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# Devoted to Advanced Methods of Education and General Culture. 

## o. U. HAY <br> Editor for Now Brunewick.

## THE BDUCATIONAL REVIBW.

Uflee, 31 Lelnater Street, St. John, N. B.
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St. John, N. B.

## Oe bappy bells of Caster Dap! <br> zing, ring pour jop, through earth and sky,

The Dominion Educational Association will probably not meet until July, 1912, on account of the absence of its president, Dr. J. W. Robertson, in Europe, as Chairman of the Royal Commission on Technical Education.

Nova Scotia has a provincial flower-the Mayflower; New Brunswick has none. Several years ago the Review proposed the beautiful little Twinflower as a suitable floral emblem for the province.

Look for the Empire Day number of the Review -to be issued early in May.

The Review believes that if all the good suggestions made and the material prepared in this number for Arbor Day, be used by our teachers with some interest and energy, there will be a good result accomplished:-The day will be celebrated not only by one-third but by all teachers in the Maritime Provinces, and an impetus be given to nature-study that will brighten the school life for the whole year.

The fortieth annual report of that excellent institution, the Halifax School for the Blind, shows that 161 blind persons were under instruction there during the past year. The work of Principal Fraser in connection with the life and progress of this institution carinot fail to be appreciated by a discerning public.

It is given to but few men to maintain an activeand busy career up to the full age of seventy-five years. But this is the experience of Dr. William Saunders, who on the first of this month retired from the directorship of the Dominion Experimental Farms, a place which he had honorably and worthily filled for twenty-five years. These farms and the work of Dr. Saunders have attracted the attention of the world; both of accoun of the stimulus given to agriculture and the consequent great development of Canada during the last quarter of a century. Tó Dr. Saunders, more than to any other single agency, is due the wonderful progress and extension of our agricultural and kindred interests.

The Rural Science School, the advertisement of which appears on another page of the Review, is
doing an excellent work in preparing teachers to accomplish better results in sciencee, especially in those subjects relating to agriculture. This school has already exerted a wholesome influence on the students who have been fortunate enough to avail themselves of its courses, and the next summer session at Truro should attract a still larger number. In addition to the courses in science there will be classes in physical training, of which many will avail themselves. There should be the best attendance yet at this summer's meeting of the Rural Science School.

## Music in the Public Schools.

It is surprising to note what can be accomplished with children at a very early age in training them to sing. That is a time in their lives when they are least conscious and when they are more susceptible to the sweet simple influence of harmony and freer to express themselves than at any other age.

It was a genuine delight the other day to visit the Dufferin School, in St. John, of which Mr. M. D. Brown is principal, and to hear the voices of nearly five hundred children in chorus during the opening exercises. Afterwards with the teacher of singing, Miss Catherine C. Robinson, to listen to the teaching and exercises going on in the different rooms from grades one to four. The children all sang in that happy spontaneous way, so natural to young children,-free in expression but without that harshness so common in youthful untrained voices. This was a result of careful teaching. The children were learning to read music with surprising facility ; and apparently in the two hundred voices heard there were few, if any, of those who too often say without reason "I can't sing."

If the children in city and country throughout these provinces were taught to read music and sing with trained voices how much happiness it would give to family and social life; and how much it would add to the life and interest of the schools. Nearly all our teachers can sing, and all can teach singing by note with a little instruction and by the exercise of a little will power. With trained supervisors for the cities and towns, and for an assigned number of districts in the country-for it is in the country that this education is most needed-the teaching if music could be carried on with comparatively small cost.

## New Brunswick Schools.

There has been an increase in the enrolment and percentage of attendance of pupils in the New Brunswick schools for the year ending 3oth June, 1910, and the increased attendance, Chief Superintendent Carter states, is furnished almost entirely by the rural schools. The total number of pupils at school during the year was 68,154 with an average attendance of 42,849 for the first term and 42,418 for the second term. The percentage of attendance for the first term was 69.33 ; for the second term 63.21 . The greatest number of teachers employed was 1984. Salaries are slowly but' steadily increasing. The most marked increase has been for first class male teachers. In 1900 their ${ }^{2}$ average salary was $\$ 439.31$; in 1910, $\$ 663.28$, a gain of $\$ 223.97$.

The number of school districts in New Brunswick is 1,535 ; and 107 of these have graded schools of two or more departments in which are included 45 per cent. of all pupils enrolled in the province. In the second term of 1910, there were reported 201 districts without schools.

The editorial writer of the St. John Daily Telegraph estimates that in each of these districts there are twenty children-or 4,000 in all-growing up without the beneft of an education! This is an exaggeration. Many of these districts have had no schools for years past and are practically dead districts. There are thirteen of these in St. John County and nineteen in Charlotte County. There are probably not 400 children in these 201 dead or thinly populated districts, and the greater part of them, get their schooling in the neighboring districts. These "dead" districts should be incorporated with others or buried out of sight, so that no wrong conclusions may in future be drawn.
Dr. Carter thinks that a considerably better showing in school attendance would be reathed if teachers could be obtained with more facility. In spite of the large number of graduates from the Normal School last year-the largest in its history -the supply is not yet equal to the demand.

The Chief Superintendent justifies the proposed increase of salary to the inspectors, urges greater attention to music, drawing and agriculture in the schools, the assigning of Latin and algebra to the high school and the substitution for them in grades VII and VIII of agriculture and more English and commercial subjects.

## Nova Scotia Schools.

Superintendent MacKay in his annual report of the Nova Scotia schools gives a total enrolment of 102,035 pupils, for the year, which was an advance pupils over the previous year, which was an advance of 1,575 on the preceding year. The percentage of daily attendance also rose from 60.7 to 64.3 , while the average daily attendance was 65,629 , an increase of 3,842 over the previous year. The number of school sections (or districts) in the province is 1,804 , and 2,579 schools were in operation with a total of 2,723 teachers.
A remarkable tendency noted in the report is the rapid increase of female candidates in the competition for high school certificates. Last year the male candidates increased by only two, while the female candidates increased by 190. The two sexes were represented in the high schools by 3,181 boys and 5,476 girls.
There is no doubt that the other Maritime Provinces show an equal if not a greater disproportion of the sexes attending high schools. This failure of so many lads to take advantage of the advanced educational courses must be viewed with some concern.
There were III sections in which no schools were open during the year. In 1904 there were 240 sections without schools. The inspectors are awakening every year these schoolless communities into life. In Cape Breton there are twenty-one sections without schools; in Yarmouth and Shelburne only two in each county.
Dr. MacKay refers in the following gratifying terms to the work of the teachers of the province: "Never before have they shown a greater consciousness of their responsibilities, and made greater efforts to qualify themselves to discharge their duties, so that the highest interest of the pupils, the parents and the state might be subserved." A proof of this statement is the fact that some 500 Nova Scotia teachers took advantage of the courses in the three summer schools held in that province last year-the Rural Science School at Truro, the Summer School of Science at Liverpool, and that of St. Francis Xavier at Antigonish.
Other educational reports will be dealth with in the next number.

Send early for the Empire Day Song, of which notice is given on another page.

For The Educational Review.]

## Arbor Day in a Knothole.

Donnie leaned against the post of the new verandah where I sat, tucked up for an airing, and picked with his knife at a loose knot in the unpainted wood.
"What makes these things in the wood, mummie?"
"They're knots," was my most inadequate reply.
A moment's silence was broken by a distinctly doubting voice.
"Did someone tie a knot in the wood, mummie? It doesn't look like it."

I scowled, but Don's back was toward me. I had been answering questions pretty concientiously all day-not to speak of the past three years-and my own thoughts just then were very interesting. But 'something' prompted me, and I switched on to his line. It, too, interested me. I did not have to pretend.
" No. I wonder how they came to be called 'knots,'" I said. "I mean, I'd like to know if there's any association between them and the knots you tie."
"Muz! Just look what that kid's doing !" called Walter from the window. Walter, I may explain, is nearly twelve; Don not quite six, and, of course, a mere "kid."

I referred the question to the newcomer, who solemnly declared it a "knotty problem." You may not believe this. I never believed that young children have any capacity for original humor, if indeed they have a sense of humor at all, until I knew Walter. Whether he is marked by fate for a funny man or not, I don't know, but the trouble developed early.

I shall never forget my. first shock of this sort, he was still in his lisping years. As a man was leaving the house, Walter asked me who he was.
"That was John Snow," I said; and that child grinned up at me with "Is he any lation to Jack Frost?"

But we take no special notice of it. We are in dread of his becoming a "smarty." So, on this occasion I only smiled and said, "Perhaps you've given us a clew. We call a problem 'knotty' when its hard. Does the knot seem harder than the rest of the wood, Don? I'd rather you wouldn't pick at that one-holes in the verandah are not right, are they?-there are waste pieces of board out there, with krots in them."

In a minute, the boys had examined the knots and announced that some seemed harder and smoother than the rest of the wood and some softer and rougher.
" I guess we're on the wrong scent," said Walter.
(I am so tired of telling them not to 'guess' when they ought to 'think,' that I decided it really was a 'guess' this time.)
"Why shouldn't a knotty problem be/ knotty because it's all tied up?"
"Perhaps," I assented; "involved, intricate, like a knot. Hm! The dictionary or some of the language books may help. I wish you'd find out for me after tea."
Walter was busy cutting a "W "一of coursewhen Donnie held up a bit of board.
"Look, mummie, the funny holes! The knots came out. They weren't in straight."
"And you haven't found out yet what makes the knots, have you?" I encouraged.
"Why they're-" Walter began, but caught my look and went on with his carving.
" It would be good fun to find out. Walter can help you some. You know where the wood came from?"
"Papa brought it from Jackson's."
Walter gave a chuckle of superiority.
"I s'pose he thinks Jackson put the knots in to fill up holes."
" I don't!"-with a 'punch' at Walter's anatomy.
"What were they doing when you were at Jackson's, Don " I asked.
"The big saw was making planks out of the logs; and I saw them making boards like these, too."
"Were there knots in the planks and boards then ?"
" I don't know. I didn't think about knots then."
"Well, I love to get hold of something I didn't think of before; don't you?". (Silence.)
" Mummie! I know! I know! They're little branches."
"Good for you, son."
"And that big, big one in the plank," (I had noticed him examining one) that was a big branch -the plank was a big tree!"
"And you said these knots were not in straight," I ventured.

The jig-dancing stopped. He poked his fingers into the knotholes again and glanced out at the
bare maples on the lawn. I saw the idea coming, and suggested, " you might put a stick in for a branch."
"They don't go 'zackly like those out there, do they, Mum?"
"Hello! Here you are with your little class intent on its specimens and full of the zeal for experiment!" Don was already hugging his father's knees.
"Go away, you incorrigible pedagogue! The child is just amusing himself," I protested. " Don't, in mercy's name, tell him he's 'studying' anything ; you'll spoil the fun."
" Walter had the mats up in the front hall when I came in. I asked if he was house-cleaning, and he said, ' Dad, hardwood has no knots in it, has it?' 'Can't you find any?' said I. 'But hardwood trees have branches' he was debating when I came out."
" Walter must be on a separate hunt of his own," I laughed. "Donnie has an idea that he could tell what kind of trees these boards were by the angle of the knots, the way they're arranged, and all that. I'm sure I couldn't."

Here Walter burst out with, "I know, muz! The hardwood branches are so high up-and there's no balsam in the knots, either!"
I saw from this disconnected jargon what he had been thinking out, but my leisure time was all spent, for that afternoon.
"It will do you good," I advised the pedagogue, "to go with them up to the woods before tea. Take Milly too; she has been at that piano over an hour."

I longed to go with them and follow up the discoveries. I am densely ignorant about these dear, out-of-door things, having had the misfortune to spend my childhood in a city.
" I'd think," said Walter, picking up one of the pieces of board, "that the knots would be only in the outside of a $\log$, but all these boards can't be from the outside."
"You mean because the branches are all on the outside of the trunk?"
"Yes. At least-do they come from away inside ?"
"It does look like it; but I never thought of it that way. You can easily find out next time you are at the mill."
"You'd hardly think, Muz, that a tree was planning, years ahead, what branches it was going to have, would you."
"I don't know, dear. But we'll have to find out just where the branches do start from."
As the others came out of the house, Mildred pointed to a board in the verandah. "It looks as if that tree had made a good deal of preparation for that knot. Look at the pretty, wavy grain of the wood all around it."
" Well, see here, Mill, if you know so much, why is that knot hard and smooth, and that one all spongy?" Not getting an immediate answer, Walter went on, "I guessed that, and I'm going to see if it's right. Those branches were cut off and got all dried out before the tree was cut down. 'That right, dad?" And off they went, talking about painting the cut ends of our apple tree branches.
The pedagogue's baby sister was spending the Easter holidays with us. She is the zealous little school-mother of fifty pupils in an unequipped country school.

At tea time I asked the children about their puzzles, and we were deluged with finds, facts, surmises, questions, contradictions, and what not. They had been to the oak grove, to the pine wood, to Jackson's. They had seen knots in long section, in hard wood, in soft wood; Don had cut off a branch and "made a knot" himself. He had a sweet-smelling shingle full of dark knots, which he insisted upon taking to bed with him. They had spruce gum and pussy-willows and half a dozen kinds of buds-only one twig of each kind, to keep in water, for we never destroy a bit of living tissue wantonly. The little school-mother listened and smiled and glowed. As soon as we three were alone, she began:
"Constance, you are a wonder, the way you draw those children out!"
"E-duco," began the pedagogue, but she paid no attention to him.
"Oh, I don't really know a thing," I explained;
"I just get their curiosity aroused and set them looking for things so they can teach me."
"Well, I don't care. Your's is the best waythe right way. It's the way we need to get hold of in the schools," she persisted.

Here the pedagogue produced some rough sketches of tree-branching which Milly and Walter had been putting in his blank-book, and casually remarked that he had just seen the first Grackle, and Walter the first Swamp Sparrow they had observed this spring.
"Do you know, I've been worried to death," said the little school-mother, "about what I'd have for an Arbor Day lesson. I want them to really learn something, to get some real acquaintance with trees instead of just singing and reciting about them and telling what they're good for, in the old hackneyed way; and now I have a whole craniumload of ideas, if only I can get them into order and carry them out."
"Arbor Day in a knothole!" the pedagogue managed to wedge in.

Next morning the lesson was roughly sketched out, something like this:
Materials-Cross sections of hard and soft wood showing knots; pieces of board and plank; shingles; polished wood.
I. The Knothole: (1) Shape; (2) size; (3) iniside surface; (4) compare in different trees; (5) conclusions from $1,2,3$.
II. The Knots: (1) Color ; (2) grain, closeness and direction; (3) any 'rings'? (4) compare 'grain' in cross section with grain of wood in same; (5) occurrence; (6) angle; (7) depth they reach in trunk; (8) notice presence of sap, balsam, etc.; (9) what keeps them firmly in? (i0) What causes them to come out; (iI) conclusions from 5, 6, 7, 8, 9, 10.
III. Practical Generalizations: Comparative desirability for building of knots and clear wood-effects of painting, staining, etc.
IV. Other Lessons: Branching habit of different trees (drawing). Stories about nests, etc., in knot holes.

A week or so later I had a letter from the little school-mother in which she said:
"The knothole topic and its many outgrowths not only enlivened our Arbor Day programme, but has kept us alive and busy ever since. One boy wanted to know if root branches made knots in the roots, and I offered to go with three of the boys to find out. Eight turned up (on Saturday) and we had a great bird-and-tree-trip. One afternoon last week, I took twenty, sending the rest home. Next week I am going to take twenty girls. They have unbent wonderfully since finding that I , too, am only a searcher. Our trips have been the greatest pleasure and have been truly profitable. And I have had only one note from an irate parent about the wasted time. My little visit to you has been an inspiration."
March 28th, 1911.
J. W. M.

Why is an oak struck by lightning more frequently than any other tree? Because it is said that the grain of the oak, being closer than any other tree of the same bulk, renders it a better conductor; and also that the sap of the oak contains a large quantity of iron in solution, which impregnates the wood and bark, thus increasing its conducting power.

## THE EDUCATIONAL REVIEW.

## For The Educational Review.]

## The Arbor Day Spirit.

"The chestnut tree is about the only ofne I associate with Arbor Day programmes," said a teacher to me, trying to hide her discouragement by a tired little laugh. "It's so hard to get anything but the same old stuff."
If there are other Arbor Day planners verging upon her condition, there are a few things of which they might remind themselves. It may be true that there is nothing new under the sun, but there are infinitely various ways-new ways-of bringing oneself and one's pupils into touch not only with "old" mother nature, but with each other. Running water and electricity are as old as creation, but men are not tired of them yet. Honour and hope are as old as the race and yet live to inspire each generation in a new way.

The flatness and staleness may be in yourself. You are out of condition. Perhaps you need more rest and meditation. Perhaps you are thinking too much of the letter and too little of the spirit of the Arbor Day programme. A mechanical, because-it's-my-duty observation of the day may do the children some good, (though I doubt it) but it is only a weariness to you.

If you have little or no new material, remember that young children love repetition and it is the old favorites that are begged for beside the nursery fire.

If you are tired of the same old ideas even in your new material, remember that the children have not that tired feeling; (unless they've been cooped up and kept still in bad air) all the world is comparatively new to them. The more you get their point of view, the better. And beware-they are only too liable to get yours.

Just forget about the " old stuff" and " consider the little children" for a while. Allow yourself to fill up with the joy of springtime and the beautiful mystery of returning life. Emphasize beauty in your personal and school atmosphere. Do not forget the original purpose of Arbor Day-tree planting; but, if you cannot possibly have trees planted with a fair chance of a beautiful result, there are window-boxes, creepers, a coat of paint, a whitening of fences, a clearing of the playground. Be sure that something active and practical is done in the interests of beauty. Why not start a doublerow hedge of spruce along the road frontage of your school-ground? With the parents interested,
it is not so hard as it sounds; and a hedge certainly adds dignity and beauty to the place.

The Arbor Day spirit is good, not for one day only, nor for a 'celebration' merely. It is akin to the Easter spirit. And surely the belief in life and good eternally triumphant over death and evil. is a part of that everyman's non-dogmatic religion which has a place in the public schools. It ought to infuse a certain glory into the work of the whole season.

Life mounting from the dead in trunk and vein, In white and yellow glory from the clod;
Spring on the earth in sun and wind and rain; Spring in the soul proclaiming, "Life is God."

## March 29.

J. W. M.

## The Flowering of Trees.

The white or silver maple blooms in late March or April. Before the buds have been noticed to swell, the flowers are out and gone. Few there are quick enough to catch this tree in bloom with its small inconspicuous flowers.

The red maple comes more deliberately and for a fortnight or so in May its flowers redden the woods.

The willows and poplars belong to the same family. They are all early to put forth their catkins, some erect, some drooping.
"Have you ever seen the blossoms of the oaks?" says a writer on this subject. "They do not hang on so persistently as do those of the maples, or scatter their pollen so abundantly as the pines. But they blossom none the less. Most of them wait until May to hang out their sparsely set tassels, but one must get the eye trained upon them earlier, watch the young leaves slowly unfold, and finally really ' catch them at it.' The blossoms of the trees are quite as varied in color and form as any other flowers. Trees are by no means a family by themselves; for instance, the apple and the thorn trees (and he might add the bilberry and cherry) belong to the rose family; the elm to the nettle family; the locust to the pea family, and so on. You can see the family resemblances, too, with half an eye.
" Make note, with care, which of the trees and shrubs of dooryard and fence row are still bare at the end of April, which are leafless but blossoming, and which are delicately clothed with new foliage intermixed with flowers. The nut trees lag at the very end of the procession, while sumac seems unduly cautious about putting forth its leaves."

## Arbor and Bird Day Quotations.

## Hepatica.

Good morning, sweet April, So winsome and shy,
With a smile on your lip And a tear in your eye. There are pretty hepaticas Hid in your hair, And bonny blue violets Clustering there.
-Selected.

## Spring.

A little bit of blowing
A little bit of snow,
A little bit of growing And crocuses will show.

On every twig that's lonely a new green leaf will spring; On every patient tree-top a thrush will stop and sing. -Carolyn S. Bailey.

## The Easter Lily.

The pure white lily raised its cup
At Easter time, at Easter time;
The crocus to the sky looked up

## At happy Easter time.

"We'll hear the song of heaven!" they say,
"Its glory shines on us today;
Oh, may it shine on us alway At holy Easter timel" -Selected.

## Spring Flowers.

There is to me
A daintiness about these early flowers
That touches me like poetry. They blow out With such a simple. loveliness among The common herbs of pasture, and they breathe Their lives so unobtrusively, like hearts Whose beatings are too gentle for the world.
-Nathaniel P. Willis.

## Violets.

God does not send us strange flowers every year; When the spring winds blow o'er the pleasant places, The same dear things lift up the same fair faces.

The violet is here.
-Adeline D. T. Whitney:

## Cheerfuiness.

It isn't raining rain to me;
It's raining daffodils,
In every dimpled drop I see
Wild flowers on the hills.

The clouds of gray engulf the day And overwhelm the town;
It isn't raining rain to me; It's raining roses down.

A health unto the happy;
A fig for him who frets.
It isn't raining rain to me;
I 's raining violets.
-Selected.

## The Oak.

Downward is sent out a thread-like root, Up in the air springs a tiny shoot;
Day after day, and year after year, Little by little the leaves appear,
And the slender branches spread far and wide
Till the mighty oak is the forest's pride.-Selected.
It seems idolatry with some excuse
When our forefather Druids in their oaks Imagined sanctity.
-Cowper.
He heweth him down cedars, and taketh the cypress and the oak, which he strengtheneth for himself among the trees of the forest; he planteth an ash and the rain doth nourish it.-Isaiah xuv., 14 .

In fact there's nothing that keeps its youth
So far as I know, but a tree and truth.
-O. W. Holmes.

## The Elm.

The elm in all the landscape green,
Is fairest of God's stately trees;
She is a gracious mannered queen,
Full of soft bends and courtesies.-Smith.

## The Eagle.

He clasps the crag with hookéd hands;
Close to the sun in lonely lands,
Ring'd with the azure world he stands.-Tennyson.

## The Kingfisher.

Have you ever seen my fisher friend Where some lone brook is flowing, When summer's skies are blue and clear, An'd summer's flowers are blowing?
-Alix Thorn.

## The Gull.

I see the solemn gulls in council sitting
On some broad ice-floe, pondering long and late,
While overhead the home-bound ducks are flitting,
And leave the tardy conclave in debate.
-Oliver Wendell Holmes.

## The Blackbird.

Blackbird! sing me something well; While all the neighbors shoot thee round, I keep smooth plats of fruitful ground, Where thou may'st warble, eat and dwell. -Tennyson.

## The Swallow.

The robin may warble his merriest tune,
The leaves may be green on the tree,
But the blithe little swallow will wait for the June;
For the bird of the summer is he.-Selected.

## The Owl.

In the hollow tree, in the old gray tower, The spectral owl doth dwell;
Dull, hated, despised, in the sunshine hour,
But at dusk he's abroad and well!
Not a bird of the forest e'er mates with him;
All mock him outright by day;
But at night, when the woods grew still and dim,
The boldest will shrink away!
O , when the night falls, and roosts the fowl,
Then, then is the reign of the hornéd owl!
-Barry Cornwall.

## The Song Sparrow.

He does not wear a Joseph's coat Of many colors, smart and gay,
His suit is Quaker brown and gray,
With darker patches at the throat
And yet of all the well-dressed throng
Not one can sing so brave a song.
It makes the pride of looks appear
$A$ vain and foolish thing to hear ,
His "Sweet-sweet-sweet-very merry cheer."

A lofty place he does not love,
But sits by choice, and well at ease,
In hedges and in little trees
That stretch their slender arms above
The meadow-brook; and there he sings
Till all the field with pleasure rings;
And so he tells in every ear,
That lowly homes to heaven are near. In "Sweet-sweet-sweet-very merry cheer."

I like the tune, I like the words;
They seem so true, so free from art,
So friendly, and so full of heart,
That if but one of all the birds,
Could be my comrade everywhere,
My little brother of the air,
This is the one I'd choose, my dear,

Because he'd bless me every year,
With "Sweet-sweet-sweet-very merry cheer."

> -Henry Van Dyke.

There is a bird I know so well,
It seems as if he must thave sung
Beside my crib when I was young;
Before I knew the way to spell
The name of even the smallest bird,
His gentle, joyful song I heard.
-Henry Van Dyke.

## The Bluebird.

The bluebird chants from the elm's long branches,
A hymn to welcome the budding year.
The south wind wanders from field to forest,
And softly whispers, "The spring is here."-Bryant.

## The Sandpiper.

Across the narrow beach we flit,
One little sandpiper and I;
And fast I gather bit by bit,
The seattered drift-wood, bleached and dry.
-Celia Thaster.

## The Mayflower.

[The author of the following expressive verses on "Acadia's own peculiar flower," is John McPherson, born at Liverpool, N. S., and named the "Harp of Acadia." He died in 1845.]

Sweet child of many an April shower,
First gift of Spring to Flora's bower,
Acadia's own peculiar flower,
I hail thee here!
Thou com'st, like Hope in Sorrow's hour To whisper cheer.

I love to stray with careless feet,
Thy balm on morning breeze to meet-
Thy earliest opening bloom to greetTo take thy stem,
And bear thee to my lady sweet, Thou lovely gem.

What though green mosses o'er thee steal,
And half thy lovely form conceal-
Though but thy fragrant breath reveal Thy place of birth-
Gladly we own thy mute appeal, Of modest worth.

Thy charms so pure a spell impart,
Thy softening smiles so touched my heart,
That silent tears of rapture start,
Sweet flowers of May !
E'en while $I_{1}$ sing, devoid of art, This simple lay.

For The Educational. Revisw]

## The Forest.

[The following verses are well worth study, from the many pictures and sounds of the forest that are presented. No need to say that the author is a lover of the woods and a thoughtful observer.]

Magnificent, rich, broad and deep, Into thy boundless depths I peep;
Now, O Forest! reveal to me Thy fullness vast in herd and tree.

A great inheritance thou art:
From out the fullness of thy heart
Thou hast bestowed upon our race Rich trophies, in thy wood and chase.

Thy mountain slopes so broad and steep, With valleys wide and rivers deep,
And waterfall's stupendous power Proclaim thy greatness every hour.

Thy cedar, pine, and spruce, and fit, Hemlock and birch with leaves astir; Beach, ash, maple, elm and oak, A tribute to thyself evoke.

And hackmatack, of grand design, Whose leaning top's unerring sign Directs the course of traveller lost In summer heat or winter frost.

Beauty of flower, fern and moss, Their verdant heads, elf-like, they toss; Thine odors sweet from petals rare, Thy grandeur is without compare.

Thou dost surround, sustain, protect Expansive lakes, which thee reflect; From thy large depths comes costly wood; From thy vast herds come fur and food.

Thine awing stillness, so sublime, Is broken up from time to time By varied sounds from far and near That fall upon the woodsman's ear.

The blaring call of antlered moose; Perchance, the honk of passing goose; The hoot of owl, the song of birds And softly falling hoofs of herds.

The distant roar of cataract high, The moaning wind's responsive sigh, And brooklet's ever-murmuring song,All join, their chorus to prolong.

Such other sounds oft fill thy vales, And mountain slopes and hills and dales, As, drumming partridge, droning bees, Or creaking of two chafing trees.

A numerous progeny is thine,
In den and cave and nest or lair,
Whose threatening growl or plaintive call,
The timid traveller may appal.
The howling wolf and yelping fox, With lucifee in furry socks,
And myriad others, great and small,
Lift up their voices' varied call.
Thou hast a charm, a beauty rare, Which I behold when free from care, In rushing brook and gurgling rill, Or dim outline of distant hill.

In shaded nooks, on wooded knoll, Where stealthy huntsmen often stroll;
Or open vistas, seen afar,
As mammoth portals left ajar.
Thine ancient trails and tangled maze, With garlands fair arrest my gaze; And leafy bank and mossy dell,-
They all unite thy charms to tell.
Thou source of ever-flowing streams;
Thy underlying mineral seams,
And wealth in wood and water-power,
Great benefactions on us shower.
Infinitude of fronds and leaves;
Richer than prairies' garnered sheaves;
Or, in autumnal tints arrayed,
More beautiful than pearls displayed.
Forest! such treasures thou dost hold;
May we assert our manhood bold,
Protect from fire thy verdant tracts,
And guard thee from the wanton axe.
If such be done, as well it can,
Thou wilt remain for use of man,
Abiding source of golden health,
Perpetual legacy of wealth.
Sackville, N, B.
C. E. Lund.

The coming of the Review is always eagerly looked for, as I find so many valuable suggestions and hints and so much interesting and instructive material. I would not want to be without it. Kindly continue to the same address until further notice.
S. M.

## The Legend of the"Mayflower.

[The following three stanzas are from the beautiful poem, "The Legend of the Mayflower," by Agnes Maule Machar, in "Lays of the True North and other Canadian Poems." The spirit is in harmony with the springtime and the woods.]

When the Maple wears its tassels and the birch buds grow apace,
And the Willows gleam out golden in the sunset's tender grace,
And the ferns, amid the mosses, their curly heads uprear,
Then awakes our wilding blossom, first and fairest of the year-
The Mayflower-oh, the Mayflower; Sweet of scent and fair to see,
Tiny, trailing, pink arbutus, chosen flower of Acadie!
There's the robin plaintive fluting in the budding boughs above,
And the cat-bird sweetly warbling for the pleasure of his love,
Are they telling the old story, how a gentle Indian maid,
Vainly seeking her lost lover, through the forest tireless strayed?
The Maytlower-Oh, the Mayflower! Sweet of scent and fair to see,
All the woodland feels thy fragrance, chosen flower of Acadie!

Do they tell how-'mid her sorrow for the one she held so dear-
Every sad and suffering creature still she sought to help and cheer,
Till there sprang up in the pathway of her ministering feet,
The Mayflower's tender blossoms-full of fragrance rare and sweet?
The Mayflower-Oh, the Mayflower! Sweet of scent and fair to see,
Filled with all the springtime's sweetness, chosen flower of Acadie!
-Agnes Maule Machar,-Lays of the True North.

It will prove a pleasing diversion if, when the days of spring approach, we arrange a bird-list and a flower-list for the pupils of our schools, having them report on birds and flowers that are first seen, giving the name of the bird or flower and opposite this the name of the pupil who made the discovery. These lists can be made upon the blackboard and allowed to remain so as to be a constant reminder that birds and flowers are the special order of business on the way to and from school.-Ohio Educational Monthly.

## The Coming of the Birds.

By J. W. Banks.

## April Arrivals.

The swamp song sparrow (Melospiza georgiana) is a common summer resident, arriving about the fourth of April. The first few weeks after their arrival they arè very friendly, associating with the hosts of other sparrows in gardens and private grounds. As the nesting season approaches they become timid and seclusive, retiring to their native swamps and wet bushy meadows. Their nest is usually built in a clump of dead rushes. Their song is a sweet, clear trill, heard only from the dense shrubbery. The colors are-breast ash, crown bright chestnut, back brown streaked with dusky.

The fox sparrow (Passerella iliaca) is an abundant spring migrant, arriving about the fourth of April. They are very friendly and sociable in the spring, making themselves thoroughly at home in gardens and back yards, scratching in the earth for weed seed, hunting ash and rubbish heaps for crusts of bread; a marrow bone is a prize to be fought for. On their return in the autumn from their summer home in the Arctic regions, this friendly joyous habit of spring has vanished. They are distrustful and wary and are rarely seen.

## Protective Coloring.

One day in the autumn I had halted at the edge of a piece of hardwood. The ground was covered with a thick carpet of brown leaves. The trees were bare and gaunt and the view extended. I looked and listened in vain for a movement of wing or a wildwood note. I sat down with my back against a moss-covered stump. Soon I was conscious of a rustling of dry leaves. Turning my head very slowly I saw fox sparrows to the right of me and fox sparrows to the front of me, half buried in the brown leaves, scratching away as busily as nailers. Wishing to understand more of this transformation scene, I arose to my feet. Instantly all was motionless as before. How well they understood that their russet-brown dress matched the color of the dead leaves !
The vesper sparrows (Pocecetes gramineus) are rare summer residents, becoming more plentiful each year, arriving about the sixth of April. They are beautiful birds, fully as large as the fox sparrow; much darker than the white-throated
sparrow; more black and white striping on the back and wings, with a patch of bay on the bend of the wing. They were formerly known as the baywinged bunting, but from their habit of singing their beautiful song from sunset till dark are called the vesper sparrow.
Their nest is a slight affair, constructed of dried grass, usually under a root of an old stump in a pasture field.
The white crowned sparrows (Zonotrichia leucophrys) are rare spring visitors, summering in the far north. They are large, handsome sparrows, having the same black and white striping on the back and wings as the vesper sparrow, but with the distinguishing pure white crown. They were quite friendly, and remained so long in the garden in the rear of my house I had hopes they would remain during the summer, but the lure of the Hudsonian fauna enticed them away.

The savanna sparrow (Ammodramus savanna) is an abundant summer resident, arriving about the sixth of April. This plainly dressed little sparrow is very timid and shy, inhabiting grassy meadows. They rarely alight on anything but the ground, threading their way through the grass stems with remarkable speed. Their song is a few faint notes, sounding more like a grasshopper than a bird. A cavity is scratched out by the mother bird in which the nest is neatly woven of dry grass stems. the brim of the nest being level with the ground. Two broods are raised in a season.

The savanna may be distinguished by a bright yellow line over the eye, in the form of a crescent.

## A Dainty Brealfast.

It was a day in the first week in April, 1907. Flocks of several species of the sparrow family had arrived, dressed in the springtime brightness of their bridal plumage. A mantle of snow which had fallen the night before covered the ground. The birds were disconsolate. At the rear of my house, surrounded by high fences, but with plenty of space from the south and west for sunshine, I cleared the snow from a space about ten feet square and covered it thickly with chaff from a neighboring hayloft. The chaff I found on examination to contain an abundance of timothy seed, some clover seed, and several kinds of weed seed. Weed seed with its wonderful vitality has the vigor of the wild berry wine. I find it is eaten in preference to cultivated seeds by the sparrow family. I was
rewarded for my labor with the most pleasing picture of animated nature I have ever witnessed. The space I had covered with chaff was alive with hungry little sparrow birds, picking and scratching away for dear life. There were white-crowned sparrows, vesper sparrows, swamp sparrows, fox sparrows, song sparrows, and juncos. It was bewildering to single out six different species of the sparrow family!

## An April Day.

Gushes of bird song, a patter of dew,
A cloud and a rainbow's warning;
Sudden sunshine and perfect blue-
An April day in the morning--Harriet Spofford.
Patter, patter, let it pour,
Patter, patter, let it roar;
Down the steep roof let it rush,
Down the hillside let it gush;
Tis the pleasat April shower
Which will wake the sweet Mayflower.-Selected.

## Birds.

I think, when God made birds, and sent them forth
To fly 'mid heavens and earth, on fine, fleet wings, He must have said, "They are such little things, I will endow them graciously, and worth Excelling other, large and strong of earth""
And so, when grace and beauty had been given, Added one gift from out the choirs of heaven-Song-so divine that, whether birds fly north, Or south, or east, or west, they still must be Glad messengers of God to human kind; Warbling from lowliest bush or loftiest tree Lessons of trust and joy, in melody Ecstatic, or serene; wherein we find Some happy hint of immortality.-M. D. Tolman.

## Birds Through an Opera Glass.

Florence A. Merriam, in "Birds Through an Opera Glass," says: "When you begin to study the birds in the fields and woods, to guard against scaring the wary, you should make yourself as much as possible a part of the landscape.
The observance of a few simple rules will help you to be unobtrusive:"
First-Avoid light or bright-colored clothing.
Second-Walk slowly and noiselessly. Among the crisp, rattling leaves of the woods, a bit of moss or an old log will often deaden your step at the critical moment.
Third-Avoid all quick, jerky motions. How many birds I have scared away by raising my glass too suddenly!

Fourth-Avoid all talking or speak only in an undertone. Fifth-If the bird was singing, but stops on your approach, stand still a moment and encourage him by answering his call. If he gets interested he will often let you creep up within operaglass distance. Some of the most charming snatches of friendly talk will come at such times.

Sisth-Make a practice of stopping often and standing perfectly still. In that way you hear voices that would be lost if you were walking, and the birds come to the spot without noticing you, when they would fly away in advance if they were to see or hear you coming toward them.
Seventh-Conceal yourself by leaning against a tree, or pulling a branch down in front of you. The best way of all is to select a good place and sit there quietly for several hours, to see what will come. Then you get at the home life of the birds, not merely seeing them when they are on their guard. A low stump in a raspberry patch, and a log in an alder swamp prove most profitable seats.

In going to look for birds it is important to consider the time of day, and the weather. Birds usually follow the sun. . . . During heavy winds and storms you are most likely to find birds well under cover of the woods, no matter at what time of day; and then, often on tiee side opposite that from which the wind comes. . . In clear weather be sure to get between the sun and your bird. In the wrong light a scarlet tanager or a bluebird will look as black as a crow. Let your eyes rest on the trees before you, and if a leaf stirs or a twig sways, you will soon discover your bird. At a little distance it is well to gaze through your glass.

## How to Plant a Tree.

Dig a hole plenty large and deep. Do not be afraid to bend the back. Leave some pulverized earth in the bottom of the hole.
> "There gently lay the roots, and there Sift the dark mould with kindly care, As, round the sleeping infant's feet, We softly fold the cradle sheet."

After the roots are carefully covered then press the earth down solid as the hole is filled. Then the wind as it moves the tree will not disturb the roots.

Leave loose earth on top so moisture may soak in. Let the children plant nasturtium seed and thus cultivate the ground.-Supt. O. J. Kern.

An Inspector writes: "The Review is a 'good thing, and I am always pleased to find that teachers are taking it. The pictures you give with it are worth the subscription price. Many of the teachers passe-partout them for schoolroom decoration:"

For The Educational. Review.]

## Music: Its Relation to the Public Schools.

Judging by the development of public school music in England and the United States, the day is not far distant, when there will be a demand for teachers properly qualified to teach this most important subject. The application by day school teachers of clearly defined educational methods, evolved from the experiences of the school room, for the last forty or fifty years, is producing results not thought possible fifteen or twenty years ago.

Every normal child can sing. This faculty of the mind should receive its proper share of development. Only with the consummation of this side of education will the people of the country know the wealth of beauty and truth revealed to us by the great masters of tone thought.

The fact has been established beyond a doubt that every human being who is sound physically and mentally, can sing if trained from youth. Why should something that enters into the daily life of a people, as does music, be left to haphazard development? Imagine a church service, a social gathering, or a patriotic entertainment without music. The whole gamut of emotions through the seven ages seek expression through music in some form.

In the Maritime Provinces wherever music study, under proper supervision, has been introduced into the public schools, results have been exceedingly gratifying. After its introduction into the schools of Fredericton, in an experimental way for three years, music became so popular, that the school board provided for its place as a regular study on the school curriculum. The work being done by the grade teacher, with the assistance of the supervisor is most satisfactory.

Music-Lover.

Rural communities have much to be thankful for if they have a good school. Health, strength, vigorous minds, and the soothing influences of country life quite outweigh the weakness of city life. Cities do have many modern conveniences but they lack that which they would buy at big prices, if they could. Vigorous rural communities have much to be proud of and much to be thankful for.

## For the Little Folk.

Queer little worm in the garden, Why do you hide in the ground? Don't you like better the sunshine, And merry birds flying around?
No, little child," it said softly, "In a little cocoon I must lie, Wait while my gay wings are growing, Then in the sunshine I'll fly."

Grow as the trees grow, Your head lifted straight to the sky, Your roots holding fast where they lie In the richness below.

How do birds first learn to sing? From the whistling wind so fleet, From the waving of the wheat, From the rustling of the leaves, From the raindrop on the eaves, From the children's laughter sweet, From the plash when brooklets meet. - Mary Mapes Dodge.

## Which I Like Best

First
I like the willows in a row,
For they have pussies they can show. Second

The sturdy oak, so straight and tall, I like the very best of all.
Third
I choose the maple with branches wide,
Where the robins can their round nests hide. Fourth

You can guess my tree when I have said The one I like best bears apples red.
Fifth
How does the oriole hang its nest
On the dear old elm I like the best? Sixth

I like all trees both great and small,
For our kind Father made them all.
(This is given by six children, each holding an appropriate spray. A little march or suitable song would be a pleasant ending.-Primary Education.

## A Game for Rainy Days.

Children enjoy the game of the "Cat and the Mice " immensely. A child is chosen for the " Ole Gray Cat." The requirements for this role are few-he must be a good runner and his shoes must be guaranteed to be more than one week old. If the actor chosen for the part has not these accomplishments, the game may not be a success. Any
children will do for the mice-say, seven or eight at a time.

When the game commences the "Ole Gray Cat" retires to a convenient corner, and the "mice" creep along up and down the aisles while the rest of the school sings :

The little mice are creeping, creeping, creeping,
The little mice are creeping all through the house.
Use any tune for this that the children may improvise-that is, any tune that your conscience will allow.

Next the mice begin to nibble at imaginary cheeses held between their fingers, as the school sings :

The little mice are nibbling, nibbling, nibbling,
The little mice are nibbling all through the house.
Then the little rodents fall asleep on convenient desks, as the others sing:

The little mice are sleeping, sleeping, sleeping,
The little mice are sleeping all through the house.
Now, as the unwary nibblers lie in more or less dreamy slumber, the "Ole Gray Cat" begins to emerge slowly and cautiously from his lair, and the school sings, with hushed, apprehensive voices:

The old gray cat comes stealing, stealing, stealing,
The old gray cat comes stealing all through the house.
And, now, old "Gray Whiskers" is upon them, and to the inspiring lines,

The little mice are scampering, scampering, scampering,
The little mice are scampering all through the house.
they run about the room with the "Ole Gray Cat" after them. As soon as he touches a mouse the latter is "caught," and must retire more or less gracefully to his seat. The scampering continues until every mouse has been caught, when the "Ole Gray Cat," covered with glory, becomes once more an ordinary child, to be turned at the magic word into a mouse, if the fates are kind and it isn't time to stop playing.-Primary Education.

Concert recitation counts for little or nothing. It divides the class into leaders and followers. It masses them. Method should individualize. It denies the teacher an opportunity to know the shirkers and the inattentive. If used at all it should be only on very sleepy occasions.-Pedagogic Pebbles.

For The Educational Revikw.]

## The Browntail Moth.

## William McIntosh.

The Browntail Moth, the most destructive insect pest which has ever been introduced into these Provinces, was first noticed in Somerville, Mass., nearly twenty years ago. It was supposed to be a native species, but as it increased in abundance it was brought to the attention of entomologists and pronounced the Browntail Moth, a European pest which had doubtless been introduced into this country by accident.

When first observed the Browntail Moth covered only a few square miles in Somerville and Cambridge.

The dangerous character of the insect was not recognized at first, and so they were permitted to multiply. The original colony yielded a swarm of moths, which flew or were blown by high winds over a wide territory. As the female moth is a strong flier its spread has been rapid. The insects are strongly attracted by light; therefore, when the moths arise from any infected spot and, are blown to a distance by the wind they fly to the nearest mass of lights. Thus cities and towns usually become first infested and from these the moths spread into the country. Electric cars, automobiles, railroad trains and steamboats transport them. The writer obtained thirty-four adult males at one time on one of the steamers plying between Portland and St. John.

The Browntail Moth now occurs throughout eastern New England, Nova Scotia, and within the month it has been discovered in two localities in New Brunswick.

## Its Life History.

In the latter part of July the Browntail Moth lays from two hundred to four hundred eggs in masses on the under side of leaves. The eggs hatch early in August, and the young caterpillars feed gregariously upon the upper leaf surface. They soon begin to fasten a number of leaves together with silken threads which they spin, forming a nest on the ends of the small branches. With the approach of cold weather the caterpillars enter the nests and close the exit holes. They remain there through the winter, coming out in April or early in May and feeding upon the buds and later the opening blossoms and leaves. The caterpillars become full grown the last of June and are between
one and two inches in length-a dark brown hairy caterpillar with an indistinct row of white dots down either side and two conspicuous red dots or tubercles on the posterior end of the body. Pupation usually takes place the latter part of June; and the moths emerge from the cocoons from the ist to the 20th of July. Both sexes are similar except that the female is larger. They are pure white with a golden brown tuft or the end of the abdomen, giving it the name of the Browntail Moth.
The caterpillars are known to feed upon over eighty species of trees and plants-pears, apples and the stone fruits being preferred. The damage by caterpillars to trees is only part of the story. Whenever these insects come in contact with human flesh they produce a most severe and painful irritation, due to a poisonous principle within the hairs.

The habit of the caterpillar in wintering over in nests at the tips of the branches gives a key to the simplest and cheapest method of destruction, which is to cut off and burn the nests during the fall, winter or spring. This preventive means is most effective, and gives such excellent results that in Germany, France and Belgium there is a law making it obligatory on property owners to destroy the nests during the winter season. Where citizens neglect to carry out this work it is done for them by local authorities, and the sum thus expended added to their taxes.

## The Browntail Moth in New Brunswick.

The first adult Browntail Moth taken in Canada was captured by the writer at Nerepis, N. B., in 1902, since that time many adult male moths have been taken in various parts of the province. A careful watch has been kept for this dangerous pest, but until the present year no proof that the insect had become established in the province could be obtained. On March 14, 1911, a colony was discovered by Fred McInnis, of Pomeroy Ridge, Charlotte County. In this colony thirty-two nests were found. On March 27th, a Browntail nest was received from Geo. L. Bartlett, Bayside, Charlotte County, and another from Clarence Sampson, of the same place.

These discoveries, all by school boys, are the result of educational work in the schools, carried out under the direction of the Agricultural Department of the Provincial Government. The result of this educational work is most gratifying.

Teachers report numbers of nests, and webs suspected of being Browntail nests are being brought to the schools. A very large number of specimens are being sent to the writer for identification.

By interesting the school children in this matter and educating them regarding the life history and appearance of the Browntail, the teacher can perform a most useful service to the country, for if every district has a group of keen-eyed searchers who know the Browntail nests it will be impossible for this pest to become abundant without being detected and reported.

## Our Native Wild Animals.

A subscriber at Bristol, Carleton County, N. B., sends the following, which shows what illustrations frequently fall to the lot of wideawake readers:
While our school was discussing the paragraph about the Canadian lynx in the March Review, a trapper arrived from the forks of the Miramichi, having with him several skins of that animal, also a live lynx. We were all able to note its fierceness and hear its terrible screams.

The trapper, during the last five years, has captured fifty-six lynxes, but has tried unsuccessfully until this time to take one alive.
We were also able to see the skins of minks and other animals. Since Christmas sixty skins had been taken.
We thought you might be interested in this.
Yes, we are interested and thank our correspondent for the trouble she has taken.
Mr. J. W. Banks, the naturalist, in a paper read a few evenings ago before the Natural History Society of New Brunswick, enumerated with descriptions of their habits, etc., some twenty-two mammals that have been found in the vicinity of Rockwood Park, St. John. They are, -the bat, shrew, white-footed deer mouse, Canadian field mouse, mole, chipmunk, flying squirrel, red squirrel, raccoon, fox (the black and silver-gray are varieties), red lynx, Canada lynx, Canadian woodchuck, porcupine, muskrat, American hare (commonly but incorrectly called the rabbit), skunk, weasel, mink, black bear, whitetailed deer, moose.

How many of these have you seen? What native mammals are not enumerated in this list

The smallest tree that grows in Great Britain may be seen on the very top of Ben Lomond. It is the dwarf willow, which at maturity reaches a height of only two inches.

St. Nicholas for April contains the first of a series of papers on The Battle of Baseball. The papers will run through the playing season, so that not only can any boy who reads them try the plays, himself, upon his own field, and against his own pet and particular "enemy," but note upon some professional field what is described. Wherever possible, every play of importance, every point, will be illustrated with an actual concrete incident, which really happened, upon a regular league field, showing just what was done, how it was done, and who did it.
It is the author's aim in his " story" to get at the heart of the game and tell of it from a boy's standpoint, and to show him, not only the wonders done by skilled players and fine teams, 万ut how he, too. can become skilful.

The real teachers of literature are the great writers themselves. The appeal of any work of art is individual and direct; and the greater the work, the more clearly it speaks for itself, and the more serious is the danger of the teacher coming between the author and the reader. In literature, form and matter, words and thought, are inseparable; and if appreciation is to develop at all, it must have at its root close acquaintance with the actual text of the book studied. Its growth in the pupil's mind may be in part fostered by the teacher; but its ripening must come from other influences-from unconscious associations, from remembrance, and, above all, from widening experience of life-School World.

A large number of the nests of the browntail moth have been discovered in Charlotte County, N. B., and others are reported from Nova Scotia. Mr. Wm. McIntosh, the Curator of the Natural History Society of New Brunswick, has been visiting schools in Charlotte County, giving illustrative talks on the moth and nests. The result is that an active search by teachers and pupils has been organized, with the discoveries recorded above. The governments of Nova Scotia and New Brunswick have been active in sending out to schools and orchardists pictures and descriptions of the browntail moth, and as a consequence there is or soon will be an army of young and quick-eyed searchers eager to destroy the nests of this pest.

## An Easter Egg Game.

"A jolly game for wee folks to play at Eastertime is that of 'Touch,'" says Woman's Home Companion for April. "Nor is it necessary to confine this amusement to the very little people, for it would make an appropriate entertainment to introduce after an Easter luncheon party where the Easter egg enters into the scheme of table decorations. Place six eggs, which have been colored green, red, black, blue, yellow and one left white, in a pan or basket of moss or bran, leaving some space between. One of the players is blindfolded and then provided with a light stick or wand. With this she carefully touches one of the eggs, reciting slowly and distinctly at the same time:
> " Peggy, Patrick, Mike and Meg See me touch my Easter egg;
> Green and red, and black and blue,
> Count for six, five, four and two;
> If I touch an egt of white,
> A forfeit then will be your right;
> If I touch an egg of gold,
> It is mine to have and hold.'

"As the rhyme tells, the colors count as follows: Green, six ; red, five; black, four; blue, two, and the yellow egg is worth more than all of them combined, for when a player touches that she wins the game regardless of the standing of the other scores. The white egg is less than nothing, as whoever touches it has a forfeit to pay. The method of determining this would wisely be decided before the game opens.
"Each player is blindfolded in turn, and when the score of, say, twenty is reached by any single player, the game is ended without the aid of the 'golden egg.' Of course, the relative positions of the eggs must be changed with each player."

## An April Night.

The moon comes up o'er the deeps of the woods, And the long, low dingles that hide in the hills, Where the ancient beeches are moist with buds Over the pools and the whimpering rills.

And with her the mists, like dryads that creep From their oaks, or the spirits of pine-hid springs, Who hold, while the eyes of the world are asleep, With the wind on the hills their gay revellings.

Down on the marshlands with flicker and glow Wanders Will-o'-the-wisp through the night, Seeking for witch-gold lost long ago By the glimmer of goblin lantern light.

The night is a sorceress, dusk-eyed and dear, Akin to all eerie and elfin things,
Who weaves about us in meadow and mere
The spell of a hundred vanished springs.
-L. M. Montgomery, in Canadian Magasine for April.

Every boy and girl passing through the first five or six grades should know several folk-songs thoroughly, melody and words, and "The National Anthem" and "The Maple Leaf." In the case of the last two the words should be known thoroughly. Many pupils are going away from school with a hazy knowledge of these important songs. I suppose we have all been at public meetings when the National Anthem was being sung; a part of thé gathering was either not singing, or was making a sound with no intelligible words. This is not quite right, and we, as teachers, should see that the boys and girls up to, say, Grade VII know a fair number of songs thoroughly and appreciatively; and if we accomplish this, in so doing we shall have added somewhat to that complex thing which we call "Canadian citizenship."- E. K. Marshall, in The Western School Journal.
[Those who heard the Sheffield Choir sing the National Anthem in St. John recently will never forget the effect that fine voices and training produce.]

Every family may have a garden. If there is not a foot of land, there are porches or windows. Wherever there is sunlight, plants may be made to grow; and one plant in a tin can may be a more helpful and inspiring garden to some mind that a whole acre of lawn and flowers may be to another. The satisfaction of a garden does not depend on the area, nor happily on the cost or rarity of the plants. It depends upon the temper of the person. One must first seek to love plants and nature, and then to cultivate the happy peace of mind that is satisfied with little. . . If the plants grow and thrive he should be happy; and if the plants that thrive chance not to be the ones that he planted, they are plants nevertheless, and nature is satisfied with them.-L. H. Bailey.

Dr. Nansen, in a paper read recently at Berlin, examined the evidence in view of the Icelandic discovery of America, and repudiates it. He believes that Columbus was the first to discover America.-Scientific American.

## How Teachers May Waste Time.

By repeating questions and answers, making too much of trifles; spending too much time with slow pupils; giving inexplicit directions. By unskilful and illogical questioning; prompting pupils too soon; and thus confusing them; by illogical arrangement and development of lessons; by tardiness in beginning work after an intermission; by allowing tardy responses to questions and commands; poor assignment of lessons; failing to see that all pupils are at work; attempting to teach before attention is secured.

By failing to become acquainted with the physical defects of certain pupils, such as deafness or nearsightedness; by doing all the mechanical work, and not allowing the pupils that privilege; by making lengthy explanations, when a blackboard illustration, picture, or map, would make the same point clear in less time; by burying lessons with too much talk; by nagging and scolding; explaining what pupils already know; giving orders, and immediately changing them; by not using signals; by correcting the language of pupils when they should be made to correct if themselves.
By explaining what pupils may study out for themselves.-School Edrication.

## Origin of Travel Paths.

Professor W. F. Ganong in commenting on portage routes in New Brunswick, has the following curious and interesting reference to the origin of highways:
It is very probable that most of the Indian portages follow ancient game-trails. I have, myself, been privileged to see, among the remote waters of New Branswick, still unvisited by sportsmen and lumbermen, the fine game trails, forming deeply-worn paths, which the great game animals, especially the moose and deer, have made in travelling from lake to lake as they seek new feeding grounds. Such trails are no doubt the result of long trial and selection by those animals, and represent as a rule the easiest and usually the most direct route between the waters. The first Indians to come into the country would have but to follow them. These trails tend naturally to follow the lowest ground.
The portage routes ishow, therefore, an interesting evolution.
First, an ancient valley, deprived by geological changes of its original stream, connects two lakes, each a source of an important navigable stream. Second, at a great time past the large game animals wandering from water to water formed marked trails along the valley. Third, the first wandering Indian followed these trails in his first explor-
ations, thus finding the most direct and easy route between waters. Fourth, he marked out the trails and made them known to his fellows, thus establishing definite portage routes. Fifth, the white man came and adopted the Indian's route in his search for lumber, places for settlement, etc. Sixth, the lumberman came and cut out the portage paths to allow his lumbering teams to pass, making a folerable road. Seventh, the advance of settlement necessitates highways which follow the same general route, deviating in places to keep on the best drained ground. Eighth, railways follow and take the same general route parallel with the highways across the watersheds.

## Old Easter Beliefs.

That the sun danced upon the morning of Easter Day was a common belief among our Anglo-Saxon ancestors, and lads still rise early on Easter Sunday morning in Rhineland in the hope of seeing the orb of day give three miraculous leaps for joy.

An old English Easter Eve rite was that of extinguishing all the fires in connection with the churches and then lighting them anew ceremoniously. An entry concerning this custom occurs in the churchwardens' accounts of St. Mary-at-Hill, London, in the year 1507 , being a payment of sixpence "for a quarter of coals for the hallowed fire on Easter Eve."
England once had a custom peculiar to herself and to no other nation; for Good Friday was the day on which rings were blessed by the kings of England, and afterwards given away as remedies for the cramp, fever, and falling sickness. These "medicinable" rings were held in high favor, and even recommended by the physicians of the day; for Andrew Boarde, in his "Breviary of Healthe" ( 1557 ) says, "the kynges majesty hath a great help in this matter in hollowing crampe rings, and so given without mony or petition."

Those are not fit to be teachers who are not growing; who do not love children; who are spiritually dead; who are without enthusiasm: who do little because paid little; who are satisfied with just ordinary results; who are teaching just to get a little money ahead.

Although I am not in the teaching profession during many years last past, I have been greatly interested in all the progress being, made in educational matters, and I enjoy the reading of the Review.

New Westminster, B. C.
J. M,

## Review's Question Box.

J. S. M.-Will you kindly answer the following questions in the Review's Question Box:
I. Is it the "Union Jack" or the "Canadian Flag" that is used for public schools?
2. On what days is the said flag to be hoisted?
3. Is there a Summer Course for N. S. teachers in Truro this year? If sb, between what dates?
4. Where is the nearest place for teachers of Inverness County to obtain their military drill and physical training certificates?

1. The Union Jack or Red Ensign.
2. In Nova. Scotia, no dates are specified. All notable days from local to empire significance should be flag days.
3. See advertisement in this Review.
4. The Rural Science School, Truro.
M. W.-1. Why is there a difference between sun-time and standard time in most places?
5. Why does the moon rise later each day? ,
6. What is the composition of plants; and what do they take out of the soil?
7. Give the feminine form of the following nouns: (a) gaffer; (b) heritor; (c) mallard; (d) milter; (e) swain and $(f)$ sire.
8. Sun time is the moment at which a place passes under the sun as the earth revolves. Standard time is the time established by law or by general usage over a region or country. In England it is Greenwich mean solar time. In Canada five standards of time have been adopted, corrèsponding to the mean local times of the 6oth (Sydney), 75th, 90th, 105th, I20th meridians. Our time in the Maritime Provinces is that of the 6oth meridian which is four hours slower, or earlier, than Greenwich time. This was adopted instead of sun time some years ago to make the time agree with railway time which must of necessity be uniform throughout a district.
9. The moon moves eastward in its revolution round the earth which takes about twenty-eight days. If the moon rise at six o'clock this evening, tomorrow evening at the same hour it will be farther eastward and be nearly an hour later in coming to the horizon.
10. Plants are made up of minute bodies called cells, which in the growing parts contain living matter called protoplasm, bounded by a cell wall. In the fibrous or woody parts the living matter has been withdrawn, the cell walls becoming thickened
and pressed closely together to secure compactness and strength, as in the stem and other parts containing woody fibres. They obtain from the soil food elements in the form of salts dissolved from certain mineral substances such as sulphur, phosphorus, calcium, iron, etc.
11. (a) Gammer; (b) heritrix; (c) duck or mallard-duck; $(d)$ spawner; (e) nymph; $(f)$ dam.

## The Loose Ends.

We are convinced, from much observation in the school-room, that teachers do not sufficiently summarize the important points of a lesson before the close of the recitation period. If the lesson is an interesting one the bell is apt to ring before the matter in hand has been quite completed and the lesson is, therefore, left at loose ends in the pupils' minds.

To be sure, it requires a good deal of skill on the teacher's part, sometimes, to save a few minutes at the end of each recitation for this summary, but it pays to do so. Adults unconsciously pursue this summing up process in their reading and study, but it is easy for the important points of a lesson to become obscured in the child's mind by the details upon which he is obliged to fasten his attention, and the two or three minutes, therefore, which the teacher takes to place the facts of the matter in hand in their proper relation, leave him with a clear, well-defined idea of the subject in his mind. This idea he is apt to remember until the next recitation, even if he forgets some of the details. Every teacher knows how easily the latter are lost from one day to another and how much time is consumed in picking up the dropped stitches. Some of this time might be saved by the above plan.-Popular Educator.

The mistress of a certain village school was one day examining a few of her select pupils in grammar.
"Stand up, Freddie, and make me a sentence containing the word 'seldom,'" she said, pointing to a small urchin.

Freddie paused as if in thought, then with a flush of triumph on his face replied: "Last week father had five horses, but yesterday he seldom!"Christian Register.

## CURRENT EVENTS.

The disputes between Russia and China have not yet been adjusted, and may still end in war. Apparently Russia is, better prepared for conflict than is China, and the Chinese may, therefore, for the present, submit to what they consider to be unjust demands. Among these is the demand that Russians in China shall have certain rights and privileges that are denied to Chinese residents in Russian territory; which really means that in China and elsewhere the Russians shall be allowed to treat the Chinese as an inferior race.
The Universal Races Congress will assemble in London in July next. Representatives of all the races in the world will meet as equals, and discuss how prejudices may be removed and more friendly relations established between Western nations and the other peoples of the earth. India, China, Japan, Turkey, Persia, Egypt and other Eastern and African countries will be represented by writers and speakers of their own native races. Twelve Colonial governors and eight Colonial premiers will be among the British representatives; and no other Empire has more need to deal with the grave problem of being just and fair to other races. Perhaps we-may add with truth that no other Empire has done so more successfully.
-Negro farmers from Oklahoma are coming into Canada in considerable numbers, because they are treated more fairly under our laws than they were under those of the United States.
A new political movement, under the leadership of Lord Dundonald, former general officer commanding the military forces of Canada, is known as the Imperial Mission. Its purpose is to promote the interests of the Empire at large, and place before the people of the United Kingdom the point of view of the Oversea Dominions. The Duke of Argyle, formerly Governor-General of Canada, is the honorary president.
Immigration to Canada from the United Kingdom is so far this year fifty per cent, larger than it was in 1910; and there are also more immigrants coming from the United States than there were last year. An enormous rush into the new country of the Peace River is expected. There are asphalt deposits in that region which are supposed to be very valuable.
The richest tungsten mine in the world is located in Guysboro County, Nova Scotia. It has recently been sold to a syndicate of Canadian capitalists.
The British, German, French, Italian and Belgian governments and the government of the United States are cooperating in the exploration of the upper air. This is done by means of small balloons that explode with the pressure of the contained gas, and parachutes that bring back safely the delicate instruments which are sent aloft. A meteorograph, as it is called, was recently sent up from Toronto; and a temperature of ninety degrees below zero was recorded at a height of seven miles. Strange to say, a lower temperature is found at a greater height.
After the first of October, it will be unlawful to have common drinking cups in any park, public building, factory,
theatre, school or railway station in New York. An investigation by the city board of health has shown the great danger of the transmission of disease by their use.
A great engineering work has, just been completed in Arizona. It is called the Roosevelt dam; and, with the exception of the great dam at Assouan, in Egypt, it is the largest work of the kind in the world. It dams the waters of the Salt River, making an enormous storage basin for irrigation. The dam is one thousand and eighty feety long, and forms a reservoir twenty-five miles long and more than two hundred feet deep.
Wireless operators in San Francisco claim to have caught messages from the Atlantic coast and also from Japan. Two scientists in Germany have discovered that messages can be sent from one mine to another, through solid earth and rock; and it is even suggested that the earth may be used instead of wires for the transmission of ordinary telegraph and telephone messages. Westinghouse, the great electrician, finds reason to believe that mechanical power can be transmitted by wireless methods; and that the electric current generated by waterfalls in remote mountains can be sent without wires to distant cities, there to furnish heat and light and power. But the greatest discovery in applied electricity since the invention of the electric light perhaps is that wireless messages may be directed in their course. Under certain conditions they will follow along an electric wire without at all interferring with the message that is on the wire. It is, therefore, not strictly wireless. Its greatest importance lies in the fact that it requires but a small fraction of the power that is needed for an ordinary wireless message, which expends its force equally in every direction, the greater part of it wasted in space.
This is the centennial year of Portland cement, so called from its resemblance, when set, to a certain building stone obtained at Portland, England. Though the discovery of the process of making the cement dates from 18 II , the first important work to which it was applied was the building of the Thames tunnel, in 1828 .
The British government has not yet recognized the new government of Portugal. The elections in Portugal have been postponed for the fourth time, and there is a strong movement for the restoration of the monarchy.
The remains of the late King of Siam, who died in October last, were cremated at Bangkok last month, with great pomp and ceremony. This was in accordance with the national custom of Siam. The dead are generally cremated in that country; but it is only in the case of princes that this takes place so long after death.
In remote parts of Norway and Sweden, where drugs and medicines are hard to procure, boxes containing drugs, ointments and bandages are placed beside the roads. When an inhabitant needs any of these materials, he goes to the box, takes what he wants, and leaves the money to pay for it. The honesty of the people is such that the right amounts are always left, and though the money is not collected for weeks, none of it is ever stolen.
There were nearly three times as many books published last year in Russia as there were in England.

## SCHOOL AND COLLEGE.

Dr. H. S. Bridges, City Superintendent of Schools, St. John, N. B., recently spent a month' in a trip to the south, visiting schools in the cities of Washington, Philadelphia, New York and Boston.
Mr. D. B. Boyd, of Antigonish, N. $\mathrm{S}_{\mathrm{v}}$ a student of the Dalhousie University Law School, has been appointed temporary principal of the Young Street school, Halifax, at a salary of $\$$ ilo a month.

Principal Sexton, of the Nova Scotia Technical College, left Halifax early this month for Europe with the Royal Commission on Technical Education. He will be absent for three or four months, studying with the members $f$ the Commission the methods and developments of the more advanced technical schools of the Old World.
Dr. David Soloan, Principal of the Provincial Normal College of Nova Scotia, is attending the meeting of the Simplified Spelling Board in New York. He will return in time for the opening of the College after the Easter vacation on the 20th April.
Rev. Dr. R. Magill, Professor of Philosophy in the University of Dalhousie has been appointed by the government of Prince Edward Island as the representative of its education department at the second quadrennial Conference of the Education Departments of the Empire, which meets in London on the 25 th of April.

Professor Clarence L. Moore, M. A., of Dalhousie University, has been appointed to take charge of the biological work at the Provincial Normal College, Truro, during the months of April, May and June.
Miss Annie B. Drake, teacher, of Mount Pleaミant, Carleton County, N. B., and Mr. Frank W. Allen, of Yarmouth, N. S., were two successful competitors in a subscription guessing contest offered by a Montreal weekly newspaper. The winners will be given a free trip to Europe this summer.
Two newspapers in Nova Scotia, the Halifax Herald and the Sydney Record, are offering free excursions'to England abcut coronation time to those teachers who gain the greatest number of votes for the sale of their papers.
Superintendent of Education, Dr. Alex. Robinson, of British Columbia, is on his way to England to attend the quadrennial Conference in London this month.
Supt. D. McIntyre, of the Winnipeg schools, is on a visit of inspection to many of the schools of eastern Canada and the United States. He was recently at Sussex, N. B., and visited the fine new school building there of which he spoke in terms of praise.

The N. S. Journal of Edvication will be issued early in A rith nror to the departure of Supt. A. H. Mackay, who leave for England on the 1gth of April to attend the. Educational Conference in London.
Supervisor Kempton, of the Yarmouth schools, says in nis rep rt "Every teacher in Yarmouth wants to do
what is right and for the good of the pupils. Every parent ought to desire the same. The teacher's task is a hard one. Parents can assist by visiting the schools, consulting the teachers, and giving them their strong moral support. Every teacher will meet the parent more than half way in any plan to benefit the child." This, we believe, is the growing desire of parents and teachers.

The contract has been awarded for putting up a new school building of ten rooms in Woodstock to replace the old college building which has been a landmark in that town for many years.
The government of Nova Scotia has enacted a law, authorizing the appointment of a superintendent of neglected and dependent children. His duty shall be to aid in the formation of children's aid societies in the province; to visit and inspect industrial schools and homes where children are kept; to visit any home where an adopted child is living; to keep a record of those wishing to adopt neglected children, and to act as chief probation officer for juvenile delinquents in Nova Scotia.
The regular civil service examination, preliminary and qualifying, for the outside division of the service will begin on the gth May at Halifax, Yarmouth, Sydney, Charlottetown, St. John, Fredericton, Moncton and other centres. throughout the Dominion. Application forms for the examinations, and all information relating thereto, may be obtained from the secretary of the Civil Service Commission, Ottawa. All applications from intending candidates must be filed on or before the 15th of April.
The meeting of the Northumberland County, N. B., Teachers' Institute has been set for September 14th and 15th, at the Grammar School, Chatham.
Principal R. E. Gaul, of St. Mary's Boys' School, Halifax, has resigned after a long and honorable record of twentyfive years' service.

Miss Josephine Dumas, of Caraquet, N. B., and more recently of Winnipeg, is taking a course in the School of Expression in Boston.

Dartmouth, N. S., proposes to build a $\$ 50,000$ modern school house.
Principal McCoubrey, of the Bayside, Charlotte County, N. B., school, organized a search of Bayside orchards for the browntail moth on Saturday, April Ist, and discovered a large number of nests of these pests in several orchards.

## RECENT BOOKS.

In the Modern Dictionary of the English Language, pub-lished by MacMillan and Company, the words are printed in bold, clear type which is a great convenience and timesaver to the student. The book is specially suitable for the use of pupils in the secondary schools and the upper classes of elementary schools. It will also be found very convenient to the general reader of ordinary current literature, as much care is bestowed on the selection of modern words and phrases. For a small English dietionary it is

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very good. (Cloth; pp 772; price 45 cents net. The MacMillan Company of Canada, Limited, Toronto.)

Idealism in Education is a book that should command a general reading on account of the interest with which the author, Dr. H. H. Aorne, of the New York University, has invested his subject and the important conclusions he derives. The book is divided into five chapters, treating respectively of Education in Man-Making, Heredity and Education, Environment and Education, Will and Education and Philosophy of Man-Making. Many of the topics are treated in an original and graphic way, in which men and women as unfolding personalities are viewed as the worthiest objects of human endeavor. In the last chapter these human personalities are viewed as the indistinct but developing images of the Divine Personality. There is nothing tedious or trite in the book. (Cloth; pp xxi +183 ; price, $\$ 1.25$ net. The MacMillan Company of Canada, Limited, Toronto.)

The Essentials of Character, by Dr. E. O. Sisson, prefessor of Education in the University of Washington, is a book written with considerable vigor and common-sense, and should be a help to many teachers in the somewhat difficult problem of moral education. The author's statement in his introduction that "we should be able,not to make what we please out of any child,--but to make of every child the best that he is capable of becoming," is the key-note of this excellent work which cannot fail to exert a healthy influence on teachers, parents and children. (Cloth; pp. $x+214$; price, $\$ 1.00$ net. The MacMillan Company of Canada, Limited, Toronto.)

In Geographical Diagrams and Land Forms of the British Isles we have a large number of maps, statistics and questions useful to the teacher of geography. The beautiful series of photographs, showing pictures typical of the surface features and the most beautiful scenery of the British Islands is an interesting feature. (Price, Is 6 d . Adam and Charles Black, Soho Square, London.)
There are many interesting and curious things to be found in the volumes of English History Illustrated from Original Sources. Six of this useful series have been published and the seventh, just received, is even more interesting thah its predecessors. It is an account of Britain from the earliest times to 1066 . The selections from original documents, the fine representations from old MSS.
and other sources, and the good quality of text and illustrations make this perhaps the most instructive in this useful series of history readers. Cloth; pp xviii +233 ; price, 2s 6d. Adam and Chas. Black, London.)

The Essentials of Latin Syntax is by Dr. C. C. Mierow, of Princeton University, and presents in a concise and orderly way the results of his experience in teaching Latin Composition. The facts of syntax and the illustration of grammatical principles are particularly useful to the student who wishes to make the most of his time. The noun, pronoun and verb are treated separately, and a full index renders it an easy matter to refer to any construction. The book is especially adapted for use with advanced classes in preparatory schools, or with college freshmen, as it presents a rapid survey of Latin syntax as an organized whole. (Cloth; pp. vi +98 ; price, 90 cents. Ginn \& Company, Boston, Mass.)
[Other books received will be reviewed in the next number.]

## Military Drill and Physical Training.

Judging from the numerous enquiries being received by the Local Secretary of the Summer School of Science in Fredericton, respecting the courses to be given in these two subjects during the coming summer, it appears that some confusion exists regarding them in the minds of many teachers.

The course in military drill is for males only, and is open to teachers or prospective teachers who wish to qualify themselves for the organization and instruction of cadet corps. The course lasts for six weeks, and takes up the whole time of those who enter upon it.

The course in physical training is open to teachers of both sexes, and consists approximately of thirty lessons of one hour, usually spread over three weeks. At the conclusion of the course, a certificate is granted by the militia department. The Cnief Superintendent of Education announces that in order to obtain a teacher's license in New Brunswick, it is now necessary to have this certificate. Also, that after the end of the present year, all teachers must possess it to obtain advance of class, and, further, that at the end of four years from the same date, all schools must provide physical training by qualified instructors.

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Application for admission to the military drill course must be made to the Chief Superiptendent of Education, and for the Summer School of Science to the Local Secretary, Fredericton.
The St. John Globe has always been a strong friend of Education, and in further proof of the interest that it has always taken in the matter, has given a scholarship of twenty dollars, to be repeated next year, to the Summer School of Science.
During the Meeting of the Summer School in Fredericton, the Senate of the University of New Brunswick will give a Garden Party to the members of the school. New Brunswick teachers who attended a similar function at the College during the Provincial Institute in the summer of 1908, have many pleasant recollections of the charming afternoon spent there on the beautiful grounds of the Old College on the hill, overlooking the delightful landscape of the St. John Valley.

## OFFICLAL NOTICES.

As inquiries continue to be made as to the amount of Geometry required for both Normal School Entrance and the Finals, the following are the requirements for each.

Normal School Entrance.
Class II. Part I, with Exercises.
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Normal School Finals.
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## N. B. School Calendar, 1911.

April 13 Schools close for Easter vacation
Apl. 10 Schools open after Easter vacation.
May 18 Loyalist Day (holiday in St. John City.)
May 24 : Victoria Day.
May 25 Examinations for Teachers' License (French Dept.)
May 31 Last day on which Inspectors are authorized to receive applications for Departmental Examinations.
June 9 Normal School Closing.
June 13 Final Examinations for License begin.
June 3u Schools close for the year.
Nova Scotia School Calendar, 1911
April 14 Good Friday (holiday).
May 1 Application for Headmaster examinations to be in.
May 5 Arbor Day.
May 23 Empire Day.
May 24 Victoria Day (holitây).
May 25 Applications for High School Examinations to be in.
June 26 Regular Annual Meeting of School Sections.
June 28 Normal College closes.
June 29 County Academy Entrance exaaminations begin.
June 30 Last teaching day of school year.
July 1 Dominion Day (holiday).
July . 3 High School and Headmaster Examinations begin.

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