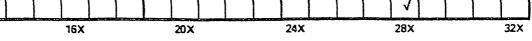
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The Canada School Journal.

AND WEEKLY PEVIEW.

Vol. X.

TORONTO, DEC. 17, 1885.

No. 46.

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The Canada School Journal and Weekly Review.

An Educational Journal devoted to the advancement of Literature, Science, and the teaching profession in Canada.

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CANADA SCHOOL JOURNAL PUB. CO. (Limited)

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The Morld.

The awful catastrophe has come at last. The earth has actually collided with a fiery comet. So say the men of science. The result was not universal wreck and ruin, but merely a shower of meteors, visible to the inhabitants of more than a quarter of the globe. Asia was the chief theatre of the grand display of celestial fireworks. The comet itself is said to have gone on its way, not, however, as the compacted mass of luminosity it originally was, but as a cluster, or train of disjointed fragments of impalpable brightness.

Canon Farrar has completed his American tour, and returned to England, loaded with the well-wishes of the educated people of the United States. He had the good feeling to comport himself everywhere with the simplicity and cordiality of true Christian manliness. His impressions of America are on the whole almost as favorable as America's impression of him. He rightly believes that her religions faith is the foundation of her national prosperity, that education is free, though training less thorough, than in England, and that in temperance legislation

the latter is far behind. He thinks co-education as he we nessed it in Oberlin, Ann Arbor and Syracuse, is succeding admirably.

The Message of the President of the United States has been looked for with interest, even in Canada. Anxiety was naturally felt to see what he would say, or propose, with reference to the As was hoped and expected he proposes a commisfisheries. sion to settle the vexed question. Almost beyond expectation he is willing and desirous that that commission shall deal with the commercial problem as well. There is, therefore, some ground for hope that a better state of trade relations may be established between our neighbors and us, as well as that a cause of irritation and danger may be removed. The President also refers to the extradition question in terms which lead to the hope that the respective countries shall not continue to be retuges for each other's defaulters and crabezzlers.

The result of the British elections is such as to leave the future in darkness. The Liberals have a considerable majority over the Conservatives, but are in a small minority against Conservatives and Parnellites united. Whether Gladstone will accept office under the circumstances remains to be seen. Probably he would be perfectly safe in doing so. Parnell commanded his followers to support the Conservatives not that he loved them more, but that his strength lies in securing if possible the balance of power. He holds this balance only on the supposition that the Conservatives would vote solid with the Parnellites, on any test question affecting the interests of either. Both these assumptions are in the last degree unlikely. The Liberals are pledged by all their past to grant to Ireland the largest measure of self-government consistent with the integrity of the empire. Beyond this many Conservatives could not, for consistency's sake, go. On the other hand Parnell and his followers could never be relied on to support the Conservatives against the Liberals on a question of policy, unless at a price to which they could never agree. Gladstone may probably resume the reins with safety, though in any case the probabilities are in favor of another general election at an early day.

The School.

Our issue of Christmas week will be particularly attractive and interesting, and we shall endeavor to mail it to subscribers two or three days in advance. We desire to bring the SCHOOL JOURNAL under the notice of as many teachers, trustees, and friends of education as possible, and shall feel indebted to subscribers who will send us the names of friends of theirs to whom we might mail free copies of the Special Holiday Number.

The Rev. Dr. McCurdy, who for seven years was Professor of Oriental Languages in Princeton College, New Jersey, and

and Leipzic has been appointed to a tutorship in Oriental Languages in Toronto University. Dr. McCurdy will, it is understood, give special attention to the hitherto somewhat neglected subject of Comparative Philology. He is recommended by Professor Green, a high authority, as having made "unusual attainments in philology," and especially as having a "wide acquaintance with the Semitic Languages." He is the author of one or two works of merit in the department of Linguistic Archæology, and has now in press a translation from the Sanscrit of the "Hilopadeca" with Notes. Dr. McCurdy is said to be a native Canadian. There seems no reason to doubt he will prove a valuable addition to the teaching staff of the University.

It cannot be too constantly borne in mind that the true measure of mental development is not what is learned but what is understood. The old days have, it may be hored, gone for ever, when children were required to memorize great quantities of dry rules, definitions, and formulas, which conveyed no distinct ideas to their understanding and which they were not even expected to comprehend till some future day, when as their powers approached maturity the hidden meaning might dawn upon them. The writer has very vivid recollections of school work of this kind. There can be no doubt that such methods have been responsible for the life-long dislike to books and study of many a pupil who might, under a more intelligent master, have become a well-educated and useful member of society . Training, not cramming, and thinking, not memorizing, are the proper functions of master and pupil, respectively.

"Every pursuit has its monotonous routine and its vexatious and depressing incidents. The true philosophy of life consists in so adjusting one's spirit to one's work as to make labor itself a pleasure. It will be found that the men who have gained marked success in any department have usually possessed bright and buoyant dispositions. Especially is this trait necessary in a profession like teaching, in which personal relations are so largely involved. Children always enjoy a laugh. If well timed and properly controlled it helps them in their school work. The teacher who can say a bright, witty thing once in a while has a great advantage." These words, which we clip for their practical wisdom and sound philosophy from an excellent article in *Education* for November, by John E. Bradley, Ph.D., we commend to the study of all teachers, and especially to the long-faced, sour-visaged, sharp-voiced members of the fraternity, if unhappily there are such amongst our readers. To all such we would say, store up in your memory a few funny anecdotes or witty renconties of the right kind for school children, and next blue day, just when the clouds begin to lower, call a halt and tell it. You will find there is more virtue in a good laugh than you ever imagined.

banquet of the undergraduates of the University of Toronto, are to be taught loyalty and industry by a process of slow the other evening, observed that there were 141 graduates of starvation. Partly as a punishment for the misbehaviour of a

who has since spent two years at the Universities of Gottingen, Toronto University and 48 graduates of Victoria University, engaged in High School work in the province. The figures are suggestive, not only of the advantage the province is reaping from its own University but also of what is being done for it by the voluntary institutions. Had he added to Victoria's 48 the number of graduates of Queen's and other institutions supported on the voluntary principle, who are serving the province in the same way, it might have probably appeared that voluntary effort is doing nearly or quite as much for the higher education of the country as the State-endowed college. This remark is made in no spirit of hostility to Toronto University, which we wish to see constantly growing in educational power and efficiency, but simply in the interests of truth and sound logic. Fall credit is not always accorded to the denominational colleges for the valuable service they are rendering in the work of higher education. There is no incompatibility between the special objects they have in view and the general educational interests of the province. On the contrary, the better they serve the denominations the more useful are they to society at large.

> It has hitherto been matter for congratulation that the barbarous practice o. vivisection has gained no foothold in Canada. We are sorry however, to observe, that a Canadian Scientist, Professor T. Wesley Mills, of McGill College, has given the sanction of his name to the cruel business by practising it at Johns Hopkins University, and elsewhere in the United States. We would that the mighty moral and Christian sentiment of the whole Dominion could be aroused to frown down every attempt to introduce into Canada the torture of animals in the name of Science. We doubt if even the largest returns in the shape of beneficial physiological discoveries could make the practice morally justifiable or counterbalance the inevitable degradation of some of the finest and noblest qualities of the human soul which it involves. But as a matter of fact, there is probably no line of scientific research which has hitherto been so barren of profitable and certain results. The much-vaunted attempts of M. Pasteur, to find a specific against hydrophobia are a case in point. In order .o make a "vaccine" of sufficient intensity for his purpose, M. Pasteur had to make a series of at least 60 rabbits mad, and in order to keep up his supply, the poor creatures would have to be kept mad in endless series. And yet when the boasted utility of the inoculation in preventing hydrophobia in human beings is investigated it appears that the "subjects" operated on had no symptom of the madness, that it is not even proved that the dogs by whom they were bitten were mad, and that if it were so proved, it by no means follows that their bite would in every instance produce the disease, as many persons so bitten never have hydrophobia, and in many cases the disease is not developed for years.

Our Government has, according to the Mail, evoked a new educational theory and is now applying it to those Indian The Minister of Education, in the course of a speech at the tribes which were lately in rebellion around Battleford. These

few of their braves, and partly as a means of compelling them | faces. We want to know our friends as friends, as men and henceforth to love the Canadian people as brethren, or rather as tender parents, the whole tribes have been put upon halfrations. In order, further, to teach them to be industrious and provident, these half-rations are being served out to them but twice a week. It is so easy for a famished savage, or a famished Christian, either, to love the family which adopts him as a ward against his will, strips him of his ancestral property shuts him up in a narrow enclosure, and gives him just enough food of the roughest kind to keep body and soul together. It is so natural, too, for a half-starved savage to deny himself when the food is at last placed in his hands, and, paying no heed to the gnawing hunger, to put by a part of it for to-morrow and the next day and the next. And then with what hearty good-will the starving wretches will be sure to go to work on their empty stomachs, and with full knowledge that their hard work will not help to fill them. How deep, too, will be their admiration of the justice, the humanity, the Christian charity, of those who punish the innocent for the sins of the guilty, and involve old men, inoffensive women, helpless children, and the sick and suffering, in the common starvation. Seriously, we blush for our country, when such a policy is announced. If carried out through the terrible Northwest winter, it will sweep the poor wretches by hundreds into their graves. It will be an everlasting disgrace to us as a people. Every humane, every Christian, man and woman, every church and benevolent society in the land ought to arise and protest against such horrible barbarity.

PEDAGOGICAL MANNERISM.

"I can tell a schoolmaster, or schoolmarm, as far as I can see them." Who has not often heard this declaration from persons engaged in other, and in their own estimation, evidently, more desirable occupations, or possibly in no particular occupation at all. The remark is the ungrammatical expression of a too common fact. It may be, it is true, the mere meaningless repetition of a saying which has became almost proverbial. It may be, and doubtless often is, the speaker's method of giving you an inkling of the keenness of his own powers of observation. But on the principle that there is always some truth in what everybody says, there must be some ground for this almost universal consensus of opinion. From so ne cause it must be that the public school teacher bears about to a greater degree than most others the stamp of his profession.

Admit it and what follows? Surely the profession is not one to be ashamed of. It is worthy to take rank beside the very highest. What then if it creates an indescribable something in speech, gait, or manner, which advertises to all close observers that one's business in life is to teach the young? Is any harm done?

Yes, there is harm done. The profession is discredited and the teacher's influence lessened. This effect, in fact always follows any marked singularity in dress, voice, or manner, which proclaims the individual's business. In our social intercourse we don't care to have the accidents or peculiarmes of one's position or mode of life, thrust constantly before our their pupils, still more.

women, like ourselves, not as merchants, or milliners, lawyers, doctors, or school teachers. The person who talks "shop" on all occasions is universally pronounced a bore. The one who acts " shop," who indicates it in face or gesture, or tone of voice, is scarcely less out of place in the social circle. We meet there on common ground, and all our words and acts should be suggestive of, or in harmony with, such thoughts, feelings, and interests as may be supposed to be shared in common by those around us.

But granting that the teacher ordinarily, or at least often, wears the symbol of his profession on his sleeve, so to speak, why is it? To discover the cause of an undesirable mannerism is to advance half way towards its cure. The result is in this case due, probably, to a combination of causes, but one or two of the chief ones may be indicated. First, no doubt, is the tone and manner of command unconsciously used. The average teacher is accustomed to autocracy. His word is law in the school-room. He brooks not contradiction, and too often is intolerant even of difference of opinion. In the effort to be firm he becomes imperious. The language of reproof is so often on his lips that the tone becomes habitual. In many cases the nervous tension is so great and constant that a state of irritability and wrong becomes almost chronic, and writes its language in every lineament and motion. These belong, of course, to the worst class of causes. There are many others of a much less disagreeable character which operate no less powerfully and leave marks no less clear and characteristic.

But the cure? If the causes are unavoidable how are the effects to be escaped? We answer, the causes are not unavoidable. The cure can come only by avoiding them. There is, for instance, no necessity for imperious tones or even, ordinarily, imperious words in the school-room. The teacher who permits himself to fall into the habit of using either makes a mistake from every point of view. They are indications of weakness. Conscious strength finds no use for them. The words and tones of cheerful, kindly request or direction, from the lips of the teacher who has true influence and weight of character, will be obeyed with equal certainty and tenfold alacrity. Like begets like, nervousness or irritability in teachers reacts upon the pupil. There is an instinct of self-respect in every child which revolts from the obedience of slavish fear. The teacher who has the happy faculty of clothing every mandate in the language of request, and speaking it in the tone which takes ready obedience for granted, will very seldom be disappointed especially if the commands are invariably reasonable and right.

But we must not multiply illustrations. The above will probably make our meaning clear. The way to avoid carrying the disagreeable habits of the school-room into social intercourse is to bring the cheery tone, the kindly manners, and all the pleasant amenities of social intercourse into the schoolroom. This can be done. It is being done with the happiest effect by many-we hope by many readers of this Journal. We congratulate those who know how to do it. They are sure to be both useful and happy in their work. But the knitted eyebrows, the scowling faces, the martyr-like tones and sighs, are also still too common. They mark the feeble, the irritable, the unhappy teacher. We pity those who carry those marks, from the bottom of our heart, but we pity the poor victims,

Special.

ELEMENTARY CHEMISTRY.

CHAPTER III.-Continued.

Calcium Bicarbonate.

Exp. 6,-Continue to pass earbon dioxide through the liquid in the test-tube; the turbidity disappears. The calcium carbonate combines with a molecule of carbonic acid, forming . calcium bicarbonate, which is soluble in water : thus :-

CaCO₃₅ H₂CO₈ H2Ca(CO3)2 4 Calcium carbonate. Carbonic a id. Calcium bicarbonate.

Calcium Incarbonate, like Carbonic Acid, has never vet been isoluted.

Exp. 7.-Boil the clear liquid in the test-tube, and turbidity again makes its appearance. The calcium bicarbonate is decomposed into the insoluble carbonate, carbon dioxide and water being formed ; thus :--

CaCO3 H₂Ca(CO₃)₂ -+ H_2O CO., حد Calcium bicarbonate. Calcium carbonate. Water. Carbon dioxide.

This experiment explains the origin of the incrustation which is deposited inside kettles and steam-boilers. The calcium bicarbonate is decomposed as above, leaving the insoluble carbonate on the bottom and sides of the vessel. It may be removed from kettles by pouring in a little dilute hydrochloric acid, and may be prevented from forming in boilers by adding ammonium chloride :---

CaCo₃ $+ 2NH_{4}1 =$ CaCl₂ + (EN_)2CO3 Calcium carbonate. Ammonium chloride, Calcium chloride. Ammonium carbonate

The ammonium carbonate volatilizes with the steam, and the very soluble calcium chloride remains in the boiler.

Supports Combustion of Substances that have a strong affinity for Oxygen.

Exp. 8.-Attach a piece of magnesium ribbon to the cap of the deflagrating spoon, so that its extremity may reach nearly to the bottom of a large bottle of carbon dioxide. Hold the ribbon in the flame of the spirit-lamp till it begins to burn, and then plunge it slowly into the gas; it wil- continue to burn brilliantly, forming white flakes of magnesium oxide, interspersed with black particles which consist of carbon. The magnesium combines with the oxygen to form magnesium oxide, setting the carbon free :---

ĊO 2Mg =2MgOC + Carbon dioxide. Magnesium, Magnesium oxide. Carbon,

Pour a little water into the bottle, and add a small quantity of hydrochloric acid, pour into a test-tube and heat. The mag nesium oxide will disappear, while black flakes of carbon will remain floating undissolved in the clear liquid. These may be collected on a filter and shown to be carbon. This experiment proves that carbon dioxide contains carbon.

Decomposition of Carbon Dioxide by Plants in Sun-light.

Exp. 9.-Fill a large tumbler with water, saturated with carbon dioxide. Fill a glass funnel with fresh green leaves

4

fully displacing all the air adhering to the leaves by agitation, and close the neck of the funnel by a cork well saturated with parafine. Pour off a portion of the water from the tumbler, and place it in direct sunlight. Soon minute bubbles will gather in the leaves and rise into the neck of the funnel. Two or three days in spring or summer, and four or five days in winter will be required. When a sufficient quantity of gas has accumulated, bring the water outside the neck to a level with that inside, remove the cork and insert a glowing splint into the gas ; the splint will be rekindled, showing the gas to be oxygen. The probable reaction is --

 $12CO_2 + 11H_2O = C_{12}H_{22}O_{11} + 12O_2$ Carbon dioxide. Water. Sugar. Oxygen,

This experiment is of great importance as it explains the natural production of oxygen from carbon dioxide and water. The plant leaf is the laboratory in which is constructed the material of which the plant consists, such as woody fibre, sugar, starch, gums, etc. All these consist essentially of carbon and water, and they differ from each other only by a certain number of molecules of water ; thus :---

| C ₁₂ H ₂₂ O ₁₁ Sugar. | . + | H ₂ O Water, | 12 | 2C ₆ H ₁₂ O ₆ ; Glucose or fruit sugar. |
|--|-----|----------------------------|----|---|
| C ₆ U ₁₂ O ₆ Fruit sucar | ' | H ₂ O Water. | 53 | C ₆ H ₁₀ O ₅ . Starch. |

Observe also that the volume of oxygen liberated is equal to the volume of carbon dioxide decomposed, so that the volume of the atmosphere remains constant.

OTHER METHODS OF OBTAINING CARBON DIOXIDE. By boiling or heating a solution of Sodium Bicarbonate.

Exp. 10 .- Dissolve a tea-spoonful of sodium bicarbonate in water in a test-tube, fitted with a cork and delivery-tube, and boil; carbon dioxide will be given off. The reaction is -

 CO_2 2NaHCO_a Na₂CO₄ H_0 + -Carbon dioxide Sodium bicarbonate. Sodium carbonate, Water.

9. By the action of Hydrochloric Acid on Sodium Bicarbonate.

Exp. 11.-Pour dilute hydrochloric acid on a tea-spoonful of sodium bicarbonate in a test-tube; carbon dioxide will be rapidly given off; thus:-

NaHCO₃ + HCI NaCl + H_2O + CO_7 -Sodium bicarbonate, Hydrochloric acld. Sodium chloride or common salt. Water. Carbon dioxide.

This reaction has been employed as a means of raising dough in the process of bread making. The escaping carbon dioxide putfs up the dough, common salt remaining in the bread. Hydrochloric acid is seldom found sufficiently pure for culinary purposes. Tartaric acid and cream of tartar, however, will answer the same purpose. Indeed, all the baking powders, and yeast powders, and the so-called self-raising flour, depend for their action on the mixture of sodium bicarbonate wich some organic acid or other substance that will liberate carbon dioxide from the sodium bicarbonate.

By Combustion.

Exp. 12 .- Hold a wide-mouthed bottle over the flame of a (mint is best). Place the funnel inverted in the tumbler, care spirit-lamp for a few moments. Invert the bottle, add a little lime-water, and shake it up; the milky deposit of calcium carbonate will indicate the presence of carbon dioxide. All our ordinary combustibles produce carbon dioxide in this way. The combustion of a bushel of charcoal produces 2500 gallons of the gas.

By Respiration.

Exp. 13.—Put a small quantity of lime-water in a test-tube and breathe through it by means of a glass tube. The limewater will become milky, showing the presence of carbon dioxide. In the same way blue lithius solution may be turned a wine-red color, which becomes blue again on boiling. A man emits by respiration about 1260 cubic inches, or 20.6 litres of carbon dioxide per hour. Two candles in burning will produce the same quantity.

(To be continued.)

ENTRANCE LITERATURE.

THE CLOUD.

Gage's Fourth Reader, Page 66.

Percy Bysshe Shelley, the eldest son of Sir Timothy Shelley, was born at Field Place, Sussex, August, 4th, 1792. Naturally shy and diffident, his early years were passed almost entirely with his sisters. At thirteen he was sent to Eton, where he suffered much from the oppression of his masters and the petty annoyances of the boys. The treatment which he received at this time seems to have influenced his later life, producing that hatred of all law, human and divine, which is so noticeable in his poetry and his character. In 1810, he entered the University College, and studied diligently, but at the end of the second year was expelled on account of a pamphlet which he published anonymously entitled "A Defence of Atheism." His "Queen Mab" was printed in 1812. His unfortunate marriage with Miss Westbrooke, daughter of a retired innkeeper, offended his father beyond forgiveness for the time, but in 1815 his father so far overlooked the past as to make him an allowance of £800 a year, on which he retired. He first met Lord Byron in Switzerland, where he went after his second marriage. On his return to England, he settled in Marlow, where he wrote the "Revolt of Islam." On account of bad health he again went abroad and wrote "Prometheus Unbound," in Italy. His last years were given to hard study and literary labor. He was accidentally drowned, near Leghorn in 1822, and his ashes, which were all that his family could obtain from the authorities, were deposited in the Protestant cemetery at Rome, near the remains of Keats.

He is said to have been gentle and affectionate in domestic life, and to have been capable of deep love and affection, although his first marriage resulted so unhappily. His favorite pastime was boating; on the shore of every lake, or stream, or sea near which he dwelt, he had a boat moored. He was

> "Lured by the love of the genii that move In the depths of the purple sea "

ultimately to an untimely death.

His writings, though marked with a certain kind of recklessiness, are in many respects unsurpassed in beauty and poetic fire by any modern poet, not excepting Byron.

Bring fresh showers.—Meaning of fresh here? Any other meanings? Are all showers brought from seas or streams?

Noonday dreams. - What is meant?

From my wings are shaken.—How? When ? Every one.—Distributive, in apposition with "buds." Mother's breast.—The earth.

Dances .- Does the earth dance around the sun ?

Green plains.—Hail storms are common even in the summer. I wield the flail, &c.—A beautiful, poetic combination of words, which when properly read is more expressive than when carefully

analyzed. This is true of much of Shelley's poetry.

Dissolve it. - Dissolve what ?

Laugh as I pass in thunder.—Beautifully expressed, but not easily explained. In thunder, adverbial to "laugh."

Mountains below. - Bolow , what ?

'Tis my pillow. --- What is ?

Sublime and on the towers.-Each adverbial to "sits."

My pilot.—In apposition with "lightning." In what sense is lightning a pilot? Is a lamp at the front of a carriage a pilot?

In a cavern—thunder.—Thunder often: sounds is though below the clouds and rolling along the ground.

Lured by the love of the genii.—A classical allusion to the belief that each lake, river, rill, &c., had its own genius or nymph.

The spirit he loves.-Spirit, lightning or electricity; he, the genius.

I all the while, &c.-Above the cloud it is fine, below is the shower.

The sanguine sunrise.—Sunrise on a misty or cloudy morning, when the sun gives the clouds a red tinge.

Rack.—The drift of the sky; thin, broken clouds. Give other meaning. What is the difference in meaning between rack and reck?

Morning star shines dead.—What planet is called the morning star?" Why? Why is it said to "shine dead "?

In the light of its golden wings.—Whose wings ? Why golden ? Peep behind her and peer.—Her, what is meant ? Distinguish between peep and peer.

"Golden bees"—"Wind-built tent."—"Strips of the shy"— "Moon and these." Write notes on each of these phrases.

Burning zoze-girdle of pearl .- Explain.

The fourth stanza is a beautiful description of a clear night with only a few fleece-like clouds through which the moon can be cleary seen. The fifth is a grand description of a storm.

Sunbeam proof.—So dense that the sun's ray. cannot penetrate it.

Its columns. --- Why use its?

Triumphal arch.--The rainbow which is commonly seen immediately after a storm:

Powers of the air are chained.—When a Roman General returned from conquest he passed under the triumphal arch with his captives chained to his war-coach or car. The cloud is here represented as carrying captive all the powers of the air under the great arch that spans the heavens.

Million-colored. - Is this correct?

Laughing below.—The cloud is said to laugh in thunder. How does the curth laugh ?

Daughter of earth and water. - In what sense ?

Cannot die. - Force of die. Can it be said to be cloud when passing through the pores of the earth?

Pavilion of heaven. - Explain.

Build.-The subject of build ?

Upbuild.-Explain the cause of the formation of a cloud.

This. is a beautiful poem but rather difficult; for a fourth-book class. It will; not be lost time, however, to read the poem darefully and with as much expression as possible. No poet is more happy in the choice of words nor in the manner of combining them than is Shelley. The pupils might write notes on such expressions as, "thirsting flowers," "sweet buds," "skycy bowers," "lured by the love," "heaven's blue smile," "meteor eyes," "morning star," "ardors of rest and love," "swarm of golden bees," "sphere-fire," "cenotaph," "caverns of rain."

Short lectures must be given by the teacher on such topics as ovaporative, electricity, cause of lightning, cause of thunder, the appearance of the sky in fine weather, in a storm, the colors of the rainbow, etc., etc.

THE PRACTICAL.*

A remark made in my hearing the other day suggested the sub ject of this short paper. It was that not enough of the practical was discussed at the meetings of the Convention. I did not agree with the remark. I, for one have looked forward every year to the meetings of the Convention with pleasurable anticipation. I have gone back to my work in school feeling that the meetings have done me good, that every year something has been said that was a real help to me in my work, and I am sure that there are many teachers who feel as I do. There are a great many people who believe that children should be taught nothing in school but what will help them to get on in the world. They want to see direct results. They would like, if possible, to see a money return for the time their children spend in school. How often one hears it said, "of what use will this or that study be to my child? In a few years he will have to earn his living, and I want him taught what will enable him to do that." They regard the education of their children as a means to obtain the great end of advancement in their worldly business. It never seems to occur to them that there is anything else in the world worth striving after but the making of a comfortable living. They forget, or rather they never think, that a good education, no matter what your station or occupation in life is, is your own great reward. Teachers, too, in this practical age are apt to be infected with the same spirit. They sometimes, in spite of their own better judgment, keep grinding away continually at what they think will count up best at their day of reckoning-examination day. There are many by-paths diverging from the hard beaten highway of school work that they know would be both pleasant and profitable to explore; but they are restrained from doing so by the practical consideration-+ all it pay. On the one hand we see the mischievous tendency of this ultra practical doctrine by the suspicious eye that people cast on all that they think is not of direct and immediate utility, and on the other it is calculated to be equally hurtful in the school-room by the narrowing influence it has upon the teacher. What after all-of all the things we have learned in school, particularly in our early school days, has been of the most practical use to us? In looking back a few things stand out distinctly in my memory. I have forgotten entirely how I learned my letters, or how I acquired the difficult rules of addition, subtraction, and multiplication; but I ".member with feelings of pleasure to this day, a beloved teacher telling a class, of which I was a member, the thrilling story of " Little Red Riding Hood," and singing to us the very unpractical song of "Froggie Would a Wooing Go." And once at a later stage I remember a venerable old gentleman coming into our school and examining a class of bare-foot boys and girls in arithmetic. What the exercises were I forget ; whether they were hard or easy I forget ; but, oh, I distinctly remember that old man's smile, his kindly touch, and his gentle, oncoaraging words. Such things may be very impracticable, but I did not think so then, and I can't say that I have changed my mind since.

Every teacher must have noticed that it is easier to teach some children than others. Not so much from a difference in their natural ability, as that some do not seem to know how to think. The difference lies in the education the children get out of school, there are many people who look upon home as merely a place to get their meals and sleep. I am not now referring to those people who, in the hard struggle for existence, must of necessity leave their children pretty much to themselves ; but to the ultra practical people who look upon cheerful conversation, amusing books and games, as hindrances to the grand object of their life-monoy making. Of course children from such homes as these will be dull and unimaginative. The teacher has to exercise all his ingenuity to rouse their sleeping intelligences. On the other hand, those people who cultivate the graceful, the beautiful, and all such practical things in their homes, will send to the schools children who can be approached on many sides. The books, the cheerful, intelligent conversation which the children have access to and take part in, are educating the children in the best and most practical way for the business of life, in which they will soon have to engage. I think that the schools should make up to those who do not enjoy those advantages, what they miss at home. In the more advanced classes I am sure it would be much more profitable for the students, instead of learning in their English Literature class at what period such an author lived, and a list of what books he wrote, and perhaps some reviews of those books, for them to spend the time in reading one or more of the works of that author. As things are now, such a course might not count quite as well at an examination, but the difference to the student would more than compensate. Those people who learn and remember a collection of words about books put one in mind of the botanist who can give you the Latin name for every flower and plant-who can classify them allbut who never wandered about in the fresh. green woods, and who never experienced the delight in culling a boquet of flowers. I would give more for the person's knowledge of English literature who laughed over the adventures of Mr. Pickwick and cried over the sorrows of little Nell, than I would for one who could give you day and date for all the authors who ever lived. What can be more enjoyable and more sociable than conversation; but how few people there are, even among those who call themselves well educated, who can talk well on any subject. We need very much to have our hearts enlarged and our sympathies broadened. Anything that helps to do this is practical in the best sense. Can we not begin the work in the school-room ? I am really anxious to know. I any very sure that many people are carrying this question of the practical, as they understand it, too far. I hope that some of the teachers here will talk a little on the subject, and give us the benefit of their ideas.

MADAGASCAR.

Madagascar consists of a central plateau or highland rising from 4,000 feet to 5,000 feet above the lowlands of the coast, and from this plateau rise occasional volcanic cones, the highest, Ankaratra, being 3,950 feet above the sea. These volcanoes extend from the northern extremity of the island to the 20th parallel of south latitude. South of this appear gravite rocks, at least as far as 22° south latitude. At higher latitudes than this the rocks of the interior are practically unknown to Europeaus. According to a recent paper by Mr. F. W. Rudler, F.G.S., sev ral crater lakes and mineral springs abound; and to the north of the volcanic district of Ankaratra there is a treet of country containing silver, lead, zinc, and copper ores. As regards building stones, besides the granuto which is so general, there are vast beds of sandstone and slate between the district of Ankaratra and the fossils, according to M. Grandidier, the recent French traveller in the interior, are preferable to the Jurassic system, and comprise remains of hippoputami, gigantic tortoises, and an extinct bird of the ostrich species. The coasts of the country are rich in timber, and it would also appear that the interior is a good minoral field.

^{*}A paper read by Miss Eliza Lawson, at the Convention of the Prince Edward Island Teachers' Association, last Ocu ber.

Practical Methods.

INOTE.-We have opened this department for the discussion of best methods of teaching subjects that present difficulty in teaching, especially by young teachers. We desire to obtain the experience of teachers who may have found successful plans and are willing to impart them to others.-ED. C. S. JUURNAL.)

HOW TO TEACH OUTLINES OF ENGLISH HISTORY TO PREPARE FOR ENTRANCE EXAMINATION.

Before assigning a lesson, I talk it over in an interesting conversational manner to my class, frequently emphasizing and repeating the most prominent parts. I then give them notes, previously prepared, on what I have been relating, and require them to copy these notes neatly and prepare them for next lesson.

At the next lesson, I question them on these notes carefully, selecting those to answer whom I suspect to be a little dilatory. then talk over another lesson and proceed in same way.

If my time is limited and I am not able to write the notes on the black board myself, I request a pupil to do so, and require the rest to copy them. I give the pupil, who writes for me, special time to copy for himself.

Occasionally, instead of questioning my class, I put them in different parts of the room, write two or three of the leading questions on the board, and require pupils to write the answers, which I correct at my leisure and show them their mistakes.

In reciting answers, I take particular pains that my pupils give their answers in a complete sentence with good language.

I supplement this method with frequent written examinations, and take care that the pupils keep a record of all questions they miss, or fail to answer fully. When a review is at hand, or an entrance examination, I require them to look at their list in particular, and learn their weak points.

My experience has been that it is objectionable to assign a lesson in the text-book before talking it over, for its language is beyond the age of most Fourth Book pupils, and they will try to commit the lesson to memory, thus acquiring a collection of words without realizing the facts

An interesting conversation makes my pupils feel I have their interest at heart, and they will do their best to please me. Besides, they will retain much of the lesson I have taught, and can learn the rest with much ease and satisfaction. FELIX.

Cherrywood, Dec. 4th, 1885.

My method of preparing English History in Outline with the Entrance Class is as follows :- I have skeletonized the leading events in the history from commencement, and use these notes as a frame-work on which to build. I notice that certain causes produced certain effects, and from any one particular cause I trace out how influences proceeded, and that some of these may have created monarchs who ruled at the time, and then bring in the leading moving the most objectionable features. statesmen, discoverers, literary men and others whose names are prominent in connection with that reign, and thus clothe the dry bones with attractive covering. I give frequent composition exercises with these causes as a subject and require the pupils to trace out the several effects resulting from them. With this view I desire the scholars to read a certain portion of the History at home, to give them habits of study, and then, in class, we talk it over, on the plan mentioned, outlining on the black-board the principal features. This may be called the topical plan, but whatever the name may be, I find it fac more pleasant and easily kept in memory than a catechetical examination on the text of the book. SYLVA.

I treat history outlines in the same manner as 1 would build a fence, namely, (1) Dig out holes at certain distances, that is, prepare by laying out the ground-work of the subject. (2) Put in the posts, as these are required to nail the boards on, or the facts on which the details depend. (3) Ornament the boards and paint them, which means adding any attractive narrative that would tend to make the matter pleasing to the scholar. T. M.

My plan is to take the first two letters off the word, and thus make "History," "Story." My history lesson is looked for with pleasure and I have no difficulty in fixing the several facts in the JENNIE MCL. minds of my pupils.

I would make my history lesson something more than mere facts and details. From the study of leading characters, as topics, I would gather around each a scene, as on the stage, and in that way picture the principal events in the pupils' minds. The influences of these personages on society, laws, manners, and customs; in literature, art, and science, morality and religion is, to my mind, the best and most practical history that a child could learn .- such as would be of service to him in his subsequent life.

PRACTICAL TEACHER.

For January 7th next we will take up the subject about which our friend from Whitevale writes in the following letter. He gives his plan but he, and we also, would like to hear from others. We thank those who have kindly sent replies to our last question. Remember, "The best plan for marking writing lessons," for JOURNAL of January 7th, 1886.

Editor of SCHOOL JOURNAL :

DEAR SIR,-As you have invited your ronders to present their difficulties in teaching, I desire to learn through your columns, the various ways, adopted by experienced teachers, of marking writing lessons. I have a plan of my own, but desire to improve it.

I have tried several ways, but of late have been using the following which has given very good results :- Supposing the pupil writes ten lines. In each line, I count the errors of spacing, height, imitation of copy, and tidiness. At the end of the lesson at the lefthand margin, I mark in fractional form the denominator indicating the number of lines written, and the numerator the number of errors-thus, 12 would mean, twelve errors, and ten lines written. I transfer these fractions to a class book. In the monthly report the sum of the Nr's and Dr's will be a true statement of the amount of work done, and the care taken in doing it. A percentage can be struck from these totals.

The reason 1 adopted this method is that I find among business men the desire is for penmanship regular, plain, and free from flourishes, and neat. However difficult it may be for a pupil to acquire an artistic style, it is within his power to learn to write regular and neatly. Using this method as a lever to stir up my other causes and other influences. I connect these facts with the pupil's pride, and ambition to excel, I find little difficulty in re-

It may be a little cumbersome.

I hope some of the experienced teachers will give us their methods.

Thanking you for the space, I am, yours very respectfully, Whitevale, Dec. 10, 1885.

No terrestrial quadruped inhabits the land within the Antarctic Circle, and whales and seals are the only mammals that enter its area. Summer in the Arctic regions, with its abundant life on the earth and in the air and sea, presents an animated and cheerful scene, compared with the utter desolation that reigns suprome in Antarctic waters.

Examination Papers.

EDUCATION DEPARTMENT, ONTARIO.-JULY EXAMINATIONS, 1885.

THIRD CLASS.

ALGEBRA.

Examiner-J. C. Glashan,

- 1. Simplify $a^{2}+b^{2}+c^{2}-(a-b+c)(a+b-c)-(b-c+a)(b+c-a)$ $\begin{array}{l} -(c-a+b)(c+a-b),\\ \text{2. Divide} \quad a^4+b^4+c^4-2b^2c^2-2a^2c^2-2a^2b^2 \text{ by } a^2+b^2-c^2+2ab, \end{array}$
- 3. Multiply
- $x^{n-8}-x^{n-6}+x^{3}-1$ by $x^{3}+1$.
- 4. Find the factors of $a^2 - b^2 + c^2 - d^2 + 2ac - 2bd.$
- 5. Find the factors of
- $(a+b)^2 (b-c)^2 + (c+a)^2$

6. Simplify

$$\frac{\frac{1}{x} - \frac{2}{x+c} + \frac{1}{x+2c}}{\frac{1}{x} - \frac{3}{x+c} + \frac{3}{x+2c} - \frac{1}{x+3c}}, x \neq \mathbb{S}e$$

- 7. Find the value of x that will satisfy the equation m(x-m)+n(x-n)=2mn.
- 8. Determine x given

$$4\left\{(x-a)(x-b)-(x-c)(x-d)\right\} = (a-c)^2 - (b-c)^2$$

e simultaneous equations

9. Solve the

$$\frac{1}{x} + \frac{2}{y} = 8,$$
$$x + 2y = xy.$$

10. A drover bought 12 oxen and 20 sheep for \$1340; he afterwards bought 10 oven and 26 sheep for an equal sum, paying \$8 each more for the oven and \$3 each more for the sheep. What was the price per ox and what the price per sheep of the first lot ?

GEOGRAPHY.

Examiner-Jas. F. White.

1. Fully explain these terms-tropic, meridian, solstice, monsoons, mean time, insular climate, longitude, inclination of the earth's axis.

2. Draw a map of South America, marking thereon the six prin- case : cipal cities, the three chief mountain chains, and the course of the four most important rivers.

3. Name the railroads entering Toronto and Ottawa respectively; tell about each the direction in which it runs, the important places in Ontario that it passes through, and its termini.

4. Describe a voyage from Montreal to New Orleans calling at six important places on the way.

5. Where are the following places and for what is each noted :-Odessa, Bermuda, Bordeaux, Archangel, Mauritius, Oporto, Honduras?

6. Describe one of these countries, France, China, Brazil, Arabia, under the following heads :-

- (a) Boundaries and physical features.
- (b) Animals and plants
- (c) Manufactures and commercial centres,
- (d) Civilization and government.

ENGLISH GRAMMAR.

Examine.-John Seath, B.A.

1. Describe, in your own words, the function of the adjective, explaining clearly the meaning of the terms "describing," "quali-fying" and "limiting", and applying your description to the adjectives in the following :- the man, five boys, good men, His kind father is dead.

2. Explain in your own words the terms "Government" and "Agreement" and illustrate by reference to all the governing and agreeing words in the following :-

If need be, thou shalt see thy master's efforts to win these laurels.

4

3. Rewrite the following statements, making such corrections as you consider necessary, and assigning your reasons therefor :---' (a) Whon a superlative is used, the class between which the

- comparison is made and which is introduced by of should always include the thing compared : as, "Bismarck is the greatest of German statesman," or "Bismarck is the greatest German statesman."
- (b) The sign to should not be used for a full infinitive unless the verb in the same form can be supplied from the pre-coding part of the sentence: a, "you never we're m3: you ought to" is wrong, since it is incorrect to say "you ought to wrote."
- (c) The perfect infinitive is used when the act spoken of is regarded as completed before the time expressed by the governing verb : as, "I hope I to have gone before the meeting.
- 4. Distinguish the meanings of :

 - (a) If he go, I shall go and If he goes, I go. (b) I think so, I do think so, I am thinking so and I should think so.

 - (c) He shall go, He will go, and He is about to go.
 (d) I knew that he speaks the truth and I knew that he spoke the truth.
 - (e) Who did it ? and Which did it ?

5. Classify and give the syntax of the italicised words in the following

- (a) He is a fool to sit alone.
 (b) Much to my surprise he forgave them their fault.
 (c) He is too old to play the fool.
- (d) My dream last night came true.
- The daughter of a hundred earls, You are not one to be desired. (e)

6. Classify the propositions in the following, giving their rela tion :--

Because half a dozen grasshoppers under a fern make the fieldring with their importunate chink. while thousands of great cattle reposing beneath the shadow of the British oak, chew the cud and are silent, pray do not imagine that those who make the noise are the only inhabitants of the field—that, of course, they are many in number-or that, after all, they are other than the little, shrivelled, meagre, hopping-though loud and troublesome-insects of the hour

- 7. (a) Translate into a phrase each of the following :--sheep-dog, wood-work, railway, steamboat.
- (b) Translate into a compound each of the following :---as dark as coul, that can keep in water, surrounded by the sea, tearing asunder the heart.

8. Correct any errors in the following, giving your reason in each

- (a) These pronouns are indeclinable and used in the singular only.
- (b) He looks like his mother does, but he talks like his father.
- He was afraid he would be burned.
- (d) The references will be found useful to the junior student and enable him to obtain an insight into the subject. (e) A second division of lands followed and the poet was not
- only deprived of his estate ; but barely escaped with his life when fleeing from the onset of his enemies.
- (f) Trusting that you will remember us, and write as often as you can spare time, and with best love (in which we all heartily join) remember me as ever, &c. (g) There are many boys whose fathers and mothers died when
- they were infants.
- (h) Shall you be able to sell them boots ?
- (i) Of all my rash adventures past, This frantic feat must prove the last.
- **(***i***)** Nor frequent does the bright oar break The darkening mirror of the lake, Until the rocky isle they reach, And moor their shallop on the beach.

The highest plateau in the world, some 13,000 feet above the sea level, is that of Northern Thibet. Its lakes are frozen over until nearly June, though they are six hundred miles nearer the equator than we are.

Practical.

DRAWING.

BY WILLIAM BURNS, DRAWING MASTER, HIGH SCHOOL, BRAMPTON.

(The Ellior of this Department will be glad to answer questions for information addressed to him in care of the School Journal.)

x.

1. Draw a square of 3 inches sides, divide this into 16 equal squares by lines parallel to sides. Form this into picture of a window by doubling the outer square and the two inner diameters.

Let the pupil make the square by first drawing two lines at right angles and of 3 inches in length, bisecting each other, then through extremities of these draw the sides of the square required.

2. Draw an equilateral triangle of 1 in. side. On upper side of the base erect a hexagon, and on the lower side an octagon.

3. Draw a parallelogram 4 in, by 6 in. Divide it into three equal parts by parallel lines. In the inner section place "star-crosses" covering the space, and in the outer hexagons also covering the spaces.

4. i. Describe a circle of 11 in. diameter.

ii. Describe an ellipse whose axes are $2\frac{1}{2}$ in. and $1\frac{1}{2}$ in. respectively.

iii. Form an oval from these two figures.

8. Draw a square of 3 in. side. Bisect each side, and on each of the half sides describe semicircles, alternately within and without the square. Join the corners of the square by the diagonals, then within it draw a concentric square of $\frac{3}{4}$ in. side, and within this another joining centre points of the sides.

6. Draw a vase 4 in. in height. Make the top 1 in. in height, and the base 1 inch. Take extreme width 21 inches. Join top and base by appropriate curves.

7. (i.) Draw a cubical block of 2 in. side so as to show the top and left side of the block.

(ii.) Represent same block above the level of the spectator's eye.

(iii.) Draw a cubical box (without a lid) showing the thickness of the material. About half the inside to be visible, and box situated to left of the spectator.

To draw these objects properly the pupil should have them explained first from the solid object placed before the class.

8. Give pictures of a cylinder whose height is 3 in. and diameter 2 in.

(i.) The top visible-object standing on one end.

(ii.) The cylinder lying in a horizontal position, the right end being visible.

9. Draw a cone of 2 in. diameter at base and height 2 inches.

(i). When below the level of the eye.

(ii.) When above the level of the eye.

10. Draw a sphere—stating why its position will make no alteration in the outline of the picture.

The same remark will apply to these figures, they can only be drawn intelligently by pupils who have observed the outline of the real objects; after having shown them to the class, and mentioned their peculiarities of outline, there will be no difficulty found in the drawing.

XI.

1. Explain the following terms :- Diagonal, diameter, right oblique diagonal-as applied to a square-; ellipse, axes of an ellipse, oval, pentagon, octagon, prism, pyramid, cone, cylinder.

Illustrate each definition by a drawing.

Be sure that these definitions are not mere verbal ones, then take several other common definitions as an additional exercise such as those relating to the circle.

2. Make a hexagon of 2 inches side, and within it place a sixpointed star.

This is best done by first drawing the hexagon by means of an equilatoral triangle then joining every alternate angular point of the hexagon, when the intersections of these points will give the inner points of the star required. Strengthen the lines, which join the points found, with angular points of the hexagon, and a star is produced. Strengthen also outline of hexagon itself.

3. Give working drawings of a box, without lid, 3 ft. x 2 ft. x $1\frac{1}{2}$ ft. thickness of wood $1\frac{1}{2}$ inches. Scale $\frac{1}{12}$.

Explain fully, meaning of a working drawing. Draw first the plan, then the front elevation, using same length and thickness as in plan, next give the end elevation, showing how measurements are obtained from the other two already found.

4. Cover a space 5 in. by 3 in. with triangles, alternately filled and empty.

Draw an equilateral triangle of 3 in. perpendicular height, bisect itssides, and through points thus found draw lines parallel to sides of first triangle. The ornament within may be of any symmetrical form.

5. Draw a square of 1 inch side. On each side of this square draw another square. Fill the four outer squares with interlacing curves.

Take care in this that the perpendicular heights of the curves are equal, otherwise the figure will be very unsymmetrical. See Paper VII.

6. Draw two concentric equil. triangles whose sides are 2 inches, and width of sides $\frac{1}{2}$ of an inch. Let them be drawn so that the vertex of one is $\frac{1}{2}$ inch above the base of the other. Interlace these triangles, and form them into a rosette by placing a circular strip of equal width around them.

7. Draw an ellipse whose axes are respectively 4 inches and $2\frac{1}{2}$ inches.

(a) by means of foci, pins, and string.

(b) by means of surrounding parallelogram.

These two plans have been fully explained in our paper No. VI. 8. Draw pattern moulding ; width of moulding 2 inches, length 5 inches, width of T lines $\frac{1}{2}$ inch and length of upright of T $1\frac{1}{2}$ inch.

Let these be drawn alternately so as to slightly overlap one an other.

9. Draw from memory a box with lid half-opened, dimensions 1¹/₂ ft., 1 ft., 1 ft. Scale ¹/₂th.

Be careful that the pupil represents the open space between the box itself and the hinge when in this position, and also only the lines visible in the thickness of the lid, &c. It will be best to show the class a practical illustration before drawing this objectr

10. Draw cylinder lying on its side, given length 4 m., diamete of end 2½ in., position to right of spectator. Place it on a solid block 5 m. x 3 in. x 2 inches.

Note that only visible portions are shown in this answer.

11. Draw outline of common egg-cup. Take special care of the drawing of lines showing union of stem and base as mentioned in our paper No. VIII.

12. Draw outline of conventionalized ivy-leaf. Height 4 inches, extreme width 2½ inches.

DICTATION EXERCISES.

Dictation exercises may be made very profitable, but many teachers have no work of this kind in their schools. The writer has used them to cultivate memory and attention; to improve the spelling; and as an exercise in capitalization, punctuation, etc. He has employed the oral and the written method with different

ends in view. Noticing that his grown pupils could not grasp and no understanding of his purposes, nor will to executo them if he retain a dictated sentence, long enough to write it upon their had. slates; and that pupils who were copying from the blackboard, copied one word and then looked up for the next, instead of read-lignorance or the public respecting the true character of school ing a clause and holding it in the mind until all the words of the work. And teachers are in part responsible. The community is clause or sentence, were written, he adopted this plan as a means in sore need of education. Every proper agency should be used to of overcoming the difficulty.

clause was read or dictated, in natural but distinct tones. The migratory character, and have an abiding place among the sons pupil standing at the head of the class then repeated the words ex-| of men. The millennium may usher in the realization of his actly as read. If he tailed, the pupil next in order attempted to dream, but to predict an earlier date, from present indications, pronounce the sentence, and if successful in doing so, he went would be to hazard one's reputation as a prophet.-Illinois School above the one who missed, just as in spelling for the head. Each sentence was dictated but once. Sentence after sentence was given to the class, and every pupil tested. The exercise was made a daily one, and continued during the term. Before the end of the that it has been abundantly shown that from ten to fifteen minutes term, the dullest pupils could remember and repeat long sentences, judiciously devoted to music each day will enable our pupils to with astonishing accuracy I found it a wonderful help in copying acquire during school life the ability to read music at sight as inwork from the board, and in taking notes of lessons, lectures, etc. | telligently as they read an English author It has also been shown Every pupil learned to put his mind on his work and to hold it that music has a disciplinary value equal to that of any branch there. To vary the exercise, the entire class have written sentence taught in our common schools. It remains then for teachers to after sentence as dictated ; then each pupil was called on in turn, to read from his slate, or paper, to spell, indicate punctuation marks and capitals as written. If he failed in any particular, some one below him had a chance to correct and go up. By varying the mode of conducting the exercise, the interest will be kept up .-C., in School Education.

It is a fact that many teachers think of nothing educational out side their text-books. If the catalogue of teachers who take no respectable educational paper should be published, it would astonish the world. -N. Y. School Journal.

The teacher is, indeed, a bird of passage. To ascertaln something of the extent of his migrations, statistics from twenty counties of the state were examined. These counties were selected at random, but subsequent investigations demonstrated the fact that the average number of the changes in them was much less than in the other counties of the state.

In these counties there are one hundred and seventy-seven g.aded schools, and, consequently, one hundred and seventy-set on princi. pals employed. Of these, eighty-six, or about fifty per cent. changed .noir locations this year.

Without making detailed examination, the conclusion is that the average for the one hundred and two counties is not far from sixty per cent. I acre is no evidence that this change is exceptional.

There is no escaping the fact that the teacher who remains in one place for more than three years, is a "star" man. It should be borne in mind that these positions are fairly remunerative, and that they are occupied, generally, by men or women of more than average ability as teachers.

The showing is not encouraging. It is quite otherwise. What ever gain we are making in educational methods, is largely neutralized by this constant change from place to place. To put a system vincial Model Schoel, at a salary of \$550 per annum. -Free Press. of schools into fair shape, takes more than a single year. The pro i will after the lst of January next, be charged a fee of \$6 per year, cess of education is a slow one. A principal whose plans have not while those outside of the town will be taxed \$2.-St. Thomas w.der sweep than a brief eight months, cannot have a comprehensive | Times. view of his position.

We do not believe that the average principal is so short-sighted yet so soon as he is fairly started in the development of any wo thy | Curlette, the Bard granted \$100. On motion of Me Hall, it was projects, he hears the inevitable command to "more on, and he resolved to make an effort, to raise by subscription an additional drops the half perfected work, to be succeeded by another with \$100 .- Narance Standard.

What a foolish, extravagant, absurd policy ! It comes from the instruct school officers and patrons in such matters. It is the dream Arranging the class as for oral spelling, a very short sentence, or of the schoolmaster taut the time is coming when he shall lose his Journal.

> Prof. H. E. Holt, teacher of music in the Boston schools, says say whether their pupils shall have the mestimable advantages of a musical education.

Educational Aotes and Acws.

Miss Merva Green, of Chatham, has resigned.

Mr. James McKay, of Lakesido Schools is re-engaged.

Mr. C. Hugill is re-engaged in Folden's School, Oxford.

Miss Kate McDougall is ougaged in the Amherstburg Schools.

The Kindergarten system is introduced into the Dundas Schools. Mr. W. H. Harlton, of the Renfrew Model School, is engaged at 8650.

Mr. C. B. Edwards has been re-engaged in No. 7, London Township, for 1.366, at a salary of \$525.

Miss Jamieson and Miss Jennie Hume succeeded Misses Brogden and Lavm in the Galt Public Schools.

Mr. McF trlane of Kirkland, has been engaged to teach in Lorneville Public School for the ensuing year.

Mr. Solomon Jeffrey has been re-engaged to teach Kinsale School another year at an advance of salary.

The Stratford Model School students publish a paper under the euphonious name of Model School Tattler.

Mr. Thos. Scott, head master of Lucan school, has sent in his resignation, the reason assigned being ill-health.

The trustees have engaged Miss Beatrice Broad as teacher for the junior department of the Little Britain public school for the ensuing year.

The Lindsay Board of Education has issued a circular approving of an annual convention of High and Public School trustees for the Province of Ontario.

Mr. W. T. Evans, late assistant teacher in the Waterdown High School, has secured the position of mathematical master of the Sarnia High School, at a salary of \$900.

Miss Maggie Thomson, of the Telfer school, London township, has been appointed to an important situation in the Ottawa Pro-

The town pupils attending the St. Mary's Collegiate Institute

Mr. Fessenden asked the Napaneo School Board, for a grant of money for the purchase of a reference library and laboratory for the High School, and on motion of Mr. McCay, seconded by Mr

The staff of teachers for the Learnington Public School for 1886 Brown has been retained in his position, as the matter was settled is now complete. Mr. Smith, Miss McMullen, and Miss Johnson have been re-engaged. Miss McCallum and Miss Bowes have re-signed, and to fill their places Miss Mary Wind-or and Miss Bertha Chamberlain, both of the village, have been engaged.

In Norway, a lady has a seat on the Royal Commission to inquire into the condition of schools. This is the first time a lady has served on this Commission. And at the fifth Norwegian school meeting, which was held last August, ladies were admitted as equal co workers with the men.

The new south ward school building, Fenelon Falls, is completed. It is a two-story stone building and the handsomest school-house in the county. A regular stampene takes place at Christmus among the school teachers. All are leaving but Miss McDiarmid. The headmaster is going into mercantile business, some into other schools, and some, they say, into matrimony .- Victoria Warder.

School matters are looking up in Muskeka district. Bracebridge has the finest public school building in the county; an excellent model school. The public school has five departments. Macaulay hes a township board and seven schools. Huntsville has an ex-cellent school with two departments. Baysville has a large school, a poor building, and but one teacher where they should have two.

W. E. Norton, principal of the Florence School, has been re-engaged for 1886. Both of the assistants have resigned and the engaged for 1886. Both of the assistants have resigned and the Board hus advertised for applications for the positions of second and third teachers. Owing to the changes in the school yard, the school hcuse and the employment of a third teacher, the school taxes are higher than they have been for some years past -Sarnia Observer.

Under section 96 of the Public Schools Act of 1885, it is provided that, in incorporated villages not divided into Wards, three of the Public School Trustees shall retire from office at the time appointed for the next annual school election, and the other three shall continue in odice one year longer and then retire. Under the Act, as formerly in force, only two of those now in office in villages would have retired.

A recent Canadian teachers' association discussed the Quincy Methods. One headmaster thought these methods would not be acceptable in public schools. "He did not believe in the idea that children can obtain their knowledge without knowing they are getting it. "There is a lot of tomfoolery in the Quincy Methods." Not improbable, and yet much that is good .- Ohio Educational Monthly.

We were shown a letter from Judge Jay H. Boulton, President of the State Board of Education, Colorado, in which he states that "the Tonic Sol-fa is sure to win in Public School work. It is growing in this State, and if not now, there is sure to be a call for more teachers." He goes on to say that they have been trying the Staff Notation for years without satisfactory results, and are determined to have the Tonic Sol-fa now.

The salaries of the whole staff of teachers in the County Model chool. Parkdale, have been increased for 1886. They are as fol-School, Parkdale, have been increased for 1886. They are as fol-lows -- Mr. J. A. Wismer, principal, \$1,000; Mr. R. W. Hicks, second master, \$750; Miss H. K. Currey, \$450; Miss E. R. Eudie, \$425; Miss M. Littlefield, \$400; Mr. F. Rolston, \$375; Miss S. Noble, \$350; Miss L. Currie, \$330; Miss L. Cook, \$330; Miss J. Worney, \$605; Miss L. Currie, \$330; Miss L. Cook, \$330; Miss M. Warren, \$325; and Miss A. Duff, \$325.

At the close of the Model Session, a grand concert was given, in the large concert-room of the Public School building, and the teach ers in training presented Mr. J. A. Wismer, principal, with a gold-headed cane as a token of respect and esteem.

The Farmersville High School Annual Circular is to had. Wm. Johnston, M.A., is head master ; G. W. Bruce, B.A., gold medalist in Moderns, is classical master , and Mr. Alex. Wherry, teacher of English and Mathematics. At the last examinations this school passed one first class C, one second class A, four B, and five third class. The tuition is free. The Public School is held in the build-ing formerly occupied by the High School. Mr. T. M. Porter is principal, and Misses M. Ross, and K. Kincaid are the assistants.

ments in that school. He did not claim that a pupil from his school obtained the highest H. S., Entrance marks given in the Province, but higher than that obtained by any other candidate in whatever who has ever proposed that religious education should be Lambton, Middlesex, and other surrounding counties. The record excluded from the national schools. I hope in the next Parliais an honorable one even still, and we are pleased to know that Mr. ment this measure will be carried.-School Guardian (Eng.)

by a majority vote of his School Board, on 15th ult.

Another proof that the Tonic Sol-fa process is a growth is the fact that, citer the training by that method is completed, the mysteries and difficulties of the staff are found to be interpreted and made plain. Tonic Sol-fa is, therefore, not only a complete such tem in itself, but it is a royal—that is to say, a natural—road to an understanding of the staff. Teachers who have tried it thoroughly, agree in saying, as one of them has expressed it : "It takes less time and labor to learn both Tonic Sol-fa and the staff, than to learn the staff alone. -T. F. Seward. in N. Y. School Journal

The following teachers have been engaged for the ensuing year:-Mr. D. McMillan, the popular teacher of Palestine public school, has been promoted to the principalship of Cambray public school, at a salary of \$425. This speaks volumes for Mr. McMillan as an instructor, as he has proved himself to be an efficient teacher. The trustees of S. S. No. 9, Maple Hill have secured the services of Miss Alice Birmingham, of Palestine, as their teacher for the coming year, at a salary of \$250. Mr. John Spence, of Glenarm, has been re-engaged at an advanced salary of \$310, as teacher of Union school section No. 2, Eldon. We are also pleased to hear that our friend Mr. Silas Smith has been re-engaged as teacher of S. S. No. 3, Eldon. We predict for him a bright future career .-Victoria Warder.

At the meeting of the Sanitary Association, held last week in Toronto, Mr. J. L. Hughes, Public School Inspector, made some remarks on health in the school-house, which were listened to with interest. Great attention was paid in the Toronto Schools, he said, to these matters affecting the health of the pupils. The said, to these matters affecting the health of the pupils. teachers endeavored to prevent, as far as possible, any pupil from leaning over his desk while studying, to prevent pupils from sit-ting in school with wet clothing, and gave great attention to the lighting and ventilation of the school-houses. He thought no one should be required to apply himself steadily to the same work sixty minutes every hour. In their schools they endeavored to give the pupils five minutes' recreation or a change of work, recess, or calisthenic exercise, every hour. This, they found, recreated ability and desire to work. The object of the School Board in this city was to attend to the health of pupils. An interesting discussion followed Mr. Hughes' remarks. Dr. Oldright pointed out the advantage of having desks and seats in schools that might be raised or lowered, the same as are used in schools in France. He thought the air space in Toronto schools was miserably small. The air space should be such as would obviate the necessity of ever keeping the windows of schools open. Mr. W. B. Hamilton said the ventilation in the Model School was very bad and in the Collegiate Institute it was very little botter.-Globe.

Mr. Chamberlain, in a speech at Evesham, England, said :---I want education to be as free as air. Now I think this question is of greater importance in the country than it is in the town. I will tell you why. The wages of the laborers in the country are less, and this tax is in greater proportion to their scanty income than it is in the case of the town artisans. It is a greater burden upon them ; they feel it more severely ; it involves a greater sacrifice of what are really the necessaries of life. If they want remission of this tax they have to seek it under circumstances involving greater humiliation and greater annoyance than others in the towns. There are very faw School Boards in the country, and I have heard of cases in which laborers or their wives had to tramp eight or ten miles to a board of guardians in order to ask for the remission of their fees. Our opponents say that free education would involve a charge upon the rates. They know perfectly well that we who have proposed free education make it a condition that no extraordinary charge shall be levied on the rates, and that the whole of the money which is required shall come, as it ought to come, from national resources. They say free education will destroy the voluntary schools. I believe that free education may be created to morrow and neither the existence nor the position of the volun-tary schools be affected in the slightest degree. Then they have said that free education involves the exclusion of religious teaching Mr. J. R. Brown, head master Forest Micdel School, wishes us from voluntary schools. It has nothing whatever to do with re-to correct an error that appeared in our recent noto on appoint- ligious education in the schools, and so far as I know-and I ought to know something about the subject, having been connected with it from the first-there is no politician in a position of any eminence

Literary Chit-Chat,

"Daisy Chains" is the title of a new work by the author of " The Wide, Wide World.

Lippincott's Magazine is henceforth to be issued under a new plan, which includes more popular attractions and a reduction in price.

F The Globe suggests that a prime cause of the failure of all attempts hitherto to establish a Canadian magazine has been that the ventures were not sufficiently Canadian in character, being rather feeble imitations of English periodicals than true home pro-It predicts success for a truly nativo magazine when it ductions. comes. Why not?

Rev. E. P. Roe's sister, who is said to have discarded literary abilities, is writing a novel.

"Dame Wiggins of Lee and Her Wonderful Cats" is the title of a volume of ancient nursery rhymes, which Miss Greenaway has illustrated, and to which Ruskin has added a number of original pieces.

M. Victor Drury, author of a well-known history of Rome, is now at work upon a similar history of Greece.

"The Ghost of a Dog" is the novel title of a Christmas story by a Canadian writer, J. A. Phillips, of Ottawa.

Kosmos, the organ of the Science Association of Victoria University, which has hitherto been published as a monthly is to be transformed into a quarterly.

Lieutenant Greeloy's book, "Three Years of Arctic Service," is to be published by the Scribners in January.

The second and concluding volume of Grant's memoirs is to be ready for the public not later than March 1st. The manuscript is now in the hands of the publishers.

Correspondence.

To the Editor of THE CANADA SCHOOL JOURNAL.

I wish to call attention to the frequently improper use of the For example, in the Educational Record of the word same. Province of Quebec, July-Aug. number, 1885, in the last line of page 182, it occurs in this sentence ; "and Rev Mr. Knight, a distinguished clergyman from Pennsylvania, who had been present on the same occasion last year." Now the "same" occasion last year was the Convocation of Bishop's College. I contend that the use of the word same in this sentence is incorrect ; the Convocation of 1884 could not be the same as that of 1885. "Similar" would have been correct and in accordance with the facts. Another improper use of it may be found in "Egypt and Syria," by Sir J. W. Dawson, F. R. S., in a sentence commencing in last line of page 185, as follows :- "I may add that a gentlemen whom I met at Jerusalem, and who has travelled much alone and unattended through the villages of the Fellaheen in Syria, bears the same testimony in favor of them." The "testimony " above referred to, is that of Sir J. W. Dawson, with regard to the general good conduct of the donkey-boys and water-girls of Egypt. Now "a gentleman," again, could not, or certainly did not, bear the same testimony with regard to the conduct of the people of one country, that Sir J. W. Dawson does to that of another. I am aware that I am attacking high authority in both these cases ; but if I do so successfully I need not look after more ordinary writers, whose name is legion, in the matter of the improper use of the word "same." Two persons, two silver dollars, or two sets of events may be very much alike, but they cannot, in any case, be the same. S. M. Cote St. Paul, Quebec, Dec. 5th, 1885.

arises, is much more effectual than the threatening of a greater punishment should the fault be renewed.

Literary Reviews.

THEORY AND PRACTICE OF TEACHINO, by David P. Page, A.M. New edition, edited and enlarged by W. H. Payne, Professor of the Science and Art of Feaching in the University of Michigan .- A. S. Barnes and Company, New York.

The author of this book was First Principal of the State Normal School, Albany, NY, and he wrote it nearly forty years ago, when the Science of Teaching was crude, compared with what it is to-day. Yet the ideas of this great master mind are so suggestive to educational thought that teachers of not only the present but of future generations will derive practical benefit from the study of them. "Theory" is a suspicious word, and the teacher who hears it is of opinion that it is a waste of time to devote attention to theoretical study, but in this case the author explains the use of the word in the title. He says :-" I have not been dealing in the speculative dreams of the closet, but in convictions derived from the schoolroom during some twenty years of active service as a teacher. Theory may justly mean the science distinguished from the art of teaching,-but as in practice these should never be divorced, so in the following chapters I have endeavored constantly to illustrate the one by the other."

The book is so well known that to dilate on its merits would be a " work of supererogation." In the hands of Prof. Payne it has become a universal educational work, as he has deleted all the local matter and made it a book that no teacher should be without if he desires to make his carcer a success. The binding and type are all that could be desired.

The International Magazine, Education, for November and December, published by the New England Publishing Company, 3 Somerset St., Boston, and devoted to the Science, Art, Philosophy, and Literature of Education is at hand, and contains an unusual amount of valuable reading for thoughtful readers on education. Dr. Harris, of Concord, contributes an article on the methods and Limits of Psychological Inquiry; Dr. Milliken, of Ohio, discusses Education as Related to Physiological Laws. The Essentials of Linguistic Training are presented in an able paper by Dr. Greene of New Jersey. The General Outlines of Education in Japan are described by S. Tegima, the Japan Commissioner of Education at London. Miss M. K. Smith gives an account of the recent Educational Congress at Havre, with Reports on Education at the New Orleans Exposition presented by Hon. John Hancock, Prof. J. M. Ordway, Hon. M. A. Newell, Hon. Warren Easton, and others. Other articles, both home and foreign, are valuable contributions to the literature which the New England Publishing Company have done so much toward elevating and extending.

AN EXCELLENT PAPER-It seemss almost unnecessary for us to call attention to a poper so well and favorably known as the Youth's Companion, of Boston. It has been for fifty eight years a weekly visitor, and each year has shown more clearly its wonderful usefulness to the class of readers for whom it is prepared.

It would be interesting to trace its influence in the case of two families, one of which began, we will suppose, twenty years ago, to provide it for their children to read, while the other furnished the more sensational publications. The contrast would no doubt be a striking one.

Parents can give their children few things of more value and importance in their growth of mind and of character than a wide-awake, intelligent, wholesome paper into whose management the publishers put conscience and moral purpose as well as money and ability.

A PRIMARY HISTORY OF THE UNITED STATES. A. S Barnes & Company New York.

The majority of histories of the present day contain all the events as they happened in days gone by; but they lack the vivid description, that clear, easy style, that attractiveness about them which entices the reader to look further into the condition of man than the present. Those qualities so requisite are fully supplied in this "history." The narrative is of a clear, easy style. It contains a full record of the changes, contests, etc., by which the United States stands eminent among the great nations of today, placed in a very pleasing way. The maps form an excellent feature of the book, being numerous and very distinct; and the prominence given to Remember that a little present punishment, when occasion the great men who have guided the affirst of state, cannot be tso highly commended. Taking the work all in all there are few that can be compared with it.