}, \mathrm{I}_{5}, 16,20,28$, 30, 37, 38, 4I, 42, 43 .

No NAME, $11,12,13,15,16,34.50,51,52$.
Frank Armstrong, Mainsville, in; 12, 13, 14, $15,16,17,18,20,33$.
No Name, Sheridan P.O., 11, 12, 13, 14, 15,16 , 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 28, 30, 32, 33, $36,43,48,49,50,52$.
There are some others on the list received too late for acknowledgment in the May issue. We tender sincere thanks to all our correspondents for the able, timely, and generous help they have given. Au revoir.

There is a village in Austria called Storbech, of which all the inhabitants, it is said, are chess players. The game is regularly taught in the schools, and every year there is a public examination in the game, and a distribution of prizes in the shape of chessboards.

They are never alone, who are accompanied with noble thoughts.-Chaucer.

## Drimary Department.

MENTAL PICTURES FOR STORYWRITING.
rhoda lee.
I. Flower day -_ children around a flower bed-a little girl with a trowel in her hand.
2. Twenty-fourth of May-girls and boys on the wharf-steamer coming in.
3. A little sick boy-couch drawn up to the window-a crutch beside him-two or three wild violets in his hand.
4. A little girl feeding a chicken beside the stove-an old hen looking anxiously in at the door.
5. A large tree--two boys looking into a nest-old bird flying around, making a great noise.

## CARELESS ROBBIE.

By A. в. 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 downstairs 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 Annie, 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

## COMPOSITION.

## rhoda lee.

Composition is defined to be constructive power over language. The defir nite training necessary to the attainment of this power should begin with the first day at school, and be carefully, though in a large measure incidentally, attended to in every class.

In answering questions the first step is taken. Shy, diffident, and perhaps indolent, children are apt to try to make their answers as short as possible, and, with mistaken kindness, the teacher completes and puts into shape the thought she supposes is in the child's mind. But this is all wrong. The teacher should endeavor from the outset to obtain full and complete answers.

It is also necessary to watch for errors common to the class, and prepare gymnastics or practices for the correction of such. To observe these errors, we must have the children talk, and in some classes a real difficulty is here presented. As a rule, however, this is not the case in the lower grades. Without the self-consciousness that characterizes the higher classes, the little ones are able to express themselves easily and naturally, and they will do so if the proper relations exist between teacher and pupils.

If five minutes of the time set apart for opening exercises be devoted to receiving general news, observations, "nature talks," etc., we will find it to be very advantageous. The children require but little encouragement to talk freely about their own personal experiences and observations.

One of the most definite forms of training in oral composition or language is the reproduction of a story. The teacher reads or relates a story, and a few days later the children tell it to her. Of course it will be little by little, in response to the questions of the teacher, who also connects the facts, but it will nevertheless form the best of preparation for what will shortly follow-the written reproduction of stories.
Before proceeding further, we must refer to two other powerful factors in the work of oral composition, namely, memorizing, and the example of the teacher ; whether she wishes it or not, her language is certainly always a model that the children copy, while the memorization of both prose and poetry is necessary language food.
As soon as the children are able to write, systematic training in the work of written composition must be commenced. Simple exercises such as the first four or five of the following serve as a beginning, but should soon give place to others increasing in difficulty, and requiring more thought.
(I) Objects seen in the room. A full statement required each time.

Example-I see a table.
I see a flower.
(2) Things seen on the way to school. Example-I saw a tree.

I saw a horse.
(3) Things in the possession of the children.

Example-I have a cat.
I have a mouth-organ.
(4) Statements regarding such as the following :

| Birds, | Hens, |
| :--- | :--- |
| Horses, | Girls. |
| Dogs, | Bees, |
| Fish, | Wasps. |

Example-Birds sing and build nests.
Bees make honey.
Fish live in the water. They have scales on their backs.
(5) Sentences beginning with such words as where, when, why, have, is, are, was, what, am, etc.
(6) Stories about such simple subjects as

$$
\begin{aligned}
& \text { My cat, } \\
& \text { A pic-nic, } \\
& \text { Christmas. }
\end{aligned}
$$

(7) Conversations between

A cat and a bird,
A stove and the kettle, A fish and the frying-pan, Rain and flowers.
(8) Personation of a flower, a drop of water, or a lump of coal ; story of the life of the object to be written. (This exercise is more suitable for an advanced grade, in which the children may get accurate information from encyclopædias and other works at home.
(9) Stories written from pictures. Ist, large enough to be seen by the whole class; 2nd, small cards, each card being different from the other.
(10) Stories written from mental pictures given by the teacher. For example, the teacher says: "I see some little girls coming down the road with wild flowers in their hands"; or, "I see a little boy in a hayfield with a rake." With the above as framework the children weave the story.
(II) Written reproduction of stories. As an aid in securing accuracy and the proper order of facts, questions may be written on the blackboard. Suppose the story were the one in the Second Primer, entitled "Fanny's Tea-party." Questions such as follows may be given :
(I) Whom did Fanny invite to her party?
(2) What did they have for tea?
(3) What did the children do after tea?
(4) What did Tom want to do?

These questions form a preliminary step to story-telling, and should be dispensed with as soon as practicable.

At first the mistakes in spelling, punctuation, capitalization, etc., are numerous, but these are errors that correct themselves in time. Most attention should at first be given to the thought and language.

There is no work more important than that of developing the power of expression. Emphasize and commend everything worthy of praise; memorize and read in class only what is good and beautiful. There is great truth in the saying, " Facility in language comes from hearing good language, mastering good language, and practising good language."

## MY KITTY.

Tune-My Bonnie.
My kitty has gone from her basket,
My kitty has gone up the tree,
Oh, who will go up 'midst the branches And bring back my kitty to me?
Chorus--Bring back, bring back, Oh, bring back my kitty to me, to me,
Bring back, bring back,
Oh, bring back my kitty to me.
The dog that lives down by the river,
That dog with the very loud bark,
Has frightened poor kitty so dreadfully,
Up there she is mewing. Just hark!
CHORUS-Bring back, bring back, etc.
They say that when some folks are frightened, Their hair will turn perfectly white,
And if kitty stays up there till morning She won't have a black hair by night.
Chorus-Bring back, bring back, etc.
STORIES FOR SIGHT READING:

## (To be cut out and mounted on cardboard.)

In the Easter holidays Tom went to the country to visit his grandma. He had good fun hunting for eggs, and helping his grandpa out in the barn.

I saw a crow when I was coming to school to-day. It was in a tall tree, and just as I passed it flapped its wings and flew away.
"I wish it would stop raining," said Fred; "it seems to rain all the time these days." "Did it rain yesterday?" said-mamma, " or the day before?" "No," said Fred, as he remembered the good time he had in his holidays, and he felt a little ashamed of himself for grumbling so.

$$
\begin{aligned}
& \text { "Rain, rain, go away, } \\
& \text { Come again some other day." }
\end{aligned}
$$

This was what Harry said as he stood drumming on the window. It was Saturday, and papa was going to take him for a drive. Mamma said, "Wait a little, I think it is just an 'April shower, last half an hour.'" And so it was, for very soon the clouds began to break, the sun came out, and the day was as bright as ever.

A little crocus peeped out of the ground one day and said," "Dear me, I have been sleeping a long time, I must get up. How nice it is to see the sun again and the pretty blue sky." She held her head very straight for a few days and felt rather lonely. One day she looked around and saw ever so many others just like herself, except that some were yellow and others white. Then she felt quite happy.
"Come along down to the pond," said mother duck, "you have not had a swim yet." Off she waddled to the water, the little ducklings all following her. When they saw their mother splash into the pond they were a little afraid, but in they went and were swimming about as though they had been doing it for years.
"Robins in the tree-top, blossoms in the grass;
Green things a-growing everywhere you pass;
Sudden little breezes, showers of silver dew,
Black bough and bent twig budding out anew.
Pine tree and willow tree, fringed elm and larch,
Don't you think that May-time's pleasanter than March?"
-T. B. Aldrich.

## THAT'S THE WAY.

JUST a little every day, That's the way
Seeds in darkness swell and grow,
Tiny blades push through the snow.
Never any flower of May
Leaps to blossom in a burst.
Slowly-slowly-at the first.
That's the way!
Just a little every day.
Just a little every day.
That's the way!
Children learn to read and write,
Bit by bit, and mite by mite.
Never any one, I say,
Leaps to knowledge and its power.
Slowly-slowly-hour by hour.
That's the way!
Just a little every day.
-Ella Wheeler Witcox, in St. Nicholas.

OVER THE BARE HILLS FAR AWAY.
Over the bare hills far away
Somebody's travelling day by day
Coming so slowly, I wonder why ?
Oh, she is busy as she goes by.
Sing, little brook, wake up and hear !
Where is the song you learned last year?
Don't you remember the dear old tune?
Naughty small brook to forget so soon !
Dainty wee clouds in the bright blue sky,
Last year I taught you to float so high !
Flowers, where are you? Why don't you blow? Come, Dandelion, you can, I know.
Spring up, tall grasses, and daisies, and clover ! Last year I taught you how over and over, Come with me, every one, this is the way; Don't you remember me? Why, I am May!
-Selected.

## QUESTIONS REQUIRING THOUGHT.

In what direction is a little girl running when the first sunshine of the morning comes directly on her face ?

In what direction will your shadow fall at six o'clock on a summer evening ?

You see a rainbow in the evening : is it east or west of where you are standing ? Why?
What direction is opposite S.E.?
In what part of the sky is the sun in the middle of the afternoon?
A ship was sailing southeast and was struck squarely on the left side by a steamer; in what direction was the steamer going ?
Explain the difference between a picture and a map.
Explain the use of: express companies; the postal system; railways.

Of what use are the telegraph and telephone wires which we see on the roads and streets ?
If a street runs north and south, which way do the houses on its east side face? Which way do the houses on the west side face?
Tell in what way farmers make money from sheep.

Name a tree of the forest which produces a valuable article of food.
Distinguish between an orchard and a forest.

What is meant when we say that the water of the Great Lakes is "fresh"? -Eaton's Common-Sense Questions in Geography.

SELECTIONS FOR MEMORIZING.

Among the beautiful pictures
That hang on Menory's wall
Is one of a dim old forest,
That seemeth the best of all.
Not for its gnarled oaks olden,
Dark with the mistletoe ;
Not for the violets golden,
That sprinkle the vale below;
Not for the milk-white lili s , That lean from the fragrant bedge, Coquetting all day with the sunbeams, And stealing their golden edge ;
Not for the vines on the upland,
Where the bright red berries rest,
Nor the pinks nor the pale, sweet cowslips, It seemeth to me the best.

I once had a little brother,
With eyes that were dark and deep;
In the lap of that dim old forest
He lieth in peace asleep.
Light as the down of the thistle,
Free as the winds that blow,
We roved there the beautiful summers,
The summers of long ago.
But his feet on the hills grew weary,
And one of the autumn eves
I made for my little brother A bed of the yellow leaves.

Sweetly his pale arms folded My neck in a meek embrace,
As the light of immortal beauty Silently covered his face;
And when the arrows of sunset Lodged in the tree-tops bright,
He fell, in his saint-like beauty, Asleep by the gates of light.
Therefore of all the pictures
That hang on Memory's wall,
The one of the dim old forest Seemeth the best of all.

CLIMBING UP THE HILL.

Never look behind, boys,
Up and on the way !
Time enough for that, boys, On some future day.
Though the way be long, boys,
Fight it with a will;
Never stop to look behind
When climbing up a hill.
First be sure you're right, boys, Then with courage strong
Strap your pack upon your back, And tug, tug along;
Better let the lag-lout
Fill the lower bill,
And strike the farther stake-pole Higher up the hill.

Trudge is a slow horse, boys, Made to pull a load,
But in the end will give the dust To racers on the road.
When you're near the top, boys, Of the rugged way,
Do not stop to blow your horn, But climb, climb away.

Shoot above the crowd, boys, Brace yourself and go !
Let the plodding land-pad Hoe the easy row.
Success is at the top, boys, Waiting there until
Brains and pluck and self-respect Have met you on the hill.


#### Abstract

Question Drawer. Allquestions for this department, like sull com munications for any other department of THE Journal, must be authenticated with the name and sddress of the writer, and must be written on one side of the paper only. Questions jeet, $i, 8$ also be classified according to the sub matical, questions for the English, the Mathetion departments should be written on separate Elips, so that each set may be forwarded to the Wiator of the particular department. If you Wish prompt answers to questions, please observe these rules.


M.H.D.- The boundary line between the United States and Canada may be traced as follows
From St. Andrews, on the Bay of Fundy; by the St. Croix River to Grand Lake; from Grand Lake in a straight line (about $67.50^{\circ}$ west longitude), due north to Grand Falls ; thence by Rivers St. John and St. Francis to Kamourazka in Quebec;thence Southwest in a straight line to Frontier Lake, in Montmagny; thence nearly south to the southwest branch of River St. John; thence along an irregular chain of mountains on the southeast of Beauce and Compton to about the forty-fifth parallel; along that parallel due west until the St. Lawrence is struck at Cornwall; thence the St. Lawrence and the Great Lakes to a point on the west side of Lake Superior ; thence a chain of small lakes Lake Rainy River to the southern end of Lake of the Woods; thence along the forty-ninth parallel to the Pacific.
X.Y.Z.-The regulation is that every teacher shall follow the course of study for Public Schools "as far as the circumstances of his school will admit." "Any modifications deemed necessary shall be made only with the concurrence of the

A Subscriber.-A federal union, or Confederation, is a union formed by an agreement or compact between several provinces or states, under which each of of contracting parties retains its powers deemed to be local matters, while all matdeemed to be local matters, while all matters which are thought to affect the welfare of all the uniting provinces or states are committed to the control of a central government and parliament. A union like that of 1840 is called a legislative Union, because there are no local legislatures, all legislation and government being in the hands of one central government and parliament. At the forming of Macdanadian confederation Sir John A. Macdonald and a few others would have preferred to do away with all the provincial parliaments or legislatures, and have the whs made by the central parliament for the whole Dominion. That is, they wished to form a legislative union. But the great body of representatives would not Own local the idea of surrendering their

Literary Mintes.
Justin M'Carthy, the Irish journalist, politician, historian, and novelist, has Fritten for the April number of The on "Lord Rosebery."
It seems rather early to see "The Successor of the Railway," but Appleton
Morgan coming applies that title in the forthComing Popular Science Monthly to the economy line, which, by its speed and economy, is becoming a serious competitor of the steam railroad over rapidly creasing distances.
The complete novel in the May issue of Lippincott's is "The Lady of Las Cruces," the last) episode in the life of that beauti-
ful and gifted Mexican who was the heroine of "The Picture of Las Cruces," in the magazine for February, 1894. "Martha's Headstone," by Edith Brower, is a strong and touching story, with an uncommon motif. "Odds on the Gun" is a stirring anecdote of South Africa, the first of sundry surprising adventures of a war correspondent which will be offered. "The Heart of the Fire Spirit," by the late Lieut. Alvin F. Sydenham, sets forth one of the many devices of the Indian medicine-man. William T.Nichols solves the mystery of "The Ghost of Rhodes House." In "Effacing the Frontier," William Trowbridge Larned casts a good deal of light on the condition and prospects of the West. The army, he thinks, will soon be no longer needed to keep the redmen in order, and may profitably be stationed in Chicago and other cities to meet the growing danger from anarchists and strikers. The other departments are well up to the average.

Conspicuous among the contents of the May Atlantic is Percival Lowell's first paper on Mars. The subject is the "Atmosphere of Mars," and it is treated with such skill that the reader finds new interest in the scientific information given. Two papers of unusual historical interest are "The Political Depravity of Our Fathers," by John B. McMaster and Dr. Rush, and "General Washington," by Paul Leicester Ford. "Tramps with an Enthusiast," by Olive Thorne Miller, and "A Week on Walden's Ridge," a Tennessee sketch, by Bradford Torrey, are sure to be entertaining. The second paper in the series,"New Figures in Literature and Art," has for its subject Richard Harding Davis, and there is another paper on "Autographs," by George Birkbeck Hill. Fiction is well represented by instalments of the two serials, "A Singular Life," by Elizabeth Stuart Phelps, and "The Seats of the Mighty," by Gilbert Parker. There is also a short story by Eliza Orne White, entitled "A Faithful Failure." Among other contributions are "A Standard Theatre," by T. R. Sullivan, "Christmas Shopping at Assuân," by Agnes Repplier, an anonymons sketch, etc. The Contributors' Club and Book Reviews complete the issue. Houghton, Mifflin \& Co., Boston.

## THE WILD FLOWERS OF CANADA

Wherever you go in Europe or the United States, there is a fashionable craze for wild-flower knowledge, color, form and blooming time ; and what is of more interest to Canadians is the fact that everywhere the people who know bear testimony to the wild flowers of Canada. The Montreal Star is now issuing "The Wild Flowers of Canada" in portfolio form, with colored plates of all the wild flowers of the country, a work of surpassing interest, an enterprise never before achieved. Each portfolio contains sixteen different flowers. For a limited time the portfolios can be procured through the Montreal Star, or dealers, at fifteen cents each. The entire work will constitute a library attraction of incalculable value, embracing three hundred lable va
flowers.

## JBook Mrotices.

A History of English Literature. By J. Logie Robertson, M.A. New York: Harper \& Brothers. Pp. 394. Mr. Robertson tells us in his preface that the present volume is the result of "twenty years' teaching" of English literature, and that his "biographical and
critical sketches contain the most recent
results in fact and fair criticism." We have, therefore, to do with a work produced at tolerable leisure, and purporting to state the history of our literature in the light of the most modern scholarship. Such a history in compact form would, indeed, be desirable for use in schools, where, at present, only antiquated manuals are, for the most part, to be found. Unfortunately, Mr. Robertson gives us too many reasons why his volume will not satisfy a scholarly public desiring "the most recent results in fact and fair criticism." In the first place, the critical reader is disturbed by the frequent occurrence of partial truths expressed as general truths. English literature begins with the arrival of the English in England (p. 1); the Anglo-Saxons were the progenitors of the English nation. After their settlement in Britain, they called themselves English (p. 3). Often the "facts" are very uncertain. Mr. Robertson knows nothing about the versification of the Anglo-Saxon, or he would not say of the Anglo-Saxon verse that "there are usually two accented syllables in each part"-there are always two stressed syllables (p. 1.3). "Flo'd under foldan" is not "flooding the lowlands," but "the flood (stream; under the earth." These stray points in the sketch of Anglo-Saxon are reinforced by some curious discoveries in the transition period. Mr. Robertson classes Henry I. among the French writers of England (p. 22) ; the scholarly world would be greatly indebted to our author if he would give grounds for a "fact" unknown to the contemporary biographers of that monarch, and unnoticed even by the great Capgrave himself in his book on the "Illustrious Henries." Scholars, too-Paris, Birsch, Hirschfeld, Nutt, Rhys-would be interested in the proofs of Mr. Robertson's antiquated theory of the origin of the story of the Holy Grail, that Walter Map, who wrote Latin legends of King Arthur, "blent them with the doctrines of Christianity by inventing and adding the story of the Holy Grail." Moreover-it is a small point - "Sir Bevis of Southampton" (p. 23) is known in literary work as Sir Bevis of Hampton. Of course such inaccuracies do not occur in equal numbers throughout all the book. The treatment of the later periods does evince some familiarity with its subject-matter, and a happy condensation of multifarious details. Yet one is tempted to think Mr. Robertson's trick of loose statement clings to him to the last. On p. 368 we learn that Goldwin Smith is "now settled at Toronto University, Canada."

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## ——NOTICE.

TEACHERS will please note that the edition of "Notes on Entrance Literature," edited by F. H. Sykes, M.A., and published by the Canada Publishing Company, is now exhausted, and, as no further edition is to be published, we can no longer fill any orders for this 'book.

For mutual advantage, when you write to an al Journal.

## OFFICIAL CALENDAR

of the

## Educational Department

May:
Bylaw to alter school boundaries--Last day of passing. [P.S. Act, sec. 81 (3).] (Not later than Ist May.)
Arbor Day. (rst Friday in May.)
24 Queen's Birthday (Friday).
June:
Public and Separate School Boards to appoint representatives on the High School Entrance Examination Board of Examiners. [H.S.Act sec. $3^{8(2) .] ~(O n ~ o r ~ h e f o r e ~ i s t ~ J u m e .) ~}$

1. University Commencement. (Subject to appointment.)
2. High Schools close, third tein. [H.S.Act, sec. 42.] (End on 3oth June.)

Public and Separate Schools close. [P.S.Act, sec. 173 (1) (2).] (End 3oth June.) S.S.Act, 79 (1) (2).] (End /st July.)
29. Semi-Annual Reports of High Schools to Department, due. [H.S.Act, sec. 14(12).] (Close of half year.)
Rural Public School Trustees to report average attendance of pupils to Inspector. [P.S.Act, sec. 206.] (On or before 30 th June.)
Protestant Separate Schools to transmit to County Inspectors names and attendance during the last preceding six months. - [S.S.Act, sec. 12.] (On or before 3oth June.)
Semi-Annual Reports of Separate Schools to Department, due. [S.S.Act, sec. 28 (I8); sec. 62.] (Onorbefore 3oth Juni.)

Trustees' Report to Truant Officer, due. [Truancy Act, sec. 12.] (Last wech in June.)
Assessors to settle basis of taxation in Union School Sections. [P.S.Act, sec. 95 (1).] (Before 1st July.)

Annual Examinations, 1895.

## NOTICES.

May i.-Applications from candidates for the High School Entrance, Public School Leaving and Primary Commercial Examinations to Inspectors, due.
May 3.-Inspectors to report to Department number of candidates for same.
May 24.-Applications for the High School, Primary, Junior, and Senior Leaving Examinations and University Pass and Honor Matriculation Examinations to Inspectors, due.
May 25.-Inspectors to report to Department number of candidates for same.
June 1.-Notice by candidates for Kindergarten examinations to Department, due.

## EXAMINATIONS

April 24.-Art School Examinations begin.
April 25.-Toronto University Examinations in Law begin.
May r.-Examinations for Specialists' Certificates (except Commercial) at Toronto University begin.
May 27.-Examinations at Provincial School of Pedagogy at Toronto begin.
June 4.-Practical Examinations at Normal Schools begin.
June 12.-Written Examinations at Normal Schools begin.
Jute 26.-Examinations in Oral Reading, Drawing, and the Commercial Course in High, Public, and Separate Schools begin.
June 27.-High Schoal Entrance and Public School Leaving Examinations begin. Kindergarten Examinatiuns begin.
July 2.-High School Junior Leaving, University Pass, Matriculation, and Scholarship Examinations begin.
Commercial Specialists' Examination a Toronto begin.
July 4.-High School Primary Examinations begin.
July 11.-High School Senior Leaving and Uhiversity Honor Matriculations Examinations


[^0]:    "This is just as he wrote it, with the exception of five words "hich he mis-spelled; these I corrected; one was "pupy," another The story is a true one, be said. I send it as a sample of part. graphing and comma and terninal mark work
    tion marks, which be has been taugt.-M. A. We forgot quota-

