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"TWO MOTHERS AND THEIR FAMILIES"

# The Educational Review. <br> Devoted to Advanced Methods of Educetson and Genersi Culture. 

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ST. JOHN, N. B., NOVEMBER, 1909.
\$1.00 Per Year.
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THE RDUCATIONAL REVIEW. Ufles, si Latmoter Btroet, st. Johm, N. B.


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SL. Johs, N. B.

Hereapter the Review will be published on or about the tenth of each month. This arrangement is most convenient from several points of view and it is hoped may be satisfactory to readers.

A correspondent writes: "In October of this year at the annual fie'd day sports in a western city the chairman of school trustees in the presence of some hundreds of children smoked cigarettes. It
is hardly credible that such a thing could take place in a civilized country, in the presence of children, and that an intelligent man in such a responsible position could so far forget the rules of good manners'." The Review agrees with this opinion. If teachers and school officers must smoke let it not be done in public places or in the presence of children. That practice is not in the interests of morals or decency.

The official notices from our education departments published in the Review from time to time should be carefully read by teachers. Attention is called to the official notices in this month's Review, especially those referring to the number of teaching days in which many teachers make mistakes. The notice from Dr. MacKay is made necessary by the non-appearance of the October Journal of Education, the publication of which is delayed.

IT is hoped that some important recommendations made at the St. John County Teachers' Institute will take shape in the near future. These were that a miscellaneous school or department (not a dull pupils' school) should be established for backward pupils who fail to grade; that it is an injustice to the pupil to deprive him of his recess; that regular visitations of the city schools be made by a health officer to be appointed for that purpose, and that there be a supervisor of music for schools.
matiti dilion betrio odi
There are several seasonable contributions and other selected articles which are leld over for next month. Contributors should be as concise as possible. Their subject may seem of great importance to them, but there are other subjects not less important. The December Review, to be published on the tenth, will consist of thirty-two pages and a fine Christmas Supplement Picture.

## Drawing.

There are few subjects in our school course of greater practical utility than drawing and few that have the power of appealing in a greater degree to the interest, activity and originality of pupils. On the other hand there is perhaps no subject that is left more to chance or to the caprice or indolence of teachers than drawing.

The capable instructors in our normal schools are doing much to remedy this defect, and the young teachers who graduate year after year are more impressed with the importance of this subject and have acquired considerable skill and facility in teaching it.

Mr. H. H. Hagerman, instructor of drawing in the New Brunswick Normal School, held for two hours the rapt attention of the Restigouche County teachers a few weeks ago in an illustrative address, replete with many valuable suggestions. His audience was toned to the highest pitch of interest and asked questions freely. This inspired Mr. Hagerman as it does every teacher. He rose to the occasion, and the result must be a great stimulus in the teaching of drawing in a county, where, Inspector Mersereau assures us, are to be found a score or more of teachers, that include some of the most earnest in the world.

The interest aroused by Mr. Hagerman in Restigouche suggests the thought that the instructors of drawing in our normal schools might do a useful work by attending all local institutes and giving illustrative lessons (not papers-we have had enough of theory) on drawing. Although excellent instruction has been given in our normal schools on that subject the results have not been equal in measure to the quality of the instruction. Drawing is poorly taught in most of our schools, especially in the country where the opportunity, and the inspiration caught from the contact with nature appeal strongly to the children. The teachers who go out of the normal schools with some enthusiasm to teach this subject find difficulties in the way and grow lukewarm. After trial and failure they are more receptive to the efforts of their drawing master to arouse them to a fresh interest in this subject.

The world is not down on you, it is too busy.

## Nova Scotia Technical College.

Nova Scotia is making rapid strides in industrial education. The opening of the new Technical College, at Halifax, which began its work on the 29th September, is a notable event in the educational history of the province. In this college, which occupies a commanding position in the city and which has a capable and enthusiastic principal, aided by an exceptionally fine staff of assistants, any lad in Nova Scotia may get a training in any of the four great branches of civil, mining, electrical or mechanical engineering. Added to this, evening classes in technical education for young men and women have been opened in Halifax, Amherst, New Glasgow, Sydney and other centres in the province.

For years past a commendable interest has been shown by the young men of Nova Scotia, to improve themselves in technical knowledge either by acquiring it in colleges abroad or by the medium of correspondence schools: Neither of these has proved satisfactory. By the first the province has lost many of its brightest young men, whose services have been secured by other countries; and the correspondence school is far less effective than the inspiration of a live working teacher. All honour, then, to the far sighted policy of the educational men and rulers of Nova Scotia, who have made it possible for young men to secure such training in their own province with the prospect of their remaining to help build up its industries and develop its resources.

The Halifax Recorder, after referring to the opening, has this to say regarding the work and the future of the new college:

## Every student will be taught just those things

 that are needed by him for a thorough mastery of his trade, and nothing will be forced upon him which, though valuable in itself, has no direct bearing upon his business in life. Not to make more tradesmen, but better tradesmen, will be the motto and the aim of the course. . . . . . The Murray Government has done many things for the beriefit of our people, but none of its acts are more commendable, more disarming to all criticism, than the founding of this eminently useful and practical institution, and placing at the head thereof a gentleman of Professor Sexton's knowledge, ability, energy and enthusiasm. Beginning with over two hundred students, what shall we say of it ten years hence?Faithfulness in little things fits one for heroism when the great trials come.-Louisa M. Alcott.

## Is It True ?

## To the Editor of the Educational Review:

Dear Dr. Hay: I want you to say through your paper that in the West trustees have almost lost faith in the honour and principle of teachers. Teachers, in coming West, show for the most part an entire absence of regard for a moral promise made to a teacher's agency or to trustees. It is indeed a hard thing to say; but it will do good. I have become almost skeptical as to the honesty of teachers, and have had to defend them to trustees with all sorts of reasons. If I am speaking strongly, it is not stronger than the facts; and I am sure you and your readers will forgive my straightforwardness.

It is largely due to the fact that coming into a new country, they are advised by even inspectors not to keep their moral engagements, but to look out for personal interests first, last, and all the time. For instance a good school is waiting a teacher fifteen miles from a town. An agency wires for that teacher, and the district secretary is told to meet her. She comes, but sees a better opening ere she reaches her destination, and the trustees who have opened the way for her entrance to western life go back open-handed. Sad, isn't it, that our teachers should do this in hundreds of cases?

> W. B. Shaw.

## Nelson, B. C., Oct. 15, 1909.

[Rumors of like character have come to our ears, but we hope they are greatly exaggerated. The Review has found teachers, with but few exceptions, honourable in their dealings and ready to fulfil their engagements. We publish our correspondent's letter because he writes under his own name and because he is perfectly frank and kind in the matter.-Editor.]

Last year more than $13,000,000$ pieces of mail matter were sent to the United States Dead-Letter Office, a large portion of which could not be delivered because of carelessness in writing addresses. This has led to the printing of some advice on a slip of paper which is placed in every letter that is returned. The advice reads: $\mathbf{I}$. Use ink in addressing letters or gther mail matter. 2. Write plainly the name of the person addressed, street and number, post-office and state. 3. Place your name and address in the upper left hand corner of the envelope.

## Gelatin Printing Pad.

There are many teachers who occasionally, if not frequently, desire to multiply a copy of an examination paper or a piece of music, a map or a drawing. The gelatin pad is an inexpensive andfor as many as forty or fifty copies-a satisfactory means of making the multiplication. In this connection the kindness of the editor permits me to fulfil a promise made to some of the students at the Rural Science School, Truro, namely, to give the recipe for such pad with instructions for making and using it.
Dissolve one-quarter pound of gelatin over night in one pint of water.
On the next day, or as soon as the solution is complete add one pint of glycerin.
Stir the mixture, and heat it in a saucepan to the boiling temperature.
Pour out in a flat pan 8 inches by 10 inches, or larger.
While cooling is proceeding, use a needle to prick the air bubbles that will appear. If left undisturbed for a few hours, the pad will be smooth and firm enough to use.
Write distinctly, on any kind of writing paper, with a coarse pen and suitable ink. "Hektograph" or "Transfer." Ordinary copying ink will not do.
Let the writing dry for from two to five minutes: Do not use blotting paper to dry it.
Very slightly dampen the surface of :the pad with a squeezed-out sponge, and remove the surplus moisture with a soft cloth.
Now press the written side of the air-dried copy firmly and evenly on the pad, and allow it to remain from two to five minutes. As a rule, the longer time will give you a larger number of copies.
Proceed at once to print. A pliable paper takes the inspression better than a stiff one. The hand, or a cloth, should be pressed over the back of each page when it is a-printing.
When the printing is finished, use a sponge squeezed out of tepid water to wash off the pad. The writing is thus only partially removed, but in time it sinks in and becomes, usually in about twenty-four hours, ready for another copy.
When the pad becomes rough or dirty, it is renewed by placing the pan on the hot stove and melting the gelatin again.

Instead of a pan filled to the depth of an inch or thereabout I have used framed slates. Two, three or four large slates may be filled to the depth of an eighth of an inch with even less material than is proposed for the pan. These will be found convenient should one wish to print several different papers in the same hour.
J. Dearness.

## Are Our Wild Birds Becoming Scarce? <br> \author{ By Wm. H. Moore. 

}This question is a poser. In the case of some species it can be easily answered in the affirmative, with others a negative answer would be correct.
Some of the conditions affecting the supply of our birds are climatic, and human. That climatic conditions affect the numbers of birds and bird travel is easily understood by those who study the habits of birds. Let us suppose we have a nice warm period in the month of April. Many birds of several species will come north in goodly numbers. If the warm period is of two or three days duration and early in the month these travellers are not in so much of a hurry as they would be later in the season. Some would pass on northward and we would see them no more.

If this short warm spell be followed by a cold period of two weeks or more, what happens? Had the first wave of migration moved past our field of observation the chances are that every few of the same species still south of us would reach us for the summer season; for by the time the next warm period comes they may have begun nesting and stay through the nesting period.

Then again, if the early migrants only get as far northward as to bring them within our field of cbservations, they may be detained by climatic conditions until they have begun to think seriously of family affairs and settle down with us and rear their broods in our locality. Then on the next wave of migration their numbers are increased by still others of the same species and there is with us an abundance of certain species. A few years ago migration was so regulated that for two seasons the robins (Merula migratoria) were so numerous that a neighbour remarked, there was hardly a bush for each pair to nest in.

Climatic conditions may so affect insect life also that the supply of insects may be either great or small, and thus insectivorous birds are with us in greater or less numbers. So we find that it is necessary to have data for a great many years in order to arrive really at any fair conclusion as to whether or not the numbers of our birds are increasing or decreasing, from climatic conditions alone.

Now let us see how man affects the supply. Without a doubt the game birds are decreasing in numbers, they are so persistently hunted and killed by man. Some species that nest in swampy ground
have had to move onward as the march of agricultural improvement has drained those wet places and so restricted the extent of territory available for breeding purposes. This is also the case in regard to those places where food could be found in abundance for some species. But if man has helped exterminate some birds he has helped extend the range and numbers of some others.

Many of the birds of our fields must have increased in numbers since the advent of the agriculturist in America, because the area available for feeding and breeding must certainly have increased. The birds of the upland meadows and waysides must now be in greater numbers than before there were such meadows.

Where man grows fruits and grains new insect pests come in and live, and thus more food is available for the birds. There is no doubt but that the birds of eastern America are each year slowly moving northeastward, increasing their range and adapting themselves to their new environments.

In another way the march of civilization has increased the range and numbers of birds. All have noticed the swarms of swallows that live about some barns. They must be more plentiful here than before there were such places available for nesting sites.

To sum up the whole question,--we find that while some birds have decreased in numbers it is just as likely that others are more numerous than they were a century ago. It is possible that a bird student observing faithfully for a score or more of years in a single locality may determine whether or not the birds in that locality are increasing or decreasing in both numbers and species.

In addition to the foregoing in which Mr. Moore has opened in such an interesting way the causes of the increase or decrease of birds the Review has obtained the opinions of Dr. Ora Willis Knight, author of that valuable book for our bird students "The Birds of Maine." In submitting the proofs of Mr. Moore's article to Dr. Knight the Revisw invited him to give from his wide knowledge and experience of bird life, any further data bearing on this important question. In reply be states that he fully agrees with the general tenor of Mr. Moore's article, and adds:
" The whole subject of increase or decrease in numbers of our native birds may be summed up in a few. words. Those species, which are capable of
adapting themselves to new conditions, and, as the woods are cut away, will select new nesting situations and adapt themselves to a change of food, will continue to increase in numbers provided they are protected from ruthless slaughter by the small boy and the Italian pot-hunter. On the other hand birds not capable of adapting themselves to changed conditions will recede with the cutting off of the forests or the settling of the prairie lands of the Canadian northwest, and ultimately become extinct unless strenuous measures for their protection are adopted. In the adaptable class I may cite as an example the cliff swallow, while in this class of birds not readily meeting changed conditions we will find many if not all of the game birds, and the best example of all of this class is the pileated woodpecker.
" It is believed to be an almost unvarying rule that adult birds return each summer to the same region and generally to the same identical spot to nest. Their young often do likewise, returning to the region where they were reared, although many young birds select new localities thus aiding in the extension of the range of a species. Of course birds are utterly dependent on a good food supply, and failing to find such will seek places where it may be found. This accounts for changes in range to a certain degree, while the natural increase is also responsible. Sometimes we are in a spot through just the right period of time to watch the influx and increase of a species. In the early nineties only a very few pair of meadow larks nested near Bangor. In 1893, I knew of only one pair, while a couple of years later I knew of three pairs nesting here. They have gradually increased. until last August (1909) they were scattered through the Penobscot Valley from Oldtown to Charleston, and I saw one flock of over a hundred including old and young near Corinth. They were also reported by Mrs. Eckstrom as having crossed the Penobscot River and being seen in Brewer for the first time in 1909. Rivers running in a general north and south direction retard the spread of a species for some time, and such rivers are generally not crossed in seeking an extension of range until a good reserve is massed on the opposite side. The meadow lark is another species increasing in numbers here with the cutting away of the woods and the spread of civilization. The Baltimore oriole is also a bird which has appeared in central Maine within the memory of men now living."

## Lessons in English Literature.-XIII. <br> By Eleanon Robinson.

The "Faerie Queene."-Continued.

## The Story of the Red Cross Knight.

While St. George was passing through these adventures, poor, unhappy Una, whom he had deserted, was wandering through deserts and forests in search of him. One day, very weary of the hard journey, she lay down to rest on the grass in the shade. She was so beautiful that

## Her angel's face

As the great eye of heaven shined bright, And made a sunshine in the shady place: Did never mortal eye behold such heavenly grace.

A fierce lion rushed out of the wood to devour her, but seeing her loveliness, he forgot his fury, licked her feet and her lily hands, and when she went on her way walked by her side to protect her.

The Lion would not leave her desolate,
But with her went along, as a strong guard
Of her chaste person, and a faithful mate
Of her sad troubles and misfortunes hard.
The noble beast soon had an opportunity of showing his devotion, for while Una was sleeping in a little country hut, a wicked thief came and would have killed her, but that the lion tore him in pieces. Una had to flee away again, and as she was toiling wearily along, what was her joy to see, as she thought, her own true Knight, St, George, riding towards her! She welcomed him with delight, and they rode on together very happily, while he assured her that it was not his fault that he had left her, but that he had gone to do battle with a robber and oppressor. He swore that he would never leave her again, but would always be her faithful defender. They had not ridden far, however, when the third of the terrible band of brothers, Sans Lov. came riding fiercely against them. He attacked the Red Cross shield and sent its bearer crashing to the ground. Una begged for her Knight's life, but when his helmet was unlaced, behold! it was not St. George at all, but the wicked nld magician, Archimago, in disguise. Sans Loy left him lying on the ground and carried off Una, after killing her faithfur lion, who fought bravely in her defence. But Una was rescued by a band of faeries and satyrs. who treated her kindlv. and adored her for her beauty and goodness. She was found among them by a great hunter, Sotvrane. who loved her, and was happy in her company; but when she told him her grief hee unselfishly led
her out of the woods of the Satyrs and back to the open plain. Here they met a weary looking pilgrim, who was really Archimago in another disguise and with another false tale. He told them that the Red Cross Knight was dead, slain by a heathen knight, and that if they went on they would find the murderer washing his wounds in a fountain. Satyrane dashed on, and at the fountain found Sans Loy and fell upon him furiously. Una, who was almost fainting with grief, came up more slowly, and when she saw them fighting she fled in terror. She had not gone far when she met her own Dwarf, leading St. George's horse with all his armour piled upon its back. Thinking that St. George must indeed be dead, she fell to the ground in despair. But the Dwarf told her all the truthhow her knight had been deceived and that he was now a prisoner in Orgoglio's dungeon. Her heart was nearly broken, but she rose up resolving to go on and find him, living or dead.

And now, at her time of sorest need, Prince Arthur came in sight, followed by his gentle squire, Timias. The Prince was all glorious in shining armour with the dragon crest, and with his diamond shield that blazed like the sun. Armour, shield, and sword had all been made for him by the great enchanter, Merlin. To this brave prince Una told all her sad story, and he cheered her heart by saying that he would not leave her until he had set free her knight. So they rode on to Orgoglio's castle. The gates were shut fast and no one appeared to answer their summons; but Arthur's Squire took from his belt a little gold bugle hung with tassels. This was a magic horn; it could be heard for three miles. Everyone who heard it trembled for fear, and all gates and doors flew open at its blast. So now, when the squire blew, Orgoglio's castle shook, every gate swung open, and the giant himself came rushing out in dread. Behind him came the false Duessa, riding on her many-headed beast. Orgoglio attacked the Prince, and there was a fearful fight. When Duessa saw that the giant was in danger, she rode at Prince Arthur, but the faithful squire threw himself in between to save his master. Duessa sprinkled him with poison from a golden cup, and all his strength left him, so that he fell back. Arthur cut off one of the beast's many heads, and at this the giant came at him again. But the diamond shield was so dazzling that he could not face it; nor fight at all, and Arthur slew him. Then they went into the castle
to find St. George, but at first no living person was to be seen.. At length they found the doorkeeper, a feeble, nearly blind old man carrying a bunch of rusty keys; his name was Ignorance, and to every question he answered only, "I can not tell." So they went on searching, and at last, in a little dungeon, they discovered St. George, half dead from his long captivity. The squire had made Duessa a prisoner, and Una said to spare her life, hut to strip her of her gorgeous robes. So they did, and when all her rich garments and jewels were taken off she was seen to be a hideous, loathsome old woman. The knights wondered, but Una, said, "Such is the face of falsehood." Then they let Duessa go and she fled away to hide herself in some desert place. Una and the knights stayed for some time in the castle to rest and refresh themselves, for St. George had still his great task before him.

## Thorough Drill in Essential Subjects.

We recommend the subordination of highly diversified and overburdened courses of study in the grades to a thorough drill in essential subjects; and the sacrifice of quantity to an improvement in the quality of instruction. The complaints of business men that pupils from the schools are inaccurate in results and careless of details is a criticism that should be removed. The principles of sound and accurate training are as fixed as natural laws and should be insistently followed. Ill-considered experiments and indiscriminated methodizing should be abandoned, and attention devoted to the persevering and continuous drill necessary for accurate and efficient training; and we hold that no course of study in any public school should be so advanced or so rigid as to prevent instruction to any student, who may need it, in the essential and practical parts of the common English branches.-Recommendation of N. E. A., 1908.

The people who dwell on farms are the ones that rear the children that rule the nations. Anything that makes for the improvement of their education and conditions makes for the improvement of the race. For 30,000 years we have been making efforts to secure a better home for the children, of whom the Master said ' of such is the Kingdom of Heaven.'-Principal J. W. Robertson.

## Analysis of Lycidas.

The following analysis of "Lycidas" is from Grade XI oi the Dalhousie, N. B., superior school. Criticism is asked for from other eleventh grades, who are invited to analyze "L' Allegro" and "' II Penseroso" through the Review.

IThose studying the following analysis should do so with book in hand, as it was necessary to shorten many quotations from lack of space.-Epiror.]

1. Milton's tribute to King in the language of flowers: (a). Laurels-High in art. (b). Myrtles-Constant in love. (c). Ivy never sereEverlasting friendship.
2. Milton's regret for King's unfinished education: (a). Berries, harsh and crude-Immature mental and spiritual education. (b) Premature falling of the leaves-Untimely death.
3. Milton's reason for writing this poem:

Bitter constraint and sad occasion dear Compel me to disturb your season due.
The curtailing (bitter constraint) of King's possible greatness through his untimely death (occasion dear) compelled Milton to write (to disturb) only what greatness King had manifested up to the time of his death, thus not allowing Milton or any other poet to sing the greatness of what King might have been when his life was fully rounded out through many years of noble deeds (season due).
4. Milton's estimate of King: (a). ClassLeft no peer. (b). Kind-a great poet. (b). Degree of greatness-Embalmed in the nation's literature.
5. Invoking the aid of the Muses to mourn for King. First appeal to the source of inspiration.
Begin then, Sisters of the sacred well,
That from beneath the seat of Jove doth spring; Begin, and somewhat loudly sweep the string.
6. Milton breathes a prayer to be thus remembered at his death.

So may some gentle muse
With lucky words favour my destined urn,
And as he passes turn,
And bid fair peace be to my sable shroud!
7. Memories connected with King: (a). Educated at the same college.

For we were nursed upon the self-same hill,
Fed by the same flock by fountain, shade and rill.
(b). Studied nature together.

Together both, ere the high lawns appeared Under the opening eyelids of the morn,
We drove afield, and both together heard
What time the gray-fly winds her sultry horn.
(c). Studied all night from books.

Battening our flocks with the fresh dews of night,
Oft till the star that orse at evening bright
Toward heaven's descent had sloped his westering wheel. (d). Wrote poetry together.

Meanwhile the rural ditties were not mute, Tempered to the oaten flute;
Rough Satyrs danced, and Fauns with clover heel From the glad sound would not be absent long, And old Damatas loved to hear our song.

## 8. Nature's lament for King.

But oh, the heavy change, now thou art gone, Now thou art gone and never must return!

Milton calls upon Nature to mourn for King, because great poets particularly are Nature's children.
9. Reproving the Nymphs for their negligence in allowing King to drown.
Where were ye, Nymphs, when the remorseless deep
Closed o'er the head of your loved Lycidas?
(a). Reason for reproving the Nymphs-I. Off duty and the results. "Where were ye, Nymphs?" 2. Possibilities of being on duty. "Had ye been there." (b). One cannot escape his fate. "What could the Muse herself . . . ."
10. Why give such concern about study and deep thought rather than have a good time.
II. Definition of "Fame."

Fame is the spur that the clear spirit doth raise-
That last infirmity of noble mind-
To scorn delights and live laborious days.
(a). Positive-I. The impulse that raises one's life; 2. The last weakness to be blotted out in noble mind. (b). Negative-1. Not a product of man's own growth; 2. Not temporary reputation. (c). How fame is won-r. Giving up all unaiding pleasures; 2. Steady hard work. (d). Highest fame-Approval of God.
12. Second appeal to the sources of inspiration: (a). Invoking the Spirit of Greek poetry - "O fountain Arethuse." (b). Invoking the Inspiration of Virgil.

And thou honoused flood
Smooth-sliding Mincius, crowned with vocal reeds.
13. Investigation into the death of King.

And listens to the herald of the sea
That came in Neptune's plea.

Note-King, who was a citiren of the Land, was wayGaid in the country called Sca, and Mitton demands o: King of the Sea, Neptune, that an investigation be held concerning the drowning of King. After the charge is laid, Neptune sends his son, Triton, as his attorney-general.
(a). The accused-1. The waves, "He asked the waves;" 2. The winds, "And asked the felon winds;" 3. The squalls, " And questioned every gust of rugged winds that blows from off each peaked promontory."
Note-These inhabitants of the sea, or travellers over the sea, are accused because their past conduct leads Triton to suspect them; and being accused and brought to trial they enter the p'ea " not guilty."
(b). Plea-" They knew not of his story."

Note-An accused has two ways of escape: 1. Plead not guilty and allow the court to fail to prove him guilty, thereby proving that he is innocent. 2. Enter the plea of "not guily" and call witnesses to refute the evidence brought against him to support the charge.
(c). Witness called for the defence:

And sage Hippotades the'r answer brings.
I. Evidence in favour of waves.

That not a blast was from his dungeon strayed.
Argument-Waves owe their existence to wind. The witness Hippotades, who is the master and keeper of the winds, testifies before the court that on the day of King's death he allowed no winds to stray from his keeping. Therefore it is evident that the waves were not responsible for King's death.
2. Evidence in favour of winds- " No blast . . strayed."
Argument-When called, Hippotades, the master and controller of the winds, swore that on the day of the tragedy he held the winds in check and that none strayed from the prison.
3. Evidence in favour of squalls.

The air was calm, and on the level brine,
Sleek Panope with a'l her sisters played.
Argumert-In the first place the air was calm, because no winds strayed from the dungeon, therefore no squalls were on the sea. In the second place, Panope and her sister were, during that day, playing on the sea, and they never sported on the surface of the sea during a storm or immediately previous to a storm.

## (d). Verdict-

I+ was that fatal and perfidious bark,
Built in the eclipse, and rigged with courses dark,
That sunk so low that sacred head of thine.
14. King mourned by his university-

Next Campus, reverend sire, went footing slow., His mantle hairy, and his bonnet sedge, Inwrought with figures dim, and on the edge, Like to that sanguine flower unseribed with woe.
"Ah! who hath reft," quoth he, " my dearest pledge?'
15. Theology in a nutshell.

Last came, and last did go,
The pilot of the Gablican lake;
Two massy keys he bore of metals twain,
(The go'den opes, the iron shuts amain).
(a). St. Peter the first Bishop. (b). Bliss, Golden Key-1. Moncy ; 2. Durability ; 3. Happiness ; 4 Purity. (c). Woe, Iron Key-1 Poverty; 2. Rust and Decay; 3. Misery, 4. Dross.
16. The church's lament for King.

How well could I have spared for thee, young swain.

What the church could give in exchange for King: (a). Her selfish members-" How well could I have spared." . . . (b). Her worldly members"Of other care they little reckoning make." (c). Her undutiful members-" Blind mouths! . . .
17. Days of mourning are over, but fond remembrances are still cherished: "Return, Alpheus,"
18. Comfort for the mourners: " Weep no more, woeful shepherds"
(a). King is not dead-" For Lycidas, . . . . is not dead.". . . (b).
Rewarded by being abe to help his fellow-men" So Lycidas . . . . mounted high." . . .
19. Conclusion-

Thus sang the uncouth swain to the oaks and the rills,
Wite the still Morn went out with sandals gray,
He touched the tender stops of various quills,
With eager thought warbling his Doric lay;
And now the sun had stretched out all the hills,
And now was dropt into the western bay.
A: 'ast he rose, and touched his mantle blue:
To-morrow to fresh woods and pastures new.

Spelling matches are a commendable feature of school work if properly conducted, and the tests made on words of our common vocabulary. It's a foolish thing to spend time and energy of pupils in teaching them to spell a mass of words whose content they do not know and in all probability never will have any cccasion to know.-Michigan Moderator Topics.

## THE EDUCATIONAL REVIEW.

## November Nature Study.

## P. J. Shaw, B. A., Agricultural College, Truro, N. S.

The early part of November is not too late to plant Dutch bulbs for winter blooming. Tulips, hyacinths and narcissuses may be obtained from florists or seedsmen now, and, planted in pots or tin cans, will give beautiful flowers in winter when other flowers are rare. Tulips and narcissuses may also be planted in beds out of doors to bloom in May. The four inch flower pot or the tomato can is a good size for bulbs for indoor planting. Place one bulb in each pot with the top of the bulb just below the surface of the soil. Moisten the soil and set the potted bulbs in a cool dark cellar to remain for six or eight weeks, or until a good root development has taken place. The bulbs should be examined from time to time to see that they do not become too dry. To prevent drying out, the pots may be placed on the cellar floor and covered with a few inches of earth. After the first of January the bulbs may be brought to the light and warmth. Growth will take place rapidly now, and in a few weeks they will be in full bloom.

Teachers sometimes have bulbs planted in this way by the children at school. The bulbs are then taken home and kept according to directions. The reports of the children on the developments which their bulbs undergo make some of the best exercises in English, both written and oral. This work also helps to awaken a taste for the beautiful and a sympathy with plants.

Geranium slips taken now and placed in tin cans of earth either at home or at school furnish interesting growing material for the children to watch and report upon. How many kinds of geraniums are grown in your school section?

One of the surest and easiest trees to grow from seed is acer negundo (box elder). This tree is also quick growing and hardy. There are pupils in schools round Truro who have trees of this species large enough to set out now which were started from seeds in the school garden. A few seeds will be supplied free to teachers who apply to the Agricultural College, Truro.

A little city boy on his first visit to a farm saw the farmer's wife plucking a chicken, and asked, "Do you take off their clothes every night?"The Delineator for October.

## For Friday Afternoons.

The Scholar's Fate.
The things it takes to educate
A little child are truly great,
I have to write upon my slate
How many times are six times eight,
And learn to figure out a rate,
And tell the different kinds of weight.
Then there are things to calculate,
And others which I must equate;
And there are things to illustrate,
And some which I must demonstrate.
I have to learn most every date,
Events in history relate,
And name each country and each state.
My spelling must be accurate;
My lines of writing must be straight.
I have to learn to meditate,
And also reason and debate,
And compositions hard create,
And foreign languages translate, ,
My ear for music cultivate.
I learn before I graduate
More things than I can estimate!
Red-Head Jim,

Jimmy Jones was his proper name
When up from the country to school he came, But the only name that stuck to him
Was the one they gave him of Redhead Jim.
It was "house-afire," and "sorrel-top,"
And what would he take for the "carrot-crop?"
But he only laughed when they badgered him-
He was grit clear through was Redhead Jim.
Red hair was as good as the next, said he, If 'twas brushed and combed as it ought to be; 'Twas the brains it covered, it just struck him, That made the difference, said Redhead Jim.
His brains were all right, if his hair was red, So in study and games he shot ahead Till there wasn't a boy but was proud of him, Yes, proud of a leader like Redhead Jim.
And his teacher said with a quizzical smile, Red heads were the best, it seemed to him, If they made such scholars as Redhead Jim!
-Youth's Companion.
The camel is the "desert ship,"
And carries with him every trip
Water enough to keep him going,
Which-for a ship-is rather knowing.

> -The Delineator for November.

Arrange the ten digits so that the sum of the numbers expressed shall be 100.

Answer- $501 / 2+49 \frac{38}{8} \frac{8}{8}$.

## A Nut to Crack.

There was an old woman who lived in a hut
About the size of a hickory nut;
The walls were thick and the ceiling low. And seldom outside did the old woman go.
She took no paper, and in no book
Of any sort was she seen to look
Yet she imagined she knew muct more
Than man or woman had known before.
Still she lives in her little hut About the size of a hickory nut, At peace with herseli, and quite content With the way in which her days are spent.
Little it troubles her, I suppose.
Because so very little she knows;
For, keeping her doors and windows shut,
She has shrivelled up in her hickory nut.
And you, my dear, will no wiser grow,
If you rest contented with what you know,-
But, a pitiful object, you will dwell,
Shut up inside your hickory shell. -Selected.

## The Message of the Snowflake.

"The snowflake kissed me,
As on it sped,
And to.d me a story,"
The little maid said
" 1 didn't mind it, So soft and cold,
And here is the story The snowflake told:-
"'You won't believe it, I almost know,
But I was a raindrop Before I was snow
I fell by the roadside, And there I lay,
Till the sun drew me up Through the air one day.
" $\cdot$ On a cloud I floated, Till cold I grew,
Then I turned to a snowflake, And flew down to you.
And this is my message, So sweet and sure.
Be pure like the snowflake Be pure, be pure.'"

Do you know
Why the snow
Is hurrying through the garden so?
Just to spread
A nice soft bed
For the sleepy little flower's head
To cuddle up the baby ferns and smooth the lily's sheet, And tuck a warm white blanket down around the roses' feet.
-Selected.

## A Little Boy's Wish.

When winter comes, the people say, "Oh, shut the door!" and when, As sometimes happens, 1 forget, They call me back again.
It takes till summer-time to learn: And then things change about, And "Leave it open" is the cry When 1 go in or out.

1 try to be a pleasant boy,
And do just as 1 ought,
But when things are so hard to learn,
I wish they might stay taught
-Werwer's Magasine.
$\qquad$ -

It isn't helfy to woke little boys up so quick,
Dey forgets w'ere dey is w'en you do,
Cause deys sand in deir eyes, an' de winkers will stick,
An' their thinkers is tangled up, too.
An' de p'ace w'ere dey cuddles in is so wom
An' de piliers so comfy an' sof,
'At I don't fink its wight for nobody to come
$\mathrm{An}^{\prime}$ des pull all de comforters off.
-Jock Bennett.
Mary's Lamb "Up to Date.
If Mary's little lamb, my dears. Had lived in "naughty-nine,"
The little, fleeting woolly thing.
Wou'd have met a better fate.
For if it followed her to school,
The teacher kind would say:
" Why, Mary, dear, I'm glad he's here, I think we li let him stay."
The children all would gather round Discussing every feature.
As though a treasure they had found, They'd talk about the creature.

They'd draw a picture of it, too, 'Twould really do them credit, And then a story each would write, 'Twould please you if you read it.
The lamb would be allowed to roam Around the room at pleasure,
And when at noon it trotted home, It's joy would know no measure.
I'm glad that time a change has wrought Regarding education,
Now children's minds are used for thought, Their eyes for observation.
-Selected.
A business man received the following telegram, and had difficulty in reading it:
It was and I said not or.
Can you read it so as to make sense?

## Schoolroom Helps.

Once on a time I was teaching in a little country school. I had forty-five children and had to teach everything from the beginners to algebra and bookkeeping. The same question arose then as now : " What can be done with the little children when their work is finished and they cannot go home?"

Our schoolhouse was too small for a table, so my trustees made a large board with a rim around it. This board could be laid across two desks and eight children work there comfortably. When not in use, it stood against the wall.

The next thing was to find material to work with. We had a letter game; pictures cut up and put into envelopes; old-fashioned magazines to cut out the pictures ; someone who was building had the carpenter saw some blocks for us. these, with clothes-pins and corn-cobs, made all the building material we needed. The children found stones and different kinds of nuts. We had a few picture books, some tooth-picks and shoe pegs.

These were kept in boxes on the cloak-room floor. When the children's work was finished they went to the clothes-room and chose what they wanted. One of the older boys brought out the board and the children played quietly and happily, disturbing no one.

You can use wall paper for all kinds of cutting and folding. It makes prettier chains and lanterns than anything else. Five cents worth of gum tragacanth, one cents worth of oil of cloves and a quart of cold water will make all the mucilage you can use in a term.

Any farmer will give you all the straw you want. With the assistance of your older girls, cut this in inch lengths and cut plain wall paper circles and you have all the straw work you can do.

None of these things cost anything, but if you feel that you can spend a little money, just go to the five cent store and invest a dollar. You'll be surprised at the number of things you can buy.

Stormy days, when everyone has to spend the noon hour in the house, all these things help to entertain even the older children.-Primary
Education.

During the week's constructive period, let the - children make a play house or a doll house. This can be used for the foundation of some of the happiest as well as instructive number lessons.

Let the pupils take rulers and measure all parts of the house, walls, floors, doors, windows, size of rugs. If one window costs so much, how much will all the windows cost? If the price of one door is so much, how much will it cost to furnish the house with doors? Give a price for each rug, lace curtain, etc. How much will all cost? We are going to spend $\$ 2.00$ apiece for rocking chairs, what will it cost to buy four rocking chairs? Each of the four dining-room chairs cost $\$ 3.00$, the table cost $\$ 10.00$, what is the cost of chairs and table? On the kitchen table are twelve cents worth of eggs, ten cents worth of butter, five cents worth of salt, six cents worth of cookies and a five-cent loaf of bread. What did the lady of the house pay for the groceries? Simplify or enlarge above problem according to the grade of the pupils.

Cut pictures from magazines and newspaper advertisements, such as dolls, dogs, fans, rings, dishes, etc. Mount on cardboard with the number combination below. Hold a card up for an instant and see how rapidly these cards can be drawn and who will receive the largest number of cards.
Place numbers on the board, such as $3,5,4,6$. 8. Add 2 to each very quickly, add 3 , subtract 1 .Midland Schools.

One of the most desirable things in a practical arithmetician is to be able to add accurately and rapidly. A daily drill at the blackboard in simple addition is well spent with pupils of almost any grade. This is a good plan: Send the class to the board and dictate a list of numbers the sum of which is known to the teacher. Examples from arithmetics' are convenient to have at hand. Then tell them to write down a number of their own and add. This will give each a different answer. It requires only a few moments to correct their work by subtracting the number they added to the list from their sum, which should give the sum of the numbers dictated. Otherwise their work is wrong. Pupils enjoy this exercise and are much more accurate in consequence of the daily drill.-Selected.
One little help in the mechanics of the schoolroom is to have special children, who are regular in attendance, detailed to perform certain duties. It is not difficult to find pupils who will assume charge of the distribution of paper and pencils; the securing of music books, the care of plants, etc. Secondary appointments should be made in case of
the absence of the first chosen. Much of the drudgery of the class-room is taken from the work of the teacher, and, as we know, the responsibiity of á duty gives pleasure to children. By this plan the routine of the class-room will be conducted without a disruption of order in the reign of the substitute.

Another help: In passing papers, the most natural and orderly method is to pass to the left or right. The possibility of noisy turning, not seeing the papers that come from the rear, etc., is thus precluded.-The Teacher.

Many a teacher longs for a manual training department in her school. Did you know that a great many things that the children do in schools fortunate enough to have this department, might be done by your children if you would have a little time and patience to spare for it. The little girls in one room which I visited were making doll dresses, another roomful of lassies were endeavouring to make buttonhoes or they were doing simple sewing or darning. Knitting is also taught, and now that crocheting is again the style, I presume they will be doing that. You can teach the boys the proper way to sew on buttons, and to darn a tear. They can whittle out pencil boxes, make stands to hold their ink wells, etc., and you might teach them how to preserve botanical and zoological specimens.Selected.

A good book is the precious life-blood of a master spirit, embalmed and treasured up on purpose to a life beyond life--Milton.

Any man who would ridicule our public schools or attempt to depreciate the splendid work that the teachers are doing, is a person devoid of discernment and lacking of knowledge. It is safe to say that school teachers in America do more work for less pay than any other class of persons with equal intelligence that can be named. And the love, loyalty, devotion and patience that are shown in the work by many teachers in our public schools are worthy of the highest esteem. And the teaching timber is continually improving-I know that. I am quite aware that the schoolroom that does not now have many traces of beauty and attempts at harmony is exceptional. I know, too, that kindness and patience are now to be found where once was force approaching brutality.-Elbert Hubbard.

## Week Days and Their Names.

Formerly the days of the week were numbered one, two, three, four, five and six, beginning with the Sabbath. Even now the custom still prevails among certain modern Greeks, the Slavs and the Finns. Many old-fashioned and orthodox Quakers, particularly in the north of England, still hold to this custom, which was the common one in the days of the Apostles and down to the fourth century, as well as usual among the Jews and the Arabs. The orthodox Quakers use the numerical system in preference to the ordinary on the ground that the gods and goddesses, from whom the names were taken, were not of the higiest respectability in point of morals.

The week was originally only a convenient quarter of the lunar month. Hence it began on Monday or moon day. The Italians still call Monday the first and Sunday the seventh day of the week. Tuesday is derived from the Norse Tiw, who corresponded to Mars, the god of war, a most disreputable person in the eyes of Quakers. Thursday was Thor's day, Thor being a good warrior who was, morally, no better than he ought to be. Wednesday again was Woden's day, Woden being the god of battle-rage. The Romans called this day Mercury's. Friday was supposed to be the luckiest day of the week-for women. It was called after the Norse Frija, the goddess of love, and is the best day for weddings. For the pagan Romans it was also the day of Venus, though the Christian Romans called it the day of ill-luck because Christ had been crucified on that day. Saturday was called after Saturn and Sunday was known to the Christians as resurrection or sun-day.
The week of seven days was imported from Alexandria into Greece, and into Italy about the time of Christ. The Greeks had previously divided their month into sets of ten days, the Romans into sets of eight days, three and a half sets being equal to one month.

I received the "Canadian History Notes." They are simply splendid, and I am sure will prove invaluable in my work. ... I could not do without the Review, I have taken it ever since I left Normal School, and each month it seems better than the preceding.
E. B.

Nashwaak Village, N. B.

## REVIEW'S QUESTION BOX.

H. G. L. S.-Yesterday (September 30) there was a great deal of the enclosed white, filmy material hanging to fences and drifting through the air. Please answer through the Review if it is the work of spiders or caused some other way.

It is probably the remnant of a spider's web. Mr. John Dearness, of London, Ont., to whom the specimen was submitted says: "The fibre under the microscope is much finer by comparison than milkweed down or cotton. It is finer too than raw silk. On burning it yields a proteid odour that is not unlike that of silk, horn or wool. Under the microscope and with the flame I cannot find much difference between it and the spider's web. I am not able to improve on your correspondent's theory."
I. B. M. asks for information about Mrs. Alexander, the writer of some of the selections in the school readers.
Stedman's "Victorian Anthology" gives the following note: "Cecil Frances Humphries born at Strabane. Ireland, 182-. Daughter of Major Humphries. Married Rev. William Alexander, afterwards Bishop of Derry, in 1850 . Her publications, consisting of stories and poems for children, were issued anonymously. She edited the "Sunday Book of Poetry" in the "Golden Treasury Series." Mrs. Alexander's "Hymns for Little Children" has gone through many editions. Her best known production is the hymn "There is a Green Hill Far Away."
E. W. F.-Can you give me any information regarding the insect that has been causing the destruction of the leaves of the white birch (Betula alba) during the past season?

The ravages of a little moth (Bucculatrix canadiensella), have been the cause, eating the green food-matter of the leaves. The latter died early in the season presenting a dried, withered appearance and causing them to fall early. The result will be no permanent injury to the trees, imless there are borers or other insects at work in the stems and branches. The trees will be weakened slightly no doubt by these ravages, just as a sickness would weaken a human being, but they may be relied upon to put forth their green leaves and resume their functions next spring as usual.
C. S. B.-What are the "cones" on the willow branch sent herewith? There is also a reddish gall or swelling on the leaves. The cones are found on the ends of the branches of the willow known as Salix cordata. I have not seen them on other species, but the reddish galls are
scen on this and other willows. Can you give me any information regarding these curious shapes. I have also see, swellings on the stem of the golden-rods, asters and other plants. Are they of the same nature?

Our correspondent has referred to an interesting subject, and one that has attracted considerable attention among nature students. These galls or swellings are the homes of insects which live in them comfortably during the winter in a torpid or semitorpid condition; then at the approach of spring they begin to show signs of life and activity, thrive upon the juicy material which forms their homeseat their houses, so to speak-and emerge in another form to renew their depredations. By cutting through these galls our correspondent may find the larva comfortably ensconced within.

Mr. A. D. Hopkins, in charge of Forest Insects Investigations of the United States Department of Agriculture, has kindly furnished the Review with much of the information contained in the answers to this and the preceding questions. Concerning the willow galls he says: "The large gall is known as the willow cone gall caused by a gall gnat, technically known as Cecidomyia strobiloides. This is quite a common gall on the willows of the northern United States. Apparently there is not much known about its life history, except that the adult insect flies in April and May and deposits its eggs in the bud, causing the gall to commence growing. It attains its full size by the middle of June. The larva is said to remain in the gall until the following spring when it changes to the pupa and the fly escapes. The other smooth reddish gall on the leaf is known as the willow apple-gall and is caused by a saw-fly (Pontania pomum)."

Mr. Thomas Speed, pardon attorney of the governor of Missouri says: "About 75 per cent. of felons are untrained in any honest or useful trat. most criminals are thieves; men, for the most part, try to get a living dishonestly because they have not learned to get it honestly. They steal, who have not learned to work. An hour's hand work a day in every schoolroom in the land, running through all the grades from the kindergarten to and including the high school, would give to every man, woman and child of the rising generation at least the rudiments of an honest, useful and profitable occupation; and would make of the next generation of Americans the most productive and the most industrially efficient race the world has ever seen. I believe that every criminologist will agree with me when I say that for every dollar so expended, two dollars will be saved in the lessened cost of crime,"-School Education.

## Raffia Work-No. 4.

By T. B. Kidner.
Raffia braiding is another form of this work which affords considerable scope for school purposes; being within the power of primary classes and also offering possibilities of exercises well worth the attention of older pupils.

The simplest braid is of three strands; each strand having two strips of raffia in it. It should be commenced by tieing the strands together at their extreme ends by an overhand knot. The plaiting is then commenced; the knotted end being placed over a small nail or hook on a window sill, or other


Putting in a new strand
convenient place. If the class is too large to admit of the pupils being thus accommodated, a stout pin can be stuck into the desk in front of the pupil, and the braid held upon it.

Joins are made by laying new strands into the braid as shown in the illustration; the ends being cut off close when the braid is finished.

After a few yards of braid have been prepared, the construction of some useful articles from it should be undertaken. The illustrations show two simple examples, both made by public school children in New Brunswick. The mat is the easier and
consists of the braided raffia, sewn together with a needle and thread into a circular form. The last few courses or rows are of raffia of some contrasting colour; thus forming a finish to the mat. Several other methods of finishing the edge are common, such as sewing the braid into circular loops, running curves, etc., to form a border.

The other article shown is a doll's hat, made in

precisely the same way as the mat, but requiring more care in sewing to form the curves for the crown and brim. Full-sized hats are also made in the same manner, but are rather heavy. For large hats in raffia, some of the attractive netted ones are preferable. Some excellent examples of the latter were made by the pupils of the St. Martin's schools last spring; the teachers gaining hints for the work from professional journals and ladies' magazines.

A still further use for narrow raffia braid is in the decoration of picture frames, made from cardboard wound with plain raffia. Some hundreds of these were made in the Fredericton Normal School last year; the students applying in them some of their lessons in the drawing department. Scarcely any two were alike, great originality and ingenuity being displayed in devising patterns in which coloured raffia braid was sewn on the face of the frames as appliqué ornament.

Farming is not breaking clods; it is the gathering up of the sunshine into cornstalks and grass and trees and saving it for the race.-Principal J. W. Robertson.

## CURRENT EVENTS.

Following the New York celebration of the discovery of the Hudson river, with its great array of visiting warships, in which those of Britain, Germany, France and Holland were most conspicuous, there has been a great celebration at San Francisco in honour of Don Gaspar de Portola, the Spanish explorer who discovered San Francisco bay; and Great Britain, Holland, Germany, Japan and Italy sent ships to take part in the display.
Last year a new island suddenly appeared in Bering Sea, rose to a height of about four hundred feet, and was duly charted and described, and named McCulloch Peak. Two months later it disappeared, and soundings have shown that there is a depth of two thousand feet of water where it stood.
Mount Vesuvius is again in violent eruption, and there are also volcanic disturbances in Mexico. These are of unusual interest because of the warning of an Italian scientist that such disturbances would occur at this time.
Green Bay, Newfoundland, is the probable western terminus of a new ocean steamship route, which is to shorten the transatlantic trip by thirtysix hours. It is claimed that this route will be practically free from fog at all seasons of the year.

The actual number of foreigners in China, outside of Manchuria, is not more than twenty-five thousand, including the Japanese residents. Some of the best authorities think that the total population of China has been much exaggerated, and that it is, in fact, not much more than half of four hundred million, the figures usually accepted. But even at these figures the foreign population is but a thousandth part of the whole; and it is impossible to believe that the foreign influence in Chinese affairs can long continue.

A British inventor has found a new explosive, remarkable for its safety, and more powerful than dynamite. It will not explode by concussion, and can only be set off by an electric spark.

The uneasiness of animals before an earthquake has led an Italian scientist to suppose that an electric disturbance precedes the shock, and he has devised an instrument to give warning of the shock. The warning is too brief to be of much practical value, but a more sensitive machine may give better results.

The rapid increase in the Hebrew population of New York within the last few years is astonishing. The Jews residing in the city are now said to number nearly a million.
The Hudson-Fulton celebration in New York had no more striking feature than the flight of Wright's airship over the warships that lay at anchor in the river. For ten miles up the river and ten miles back it flew, making the whole distance in thirty-four minutes, and landing at the place
from which it had started as gracefully as a bird would settle from its flight.

By a blunder, it was stated in the last Review that the colours used in the official Hudson-Fulton decorations were orange, white and red. This should have read, of course, orange, white and blue. Orange, white and pale blue were the colours' of the House of Orange; and a flag composed of three equal horizontal stripes of these colours was adopted as the national flag of the Netherlands in 1599. The orange soon deepened into red, and the light blue into a darker blue, giving us the Dutch tricolour of to-day.
Though to the English sailor, Henry Hudson, belongs the honour of making known the river that bears his name, he was not the first to find it. That honour belongs to an Italian, Giovanni da Verrazano; and the Italian residents have commenced the erection of a monument to his memory.
One of the war vessels captured by the United States forces in the battle of Manilla, the Don Juan de Austria, has passed up through the Canadian canals unarmed, to be used as a training ship by the Michigan naval militia. By an international agreement, it is provided that neither this country nor the United States shall maintain armed vessels on the Great Lakes. This is the second, if not the third, war vessels on the Great Lakes in disregard of the convention; but it is explained that they are not maintained by the United States government, being lent to the local authorities for militia purposes. Perhaps they are wanted there to take part in the proposed celebration of one hundred years of peace in 1915.
The ship Terra Nova, which has been used as an Arctic exploring ship, is selected for Capt: Scott's expedition to the South Polar regions next year. There is at present a strong French exploring party somewhere in the neighborhood of the South Pole; but if they succeed in reaching the Pole they will not carry it away with them, and the English expedition will start out all the same.

Capt. Bernier has returned from his visit to the Arctic regions, and reports that he has annexed to Canada all the islands of the great northern archipelago. He found great herds of musk-ox on Melville Island; and he describes the climate as not severe, but dry and agreeable in winter. He found there records left by the British explorer Parry, in 1819 and 1820. As his instructions were only to take possession of the archipelago about Grant Land, he was obliged to return when he had done so; but he might have sailed through the straits to the westward and reached the Pacific if he had been free to do so. Sir Wilfrid Laurier has said that the Canadian government will send Capt. Bernier back to the north again next year, and leave him free to go to the North Pole or beyond it if he wishes.

Among the Spaniards fighting in Morocco there are many nobles enlisted as privates in the ranks. They are members of one or other of the three orders of chivalry in Spain who are bound by their membership to fight to drive the Saracen from Spanish soil, the Order of Santiago, the Order of Calatrava and the Order of Alcantara. They feel that their duty requires them to go to the front in person, and they go willingly because the war is against the Moslem in what they consider to be rightfully a Spanish land.

The Transandine Railway, the new transcontinental railway of South America, which is to connect Valparaiso and Buenos Ayres, is to be opened for traffic on the first day of January. It is 888 miles in length, and will shorten the iourney from Europe to Australia by about a thousand miles.

Another English steamship has penetrated far into the heart of the South American continent by following up a tributary of the Amazon, and thus reached inland waters before unknown to European navigation. She carried railway material to Porto Velho, a new town on the upper waters of the Madeira, one thousand six hundred miles from the Atlantic, and not far from the Bolivian frontier.
One of the greatest dams in history is soon to he built in the valley of the Rio Negro, in the Argentine Republic, as part of an irrigation system by which an area of nearly two and a half million acres will be watered.
The great Kiel Canal, from the Baltic to the North Sea, is to be deepened and widened, at a cost which will exceed the original cost of the work. This is made necessary by the increased size of the German war ships for which it must give passage ; for the canal has become and must continue to be an important factor in the national defence.
Serious revolutions have broken out in Hayti and in Nicaragua. That in Havti is as yet confined to a limited district; but the Nicaraguan uprising seems to be general, and business is completely paralyzed.
Immigrants are entering Siberia at the rate of half a million yearly. With a climate much like that of Canada, and about the same area, great natural resources. and a great railwav stretching through its fertile plains, like Canada it is rapidly developing and will be one of the best countries in the world, if it may not already be so classed. Many of the new towns along the railway have more than a hundred thousand population.
The cost of the Panama Canal up to the present time is over two hundred million dollars.

The artificial nitrates made in Norway, and sold in competition with the Chili saltpetre, have proved as valuable a fertilizer as the natural product, and
can be more cheaply supplied. At present, however, the production is so limited that it will not lessen the export from Chili, which approaches two million tons annually.
Mills for spinning yarn from paper have been established in France and Germany. The paper yarn seems to be especially adapted to the weaving of rugs and carpets.
A commencement has been made in the work of transferring the Lapps from Lapland to Labrador. where it is hoped they will flourish and increase.
Not only in Canada, but also in the United States, the Indian population is increasing.
The great pulp and paper works at Grand Falls. New foundland. were formally opened on the 8th of October. The mill is said to be the largest in America, excepting one in Maine. Attractive dwellings have been erected, and churches, schools and a library are under construction in the model town built by the company near its works.
The world is steadily approaching a timber famine. Canada and Siberia are the chief sources of supply; and, in Canada, at least, wood is being used up at a rapid rate.
A wonderfully rich mica deposit is renorted from the Peace River country. If as rich as stated, it is more valuable than any pold mine in the world. The prospector reports a vein two miles in length. with an average thickness of fifty feet and of unknown depth. Mica of the finest quality is worth a hundred dollars a ton.

King Edward has opened the new Tuberculosis Institute in Montreal, by pressing an electric button in England. Connections had been made by wire, over land and under the ocean. When the contact was made in England, the Roval Standard rose in the air in Montreal, and the doors of the building were thrown open.

The Open Heart.<br>Would you understand<br>The language with no word,<br>The speech of brook and bird,<br>Of waves along the sand?<br>Would you make your own<br>The meaning of the leaves,<br>The song the silence weaves,<br>Where little winds make moan?<br>Would you know how sweet<br>The falling of the rill,<br>The calling of the hill-<br>All tunes the day repeat?<br>Neither alms nor art,<br>No toil, can help you hear;<br>The secret of the ear Is in the open heart.<br>-John Vance Cheney, in Century.

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## Quotations in Season.

His store of nuts and acorns now The squirrel hastes to gain, And sets his house in order for The winter's dreary reign.

> -Alice Cary.

It's autumn, autumn, autumn late,
'Twill soon be winter now.

> -William Allingham.

Little Jack Frost ran down the hill
Late in the night when the winds were still,
Late in the fall when the leaves came down,
Red and yellow and faded brown,
Whether the sun, or the rain, or the snow,
There is ever a song somewhere, my dear. -James Whitcomb Riley.
He comes, he comes, the Frost Spirit comes!
You may trace his footsteps now
On the naked woods and the blasted fields, And the brown hills withered brow.

Trees bare and brown,
Dry leaves everywhere,
Dancing up and down,
Whirling through the air.
Red-cheeked apples roasted, Popcorn almost done,
Toes and chestnuts toasted, That's November fun,
-Selected.

> Are you almost disgusted
> With life, little man?
> I will tell you a wonderful trick
> That will bring you contentment, If anything can,-
> Do something for somebody, quick!

> "I cannot do much", said a little star, bitsisdium
> "To make the dark world bright! My silvery beams cannot struggle far Through the folding gloom of night! But Im a fittle part of God's great plan, And III cheerfully do the best that I can"

Oh, what can the matter be? November said, As she wrinkled her brow and tossed high her head; It's "sweet month of May" and "most beautiful June;" November is always, they say, out of tune. I've no robins to sing, nor flowers to blow, But I always whistle the best I know I
I've no April tears, with their coguettish flow, But, instead, little scurries of pure white snow. If summer were coming, why, then in a trice I'd smooth out my wrinkles and look very nice; But, followed by winter, T've hardly the grace For carrying always a beautiful face,
But she banished her frown, and, wiping her eyes, Then turned with a sweet smile as she glided away, And every one said, "What a beautiful day!"

## N. B. Teachers' Institutes.

The Westmorland County teachers at their meeting at Riverside elected the following officers: President, A. D. Jonah; vice-president, Mrs. Lawson; secretary-treasurer, Mr. S. W. Irons; additional members of executive committee, Mr. F. Peacock, Miss McEachern, Mr. H. B. Steeves. The next Institute will be held at Port Elgin.

The Restigouche County Teachers' Institute met in the grammar school, Campbellton, on Sept. 3oth and Oct. ist, the president, L. D. Jones, of Dalhousie, in the chair. Although the attendance did not exceed thirty the interest throughout did not waver. It was an excellent example how a small institute may be conducted to secure the utmost benefit for its teachers. Addresses were given by G. U. Hay on Nature Study and Rural Scheols, and by H. H. Hagerman on Drawing; papers by L. D. Jones on the Teachings of the Great Master, and a Study of English Grammar, by Miss McAffrey. Lessons to classes of children were given by Professor Singleton on Music, by Miss Sarah Duffy on Number in the early grades, and by Miss Alward on Manual Training. A resolution of condolence to the widow of the late E. W. Lewis, for many years principal of the grammar school, was adopted by a standing vote of the institute. The following officers were elected: President. Miss M. E. McNair; vice-president. Miss Sarah Duffy; secretary, Miss Georgina G. L. Dickson; additional members of executive, Miss Elizabeth Cook, Mr. L. D. Jones.

The institute convened at Chatham, October 14th and 15 th, under the presidency of Principal Jas. McIntosh was one of the best held in Northumberland County in many years. The order was excellent and the discussions helpful and spirited. Noteworthy papers were read, some of which the Review hopes to publish in future issues. Inspector Mersereau's presence and his occasional reminders of what he expected from his teachers put them on their mettle. Addresses on topics before the institute were made by Mr. J. L. Stewart, Dr. G. U. Hay and by Dr. H. S. Bridges, whose paper on School Government touched on almost every point that leads to successful work in the classroom. Papers were read by Miss N. Keating on Fractions, by Principal C. J. Mersereau on Training the Memory, by Miss Agnes Wilson, B. A., on Some Impressions of the West (a paper jointly prepared by herself, Misses Estella Carruthers and Constance Anderson), by Miss Laula S. Smith on Nature Study, by Miss Sarah B. Hogan on Physical Culture, illustrated by means of a class of little girls from the Convent School, and a paper on the Training of the Future Citizen by Mr. H. H. Stuart, to which further allusions will be made in these pages. The officers elected were: President,
B. P. Steeves, B. A.; vice-president, Miss Jennie Crammond; secretary, Mr. J. D. Kean; additional members of executive, Misses Kelly and Galloway.

The Kent County Institute which met at Rexton on the same date as the Northumberland Institute, was very successfully conducted under the presidency of Miss, M. Caulie McInerney. Chief Supt. Carter was present and the active part which he took in the proceedings contributed greatly to its success. The following officers were elected for the ensuing year: President, Arthur H. G. Mitchell; vice-president, Miss Ettawanda Palmer; secretary, C. M. McCann; executive committee, Miss M. A. Buckley, Miss Onora Breau. Harcourt was chosen as the next place of meeting.

The St. John County Institute was held at the High School, St. John, October 21 and 22. Mr. W, L. McDiarmid presided, welcoming the teachers and outlining the work. About two hundred teachers were present and the proceedings were harmonious throughout. Some excellent papers were read and ample opportunity was given to discuss them. These discussions, in which many ladies took part, were very effective, the delivery of the speakers good, and marked by a desire to keep well to the points under discussion: An address was given by Inspector MeLean, who dealt chiefly with rural schools and the difficuities of teachers in them; Principal Henry Town read a paper on the Dull Boy, who, he said, is not always a failure in life; Miss Catherine M. Robinson, teacher of music in the Dufferin School, exemplified her method by instructing a class of twenty pupils from grades two and three; Dr. J. P. McInerney, M. P. P., read a paper on the need of Medical Inspection of Schools; Miss Ethel G. Hanna on the Best Books. for Children (to be published in the Review) ; Dr. H. S. Bridges, City Supt. of schools, a paper on Child Nature; and an illustrative address on raffia work and its possibilities by T. B. Kidner, director of manual training. Officers appointed: President, W. J. S. Myles, A. M.; vice-president, Henry Town; secretary, Miss Ida A. Keagin ; additional members of executive, Mr. W. A. Nelson, Miss Isabella J. Caie.

I divided my school into two sections, each of which elected a captain, who held his office for a period of two weeks. His duty was to make a list of the names of the pupils in his division and note absence and tardiness. An absence or tardiness was considered a break. The division having no more than three breaks during the two weeks would be entitled to a quarter-holiday. Thus absence and tardiness were greatly diminished and became very unpopular in the school.-Arkansas School Journal.

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Edmundston.
J. E. DeG.

## School Holidays Calendar, Nova Scotia.

$$
\begin{aligned}
& \text { Labor Day.. . . . . . ......6th September, } 1909 . \\
& \text { Thanksgiving Day.. ......25th October, } 1909 . \\
& \text { Christmas Vacation (eleven teach- } \\
& \text { ing days) begins .... .. . .24th December, } 1909 . \\
& \text { Schools re-open.... .. .. .... 10th January, 19Ia. }
\end{aligned}
$$

The First Quarter of the school year in Nova Scotia consists of the first eleven weeks beginning on the 30 th August- 53 teaching days.
The Second Quarter of ten weeks will begin on Monday, fifteenth of November, and end on the fourth of February -49 teaching days.
The First Half School Year will have 102 teaching days.
A. H. Mackay,

Halifax, October 22, 1909.

Supt. Education.

## SCHOOL AND COLLEGE.

Mr. Aa: - J. Perry, of New Brunswick, and more recently of Okanagan College, B. C., is now at Chicago University working for his Ph. D. degree. The college has granted him a year's leave of absence.

Miss Alice A. Nichols, who recentiy taught school at French Vi.lage and Lime Hill, N. B., has removed to Helderness, New Hampshire, Nhere she has secured a position as teacher in one of the schools of that town. Her experience will prove valuable when she returns to teach in her native province, which she expects to do in the future.

The Provincia! Normal College at Truro, N. S., has opened with an attendance of 170 .

Mr. C. L. Moore, recently supervisor of the Sydney, C. B., school, is taking post-graduate work in biology at Cornell University.

Acadia Seminary has a registered attendance of $105^{\circ}$ students.

The University of New Brunswick has an attendance of one hundred and sixty students this year, the largest in its history.

Miss Louise Wetmore, of Clifton, King's County, N. B, has been appointed assistant instructor in the manual training department of the Macdonald College, Quebec.

Mr. Francis Dawson, of Truro, N. S., has been appoin:ed demonstrator of civil engineering in the Technical College at Halifax.

The County Academy at Truro, N. S., has an attendance of 240 this term, in which fourteen counties of Nova Scotia are represented.
The attendance at the Halifax Ladies' College last year was 534 -the largest in its history. This year efforts are made to increase the numbers.

The opening of the new grammar school building at Richibucto, N. B., took place on the evening of Oc ober 13th in the presence of a large assemblage of residents and those interested in education from other places. Chief Superintendent Carter was present and made an excellent address, which the Moniteur Acadien speaks of as being "perfect in diction, and one which could not fail to make very popular with our compatriots his elevation to the important position of superintendent of educa ion." The new school building is easy of access, well lighted, heated and ventilated.

A gathering of teachers of grades seven and eight of the Halifax public schools listened, on a recent Saturday afternoon, to a nature lesson on the life-history of a mosquito given by Miss Agnes Spencer to children in the al-ove-named grades. The children had the eggs of a nosquito, and each child in the school has an aquarium. They have watched carefully through the varicus stages the development of the insect, and have been taught the manner in which it spreads disease, and how it can be prevented. It was an interesting lesson to teachers and children.

## RECENT BOOKS.

A great book is the Webster's Nete International Dicfionary, just issucd, and new from cover to cover. Whith its 2,500 pages, 6,000 ilustrations, and 400,000 and more defined wordsiand phrases, it is a marvel of schoiarship and completcness. Among its new and more important features are its general information is practically doubled, and it has more the character of an encyelopedia than any proceding edition; each page of definition is divided, the more important words being placed above, the less important below, and in smaller type-a great advantage to students, besides securing economy in space; it includes not only obsolete words, but the words in precess of formation to-day and such slang terms as seem likely to hold their ground for a longer or shorter tern of ycars; the synomyms are almost entirely re-written, and the number of articles increased from 600 to 148. of separate words from 1687 to 4810 , and of citations from 400 to 6000 The editor of the New Webster is Dr. W. T. Harris, formerly United States Commissioner of Education, a man of broad scholarship and accurate judgment. In his concise preface to the work, Dr. Harris says: "The took has been entirely re-made; the previons material has been sifted and re-arranged, a radical change in the construction of the page has been introduced; the defini ions have been treated with nicer discrimination and a more historic method; and in every department there has been enlargement of the vocabulary and an enrichment with new information. Its salient features in comparison with its predecessor are: A more full and scholarly treatment of the whole field of the English language; a great addition of words and definitions; a greatly increased amount of encyclopedic information; a more exhaustive and discriminating treatment of synonyms; and an arrangement of material that makes the dictionary much casier of consultation. In short, the New International is essentially a new book." The book, thotgh a ponderous tome, is but siightly larger than its predecessor. The paper, however, is thinner, and the page a little longer and a trific wider. The pages are clearly printed, the letters, though small, are easily read.

It is doubtful if there is any single book of reference in existence to-day that can compare with the New Webster in utility and comprehensiveness. (G, \& C. Merriam Company, Springfield, Mass.)

The New School of Comparative Geography combines physical and political geography in just proporions, and gives land elevation and sea depths. The maps are clear and distinct, the names of places being printed so that they can be read with case-a feature justly appreciated in a map. (Price 25. 6d. Messrs, Geo. Philip \& Son, 32 Fleet , Street, London).

Lewis's Pupil's Notcbook and Study Outline in Oriental and Greek History is a skeleton of topics with maps and drawings for details to be filled in (rom geographical data and from books to which references are made. (Manila, 144 pages, price 25 cents. American Book Company, N. Y. Morang, Toronto).

## New

 Brunswick School Calendar. 1909---1910Note.-That the Number of school days in this term (ending 31st December) is 80, both for city and country schools.
July 1st-Dominion Day.
July 6th-Departmental Examinations begin.
August 26th-Schools open.
Sept. 1st-Normal School opens.
Sept. 6th-Labor Day.
October 25th-Thanksgiving Day.
Dec. 14th-Examinations begin for Teachers' License, (Class II.)
Dec 17th-Schools close for Christmas Vacation.
Jan. 3rd-Schools open after Christmas Vacation.
March 24th - Schools Close for Easter Vacation.
March 30th-Schools open after Easter Vacation.
May 18th-Loyalist Day, (Holiday in St. John City.)
May 24th-Victoria Day.
May 25th-Examinations for Teachers License, (French Department.)
May 31st-Last day on which Inspectors are authorized to receive applications for Departmental Examinations.
June 10th-Normal School Closing.
June 14th-Final Examinations for License begin.
June 18th-Annual School Meetings.
June 30th-Schools close for the Year.

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## OFFICIAL NOTICES. <br> NEW BRUNSWICK.

After the beginning of the school year 1910-11, Hall \& Stevens Geometry shall be used exclusively in all public schools in this Province, but during the present school year it shall be used for beginners and for those pupils who have not an advanced knowledge of the subject.
The Normal School Final and Entrance Examinations and the University Matriculation Examinations shall be based in 1910 upon Hamblin Smith's Geometry, but not thereafter.
All teachers are requested to use Hall \& Stevens Geometry as a hand-book for purposes of reference and comparison in the work of any grade.
The use of Goggin's Grammar shall begin at once, as all texts in Elementary English Grammar cover substantially the same ground.
Harcourt's Copy Books are to be used caclusivcly in every school, but any pupil who has not finished the work in his last copy book may complete it.

The attention of all ungraded school teachers, as well as those in graded country schools, is directed again to the leaflet on Nature Study and Agriculture, authorized by the Board of Education, copies of which may be obtained from the Inspectors.
Teachers are required to report to the Inspectors during the last school week in December as to the work they have done.
While in town and city schools this course is not yet compulsory, it is recommended that teachers there make use of it as may be possible. Little or no expenditure of school time is required for the purpose.

Days lost at the beginning of a school term may not be made up by teaching on Saturdays, nor may lost time be made up by teaching on Labor Day or other school holidays.
Saturday teaching is discountenanced.

Teachers are requested to fly the School Flags in fine weather.
The Union Jack is recommended as being the most appropriate for school purposes to those requiring new flags.
W. S. CARTER,

Chief Supt. Education.
Eaucation Office, Fredericton, N. B. October Ist, 1909.

I have a little joke that might be worth publishing in the Review. In the geography class the other day (second grade) I asked one of the boys (Joe), what a belt was, referring to the hot and cold belts of the earth. He replied: "It's a thing to keep your pants up."

## OFFICIAL NOTICES.

## nova scotia.

Changes made in the High School Programme of Nova Scotia, as publishod in the Journal of Education, April, 1909. To go into effect immediately for the school year ending July, 1910
(14) A candidate who has taken Latin in Grade IX, may take the 1X French paper instead of the regular one in Grade X. and the X French paper in Grade XI, provided a so or 60 per cent. mark is made respectively for a Teacher's or a Hish School Pass in ieach case.

## GRADE XI

Puysics-The chapters on either (a) Light and Sound, or (b) Elcctricty, to be taken with the rest of the text, ahernative questions to be given on (a) and (b).

Pkntical Mathematics-To be known as Trigonomotry and Monswration. As in Murray's Essentials of Tigonowctry and Mcnsuration, excepting Chapter XI.

GRADE XII.

## (Leaving Examination).

(Nine papers out of fifteen on the following twelve subjects constitute a full coursc. The following subjects are imperative: English, two foreign languages, one mathenatical and one scientific subject; except that those who take both Latin and Greek may omit the scientific subject, and those who make an average of 70 on English, with 5 more on each of the marks and averages determining the respective regular passes, may omit foreign languages).
Excusu-(a) Bradley's. The Making of English may be taken instead of Lounsbury, which will be dropped after next examination. (b) Chaucer's Tales to be omitted.
Latin- (b) For Cicero substitute Cacsar's De Bell, Gall., Books IV and V; and for Virgirs Aeneid, Books II and III, substitute Books I and II.
Greek.-Homer's lliad to be omitted.
Fresch.-Molierc's L'Avare to be omitted.
Algerra-As in Hall and Knight's Higher Algebra. Chapters 1 to end of 18 , and 35 . omitting * paragraphs.
Geometry.-As in Hall and Stevens: (a) Definitions of V and introduction to VI ; (b) VI with exercises to "Theorems and Examples" on VI; (c) Definitions and proved exercises in "Theorems and Examples" on VI; (d) XI without exercises; (c) Wentworth's Analytical Geometry, Chapters 1,2 and 3 .
Triconometry.-(a) Plane as in Murray's Plane and Spherical. (b) 'Spherical as in Mutray's Plane and Spherical, Chapters 1, 2,3 and 4.
A. H. MacKay,

Secretary C. P. I.
Education Office, Halifax, N. S., 30th August, 1909.

Many a teacher sits up at night to correct errors that she might better sit up in the daytime to prevent.-Frank H. Hall.

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## Curing a Cold in Advance.

We get sick because we are too lazy to keep well, according to Dr. Woods Hutchinson in Woman's Home Companion for October. We are always looking for short cuts to health. Of reputed cures for coughs and cold, he says:
Their name is literally legion, for hardly a drug can be mentioned, hardly a substance discovered, which is capable of either being swallowed or inhaled, that has not been recommended as a cough remedy. Eight-tenths of all colds are mild infections, which run their course until the body has time to produce an antitoxin or antibody to stop their further progress. As this process in reasonably healthy individuals is usually carried out in from four to six days, anything which happens to be given in
that time stands a fair chance of getting a reputation as a cure.

The only sure cure for colds and coughs is to avoid the infections and the foul air of ill-ventilated rooms and buildings in which they breed; to keep the body toned up to fighting pitch, by cold baths and an abundance of fresh air, especially in the bedroom; and if the infection does get a foothold to assist Nature in her fight against it by rest in the open air, and promoting elimination through the skin, bowels and kidneys.
In fine, don't tinker with symptoms; look for the cause, and remove it. Don't try to lock the stable door after the horse is stolen, but train your horse to bite strangers. Attack is the best defense. Keep your body at good fighting weight, and you can defy disease: Sunlight, food, fresh air and exercise are the only cure-alls known. Don't worry about disease and what to take when you're
sick, but work for health. sick, but work for health.

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