PAGES MISSING

Educational Review.

Devoted to Advanced Methods of Education and General Culture

PUBLISHED MONTHLY.

ST. JOHN, N. B., APRIL, 1914.

\$1.00 PER YEAR

MRS. G. U. HAY, Proprietor.

ELEANOR ROBINSON, Editor and Manage

THE EDUCATIONAL REVIEW.

Office: 174 Waterloo Street, St. John, N. B. TELEPHONE MAIN 1629 - 41.

PRINTED BY BARNES & Co., Ltd., St. John, N. B.,

CONTENTS:

Editorial		25
entennial Anniversaries of the War of	1812 2	226
Talk on Writing	226-2	229
Questions on Lays of Ancient Rome	2	229
		230
Jocany	231-2	
Allimai Mature Study	235-2	
Winter Birds		234
Bird Pictures free to Teachers		235
How to study "The Essays of Ena,	Land Control of the C	236
For Country Boys		237
		237
For Empire Day		238
Memory Gems		238
The Robin		
An April Day		238
Medical Inspection of Schools		239
The Study of Birds		239
History Paper		239
Current Events		240
School and College	241-	242
Recent Magazines	***********	LITE
Official Notes		243
Official 140cos.		

THE EDUCATIONAL REVIEW is published on the tenth of each month, except July. Subscription price, one dollar a year; single numbers ten cents. Postage is prepaid by the publishers, and subscriptions may begin with any number.

When a change of address is ordered, both the NEW and the OLD address

hould be given.

If a subscriber wishes the paper to be discontinued at the expiration of the subscription, notice to that effect should be sent. Otherwise it is assumed that a continuance of the subscription is desired. It is important that subscribers attend to this in order that loss and misunderstanding

The number accompanying each address tells to what date the subscription is paid. Thus "324" shows that the subscription is paid to April 1,

Address all correspondence to

THE EDUCATIONAL REVIEW.

St. John, N. B.

We thank very heartily all those subscribers who have taken the trouble to express their appreciation of the help they receive from the REVIEW, and especially those who have asked for, or suggested, articles that they think will be useful. We shall be glad to receive many

more letters of this kind, and the more definite and detailed they are the better.

We have had several requests for notes on High School Literature, and the papers on the subject in this number will be continued in lactic otal and into Prophily May and June.

The attention of our readers is directed to the special offer that the REVIEW makes to new subscribers in our advertising columns.

If you are already a subscriber, draw the attention of those who are not to this chance to get the May and June numbers free.

As the spring comes on, Nature Study claims attention. Teachers and children alike grow restless and long for a change. Now is the time to interest yourself and your classes in the stirring of life and growth around us. "The spring comes slowly up this way," and there is time to study her progression.

Professor Perry's studies of birds offer a chance for co-operative work, and we hope that many will respond to his request and send him reports. Take advantage of the offer of the Audubon Society, printed in another column.

And do you realize what prompt and practical help you may have for the asking, from the Natural History Society of New Brunswick. If a child brings in a specimen, plant, bird, or insect that you cannot name, send it to the Natural History Museum in St. John, and it will be identified for you. If you want to give a lesson on this, or any nature study subject, you will be furnished with lesson notes. The Society has already at hand a set of lessons on common birds, insects and plants, and new ones will be prepared upon request. The Provincial Government works with the Society in this matter, and it is much to be desired that teachers should take advantage of such a generous offer. Address all communications to Mr. William McIntosh, Curator Natural History Museum, St. John. a mond bas all restering with

CENTENNIAL ANNIVERSARIES OF THE WAR OF 1812.

J. VROOM.

XXI.—The Capture of Oswego.

May 6.— When the lakes were again clear of ice, in the spring of 1814, Sir James Yeo had two new vessels added to his fleet. They were large frigates, which had been built at Kingston. With these and his other six ships, he had a decided superiority over Chauncey.

Yeo's fleet left Kingston on the third of May, having on board over a thousand men commanded by General Drummond. This force was sufficient for the reduction of Oswego, though it was not large enough to justify an attack on Sackett's Harbour. The capture of either place was supposed to be worth the effort. The greater part of Chauncey's fleet was at Sackett's Harbour; Oswego was an important depot for naval stores.

Oswego was not strongly garrisoned at the time, but was defended by a fort, which stood in a commanding position on high ground, and by an armed vessel which lay in the mouth of the river.

The ships reached the place on the fifth, and sent out boats to draw the fire of the batteries. An attack in force was to have been made at eight o'clock in the evening; but a heavy gale from the north compelled them to keep off shore until next morning. This delay allowed the defenders to carry away some part of their stores, and to sink their armed vessel, with the seven heavy guns which she carried, hoping in that way to save her from being taken by the British.

On the morning of the sixth, the storm having abated, the British fleet returned to the attack. Men were landed under a heavy fire from the fort. A part of the defenders, however, had already begun their retreat; and, in ten minutes from the time when the attacking party reached the top of the hill, the fort surrendered. Its guns were destroyed, the barracks burned, the sunken vessel raised and carried off, with her guns on board, and a large quantity of ammunition and provisions seized. The fleet returned to Kingston with the spoils. Sir James Yeo then sailed for Sackett's Harbour, where he arrived on the nineteenth, and began a strict blockade.

While the capture of Oswego was creditable to the British and Canadian troops engaged, especially to the Glengarries, whose conduct on the occasion added to their renown, yet it was of no great importance in its results. Its chief object was to check the supply of guns and ammunition for Chauncey's fleet; but the guns and naval stores which Chauncey needed reached him by another route, and before long he was again able to challenge the supremacy of the British fleet on Lake Ontario. Had he followed up his advantage when the time for action came, the battle of Lundy's Lane might have had a different ending—but that is another story.

A TALK ON WRITING.

ELIZABETH WILSON.

This article is not intended to set forth any new or complete system of writing, but I have been asked to tell you something of my methods of teaching this subject, and I do so, hoping that what I have found useful in my own school-room may in some way help you.

This paper deals entirely with slant writing, and where the words, "straight lines," are used, of the required slant, is always understood.

I believe we are all striving to obtain the forearm muscular movement, and when we succeed in getting a good position of the body, and the proper pen-holding, we are more than half way to the goal.

Position.—The writing position must be a natural one in order to be untiring, and I'll outline here, as clearly as I can, what I find to be very good. Sit well back in the chair, with body erect, soles of the shoes flat on the floor, and arms hanging straight from the shoulders; bend forward slightly from the hips, but do not lean against the desk; raise the arms over desk, elbows out, and drop them naturally; raise right arm, and bend forearm at right angles with upper arm, and drop again.

How to Hold the Pen.—The next part concerns the pen holding. Hold the pen lightly, using the thumb and first two fingers. Straighten out the first finger, and press the pen against the side of the second finger, opposite the nail. The pen-point should project an inch, or a little more, beyond the end of the first finger, and the pen-holder should cross the hand just back of the

knuckle of the first finger. The third and fourth fingers must be kept together, and curved so the hand can rest and slide on the first joint, or end of the little finger, according to its length. The pen-holder should point at the right shoulder, but we often find it pointing at the ceiling, or across the room, and the child trying to write with the hand so cramped that a white streak appears along the lower joint of the first finger. To call attention to this, I sometimes ask the children if they think I am going to take their pens. Some such reminder is all that is necessary to correct the position when once the proper way has been learned. The right arm must rest only on the muscles just below the elbow, and on the little finger. The left hand is kept on the desk to hold and move the paper.

MOVEMENT.—With this position of body and pen, move the arm on desk, as if writing, until you get a uniform movement of arm, hand, and fingers. Let the children see that the little finger must write the letters just as the pen does. I usually illustrate here by writing on a blackboard, dusty enough to show clearly the trace of my little finger, or by placing a small piece of chalk between the third and fourth fingers, so as to trace their movements on the board. At first, I usually find a tendency in the class to keep the little fingers rigid, and to help to overcome this difficulty, I have each pupil write several words, paying attention only to the writing of the little finger, while the pen does the tracing. This may not be a very important exercise, but it encourages the little fingers to move.

Many good movement exercises can be brought into use. Take the oval first. Roll the arm around on the muscle, making the little finger slide in an oval two-thirds as wide as it is long. Touch the pen-point lightly to the paper, and make about seven revolutions to an oval. If you start this exercise with large ovals, covering three spaces of ordinary-lined paper, you will find that they cannot be made with the finger movement, and the child is obliged to use the forearm muscular movement.

When the child has the position and form in mind, it is a good plan for the teacher to count aloud, neither very fast nor very slow, while, the class make the revolutions. Counting is a means of securing uniformity of movement, of

keeping the class together, and giving an idea as to how fast to practise, and I find it always creates more interest and enthusiasm in the work. Tapping on a book-cover with a pencil answers the same purpose.

After three-space ovals, try two-space, and then one. Make rows of these across the paper,

00000

and when they are well done start again, but instead of retracing the ovals show the class how to work steadily forward as in illustration:

2. (a)

Practise both the direct oval, and the reversed oval, for here we are laying the foundation for the capital letters.

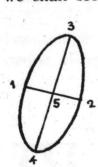
The letters O, C, A, E, D, are made from the direct oval. L, T, F, P, B, R, S, G, are made from the capital stem, and the remaining thirteen are made from the reversed oval. (See diagrams in New Brunswick Copy Books, Inside Cover).

Uniformity of Slant.—Uniformity of slant is absolutely necessary for plain writing. Keep all lines straight and parallel, by drawing them all towards the body. Be careful to see that each child starts with, say a one space straight line. Then count to fifteen or twenty, while the children make the strokes, and the slant of the last line will usually surprise the young writer.

A part of each writing period can profitably be spent in such exercises as these and we often practise them for a few minutes before a written exercise in grammar or history. Several good ones are to be found in the back of the Prescribed Writing Book, and the order in which these are used will depend upon the letter to be taught.

COMBINATIONS OF STRAIGHT LINES AND CURVES.— The elements of writing—the curve

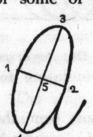
to the right, the curve to the left, and the straight line, are all taken from the ellipse and its diameters. The curves are often modified, as we shall see when we make the letters.



Draw an oval on the board, and number its parts. Let the children point out the curves on the drawing, and spend some time in practising them, and along with this, practise the upper turn and lower turn both separately

and combined. By looking over the small letters, it is readily seen, that they are nearly all made by attaching curves of some sort to straight lines. It is well to remember that all curves are joined to the straight lines of short letters, one-fourth of the length of line from top or bottom.

I shall not attempt to go through the whole alphabet, but shall mention only a few points that I have found helpful in teaching the form of some of the letters. Look at the oval on



the board. Draw a straight line from 2 parallel to 5-4, attach a curve to the right, similar to 4-2; place a dot above and we have an "i." Now to make this letter again, draw a straight line

on the board about six inches long, divide into quarters and add the curves. The dot, above the "i," should lie in the straight line produced. Have the children write this letter several times on their practice paper, and then go on, to the other short letters made from the straight line and the curves. The u, v, w, n, m, r, s, x, all follow naturally. The o, a, c, e, are made from the small oval. The stem letters are easily taught here. Build them up from the i, a, and v, or x; notice the length of each letter and the curves; make each one separately; reduce them to short letters, and see how they compare with the ones already taught. To make the loop letters take the i; produce the straight line upward (our writing system requires three times its original length); attach a modified curve to the right, and you have an 1. By producing the straight line of the i, either up or down and then adding curves, you can easily make all the loop letters. If these are made in ruled spaces, the class can see at once, that the straight line

and curved line always cross on the space lines which enclose the short letters.

Practise writing short words of various combinations, as soon as sufficient letters have been formed correctly. Call attention to the fact that all turns on the base-line should be alike, and teach the children to train the eye to write without guide lines.

LESSON PLANS.— My school is usually made up of children from ten to twelve years of age. When I get a new class, I have each pupil write three or four lines on the first page of the writing book. While they are doing this, I look out for position of body and pen, movement, form, and other details. This shows me where to begin, and on what part of the work to spend the most time.

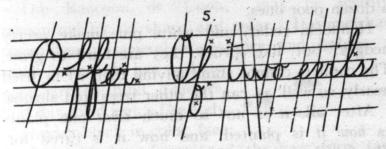
We start with the position of body, and the pen holding, and spend a few minutes in muscular movement exercises, making the oval, slanting lines, and loops, as these all come into use on page one of the copy book. Each child keeps a sheet of tablet paper in the writing book for practise work. In this part of the lesson, I sometimes allow the pupils to count aloud with me. It adds to the interest and takes nothing from the results. Before leaving these exercises we make the capital O from the oval, the required stem letters from the slanting lines, and the required loop letters from the loop exercise.

Then we talk about the short letters in the copy; illustrate on the board, and practise on paper. We compare the height of the capitals, stem, and loop letters, and by this time I usually find two-thirds, or more, of the class anxious to write another line in their books. When it is written the improvement is made evident by the satisfaction expressed on the faces.

As I walk about the room looking at these lines, I get the different pupils to point out where the last line is better than the others, and where they can yet see mistakes. I show the class again, on the board, how to correct them, and another line is written in the books.

During the writing lesson, I ask, say five pupils to write on the board in spaces already prepared, while the others practise on their paper. This work is done with the understanding that it is to be criticised by the class (with no mention of names but always by the numbers above the lines). It is surprising to see just how much they can find wrong with this writing. Then we have a few lines written

without spaces, and draw the spaces afterwards to show how even or uneven they are as the case may be. When we are practising a new capital letter, I sometimes have the class



go in order to the board, and have each pupil make the capital. We number these and discuss them, and before we correct them some one is ready to say, "Numbers 3, and 15, or whatever the case may be, are the best," and the owners of these numbers are quite ready to beam their thanks.

When a page in the writing book is all complete but the last two lines, we stop writing, and exchange books. Then each one does his very best to write a good line in the borrowed book. When the books are returned to the owners, the writing is well looked over; and when I ask, "How many have a line written better than your own." "One just about the same?" and, One not so good?" the show of hands tells me at once just what they think of it. On the last line each pupil writes his own name and the date, and we are ready for something new. When several pages have been written, we take a few minutes to turn back the leaves, and compare the writing on the different pages, and there are always cases where the improvement is so apparent that no words of encouragement are needed.

On some of the written exercises that we exchange and mark in class, I allow the pupils to say what they think of the writing. Good, Fair, or Poor, is written below the owner's name before it is returned, and I nearly always find that the criticism is a just one.

Another exercise I find beneficial is the writing of passages from the reader, without the aid of the writing book. I always consider this one of the best tests, for after all it is not the copybook writing, but the every day exercise that counts. In marking these exercises, I take into consideration the neatness, effort, and improvement, as well as the form and movement. All through the grades, I think the pupils' attention should be called to the writing position of the body, the pen holding, and the uniformity of slant.

QUESTIONS ON LAYS OF ANCIENT ROME.

1. Who is supposed to be speaking in these poems? What is their supposed date? Quote verses or phrases from the Lays that bear out this illusion. Give instances of "illiberal sneers at the Greeks," "furious party spirit," "contempt for arts of peace," etc., spoken of by Macaulay in his introduction. Is the story of Horatius as told here, true to history?

2. What Roman virtues are emphasized in the Lays? What can we learn from them of Roman occupations, dress, methods of warfare, religion, of the streets and buildings of Rome, social and political divisions, relations with other

countries, ways of reckoning time?

3. Write a verse from Horatius showing the normal metre; and another where the metre varies. What is the metre of Virginia? Write any verse that seems to you particularly fine. Illustrate Macaulay's use of repetition, of proper names, of metaphor. How does he impress upon us the greatness of the throng that poured into Rome for safety from Lars Porsena?

4. Give examples of moralising on the part of the poet. Does he think the present time or the past is greater? Does he dwell upon the beauty of his land? Support your answers by

quotations?

5. Who or what, were the following: The fleetest steed from Aufidus to Po; the proudest town of all; the sweetest maid in Rome; (give other instances of description by superlatives), the man of seventy fights; the priest who slew the slayer; the great Thunder Cape; the accursed race; the wicked Ten; Rome's whitest day; the she-wolf's litter?

- 6. What answer did Aulus give to the message from the Thirty Cities? What prayer are Romans told to make when they see the hoof-mark in the flint? What were the "words of doom" spoken by "ancient Camers"? What reward was set upon the head of Virginius? How did the Romans reward Horatius?
- 7. For what occasion was each of the last three Lays written? What is meant by a "Lay?" Name some other famous Lays. With what subject do they all deal? Did Macaulay write any others? Any other poems of any kind? What are his other writings?

[An excellent set of questions on the High School Prose Book may be found in the REVIEW for June 1913.]

BOTANY.

L. A. DEWOLFE.

Among questions recently asked, several are of sufficient general interest to be answered in the Review. I shall answer two or three.

What is the Best Kind of Hedge to Plant? — I don't know that there is any best. Among the best are Barberry, Privet, Hawthorn, Spruce, etc. The kind to select depends somewhat on where it is to be planted, and how high it is to grow. Personally, I am fond of Barberry. The purple-leaved barberry (Berberis purpurea) is very attractive. It is hardy; and on account of its spines, it is not likely to be eaten by stray cattle. Other spiny or thorny hedges are the English Hawthorn, and the Buckthorn. These are good where any danger from cattle exists.

Rosa rugosa, the Japanese single rose, is also excellent for a hedge in similar situations. It is thorny, and grows high enough to hide the fence.

In front of a house where a low hedge is desired, the Japanese barberry is good. It needs little trimming. The common barberry is also easily kept low. The red berries on these hedges, if they are not pruned too severely, are attractive in the early winter.

The California Privet makes a very pretty foliage hedge, holding its leaves until about Christmas. If the winter is very cold, however, it is liable to winter-kill. Even so, the roots are not killed; and, if cut off near the surface of the ground, the hedge will quickly come up again.

The English Privet is somewhat hardier than the California Privet. To my mind, however, it is not quite so pretty. Either, at any rate, is well worth a trial.

If one prefers a showy flowering hedge, probably the best is the Bridal Wreath (Spirea Van Houttei). It grows very quickly, making a creditable hedge the second year. If properly pruned, it sends up numerous shoots from the root, thereby forming a thick hedge. If untrimmed, it grows to a height of about six feet.

Lilac also makes an attractive hedge, where it is not cut too low. The shrub is so well known that no comment is necessary.

For an evergreen hedge, where one wants a certain amount of seclusion, none is better than the spruce. Norway spruce will grow somewhat faster than our native spruces. Such a hedge is good as a wind-break on the exposed side of

a lot. Spruce, however, is more likely to die than the other hedges named. When it is successfully established, it is certainly good; but for every good spruce hedge, one will find a dozen poor ones.

Hemlock, cedar, and white pine make pretty hedges; but, like spruce, they are hard to grow. The conifers cannot stand having their roots dried nearly so well as can the other trees and shrubs.

After all, it is not so much what one plants as how it is planted, and how it is cared for. The beauty of a hedge is largely a matter of pruning. Too much pruning is undesirable. Less pruning gives a more natural appearance. And even this depends on the kind of hedge-plant used.

CAN YOU GIVE SIMPLE DIRECTIONS FOR TREE-PLANTING.—This is a suitable topic for April. I shall touch upon the important points briefly.

The first requirement is a good tree. The next is good soil to plant it in. Dig the holes larger and deeper than necessary. Loosen the earth in the bottom of the hole, and put in some good soil. Then place the tree in position, after having cut off all broken roots. Sprinkle good earth on and among the roots until the hole is half-filled. Then tramp it down, and pour in a bucket of water. This will wash the earth among the rootlets. Continue filling in the earth and tramping it, until the soil is an inch or two higher than the surrounding surface. That will prevent rain standing about the root.

The last soil taken out when digging the hole, should not be the first to go in. It is not so good as the surface soil.

Don't expose the roots to the sun or wind, keep them covered until ready for planting. If you have bought the trees, don't unpack them until the holes are dug. Then keep wet bags over them while carrying them to the spot where they are to be planted.

If the trees arrive before you are ready to plant them, dig a trench, and bury their roots until you can plant them.

As soon as the planting is completed, cut back the tree considerably. Possibly, one-third of the whole tree could be cut off.

If native trees are to be transplanted from the woods, much of the earth can be moved with them. In such case, pruning off the side branches except, perhaps, very near the top would be sufficient. Early spring is a good time to transplant. Use plenty of water.

ANIMAL NATURE STUDY.

H. G. PERRY.

The Raccoon.

The Raccoon, or "Coon," may be readily recognized by its shape and color. It somewhat resembles in general appearance and habits, a small bear. It has a sharp nose, arched hind quarters, and flat-soled feet. The body

is grayish-black in color, face markings black and gray, and the long furry tail tipped with black and marked with black rings.

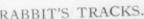


THE RACCOON TREED.

Cut loaned by The Comstock Publishing Co. from their book,
"Handbook of Nature Study."

These animals hibernate in families during the winter, the whole family denning together, in a hollow tree, a stump, or a log, from about the last of December to the first of April. During warm spells of early winter, they frequently leave their dens, and make nightly circuits to stubble-land, to gather in the gleanings.

When walking, the "coon" plants its whole foot on the ground, making a track that closely resembles the foot-marks of a very small baby. You may find such tracks in spring and fall snow, around old grain fields. Watch for them. Do dogs and cats make similar foot-marks? The foot of the "coon" is said to be plantigrade.



Cut loaned by The Comstock Publishing Co. from their book, "Handbook of Nature Study."

Pupils should be taught the derivation of this word. Are the feet of the dog and cat plantigrade? Examine the tracks of the rabbit, and draw your conclusions about its feet.

Are the feet of the horse, cow, sheep, squirrel, and man plantigrade? Determine what part each of these animals is walking on.

As one traces "coon" tracks in snow, he finds places where they are much like those of the cat. Why this change? Are the steps now shorter or longer than before?

The "coon" is a representative of the carnivora, but one that is quite omnivorous. He is fond of frogs, fish, birds, eggs, and animal food of all kinds, and is said to eat even snakes. During Autumn he becomes very fat in preparation for the hibernating season, and, at this time makes serious levies on the farmer's grain fields, and poultry houses.

What is the chief use of its fur? How many pelts are sold annually? What is their value? How does this compare with other kinds of fur?

For information along this line, and for the range of this animal in Canada, see "Fur-Farming in Canada," page 70, and map number seven. Notice the excluded territory—all of P. E. Island, all of Cape Breton, and the eastern part of Nova Scotia, and the northern part of New Brunswick—nearly half of the Province. The fact that such a northern limit exists in our Provinces is of considerable interest. Do you know of other animals, or even plants, that have their limits in our Provinces? What factors determine animal ranges?

The reader may be interested to know that a black strain of Raccoons appeared in the litter of one of ordinary color, captured near Falmouth, Nova Scotia, a few years ago. Of the four cubs, three were black, and one gray,

and in the breeding of this black strain, they have since produced offsprings, both black and gray, in the proportion of about three to one. This brings us to the great field of heredity* There are many science primers on this, and the kindred new science of Eugenics, which every teacher should read. Some knowledge of the laws of heredity is quite a necessary equipment for effective teaching.

In captivity the raccoon soon becomes docile and amiable, and they make very intelligent and at times mischievous pets.

The Skunk.

The skunk is also a hibernating animal, and resembles the raccoon in form, though somewhat smaller. He has a pointed nose, plantigrade



THE SKUNK,
IN HIS NATIVE HAUNTS.

Cut loaned by The Comstock Publishing Co. from their book,
"Handbook of Nature Study."

feet, arched hind-quarters, and a long tail. He varies in color from entire black to the more common variety of black, with two white strips along the back, and down the sides of the tail, and a white strip in the face.

This animal affords a good example of warning coloration. He is seldom in a hurry, but ambles along with a slow rolling gait, holding his black-and-white tail aloft, like a banner in the sky, "secure in the possession of an intolerable malodorous secretion." Most animals leave him alone. Why? Account for the fact that

these animals often stray into towns and cities. What would happen if a rabbit or raccoon should attempt such a visit?

On what does the skunk feed? Does he hunt his food during the day or night? How is he often a nuisance to the farmer? Does his fondness for mice, grasshoppers, grubs, beetles, etc., injure or benefit the farmer?

Most students of Nature call the skunk a silent animal. Mr. Burrows says: "The most silent creature known to me," but Thoreau tells of hearing one keep up a "fine grunting, like a little pig or a squirrel." And the man who first taught the writer to be kind to and to love all animals, was wont to tell of a skunk family—a mother with seven kittens—he happened upon in a pasture, and of the low grunting "skunk talk" of the mother as she trotted along, directing the movements of her playful kittens. "The prettiest picture in Nature."

The fur of the skunk is of considerable value, and the animal is beginning to be farmed in several localities in the Maritime Provinces. Much of this fur is dyed and finds the market under various fancy names. Look up data re the price of pelts, etc., and compare with data for raccoon fur.

The Wood-chuck, or Ground-hog.

The Wood-chuck, or Ground-hog, has also been hibernating during the winter, and at this time of year is about resuming activity again. A tradition in some parts of the United States says, that he leaves his den on Candlemas Day, and, if he can see his shadow, returns to it for another sleep, as "Winter will take another flight." In the Maritime Provinces, such meteorological instinct has been attributed to the bear.

Find the den of the Wood-chuck. How does it compare with that of the raccoon? Where is it located? Does it vary in this respect? What is his chief food? Compare the diet of the raccoon, skunk and wood-chuck. Note that the wood-chuck feeds principally during early morning and in the evening, though you will frequently find him out of his den during the day.

The fur of this animal is of little or no commercial value. Why?

Study this animal as opportunity presents during the summer. What is his chief means of

^{*&}quot;Heredity in the Light of Recent Research,"
by Doncaster. The Cambridge University Press, Fetter Lane, London,
E.C. Price 25c.

"Heredity." by Watson The Hance Complete.

[&]quot;Heredity," by Watson, The Upper Canada Tract Society, Toronto. Price 20c.
"Heredity," by Dr. Castle of Harvard, Published by D. Appleton Co., New York. Price \$1.50.

defence? Does he possess protective or warning coloration, or both? Does the skunk have protective coloration? Study other animals for protective and warning coloration. Notice that all animals that seem to possess protective coloration are lighter on the under-parts. Why? Note also that many animals that are very conspicuous in the museum, enjoy a high degree of protection when placed in their nature haunts. Make lists of such cases as come under your



A YOUNG GROUND-HOG,
AT THE DOOR OF HIS HOME.

Cut loaned by The Comstock Publishing Co. from their book,
"Handbook of Nature Study."

observation. Be on watch yourself and set pupils to work on this subject. You will find splendid examples among birds. Does man take advantage of protective coloration in his own clothing, etc.? Note painting of our warships. the khaki uniform of our soldiers, etc. Later in the year, we hope to discuss this subject of protective and waning coloration to great length.

Sydney, N. S., is to have a permanent building for her Technical School. Professor Sexton, the supervisor, has been in Sydney conferring with the Technical School Committee over plans for a building to be erected in Charlotte Street. The closing exercises of this year's classes will be held about the middle of April. The new departments of the school have met with great success, all classes have been well attended.

Scene outside an Islington Picturehouse:— "SNATCHED FROM DEATH IN 3 PARTS."

It would, perhaps, have been kinder to leave him alone.—Punch.

WINTER BIRDS.

REPORTS FROM EASTERN NOVA SCOTIA.

Antigonish:—Old Squaw, Long-tailed Duck, 1; Hairy Woodpecker, 1; Blue Jay, 2; Canada Jay, 4; American Crow, abundant; Redpoll; Snow Bunting, small flocks; Tree Sparrow, 1; Northern Shrike, 2, singing, January 24; White-breasted Nuthatch, 2; Red-breasted Nuthatch, 3; Chickadee, common; Acadian Chickadee, tolerably common; Golden-crowned Kinglet, tolerably common.

Guysborough:—English Sparrow, in town; Snow Bunting; Chickadee, 10.

REPORTS FROM MIDDLE NOVA SCOTIA.

Colchester:—Blue Jay, American Crow, English Sparrow, Snow Bunting, Northern Shrike (Butcher-Bird), Chickadee.

Hants:—Blue Jay, 7; American Crow; Pine Grosbeak, 8; English Sparrow; Redpoll; Snow Bunting; White-breasted Nuthatch, 2; Chickadee, 5; Acadian Chickadee, 1; Ruby-crowned Kinglet, 1.

REPORTS FROM WESTERN NOVA SCOTIA.

Kings:—Canada Goose, a flock, March 23, Wolfville; Ruffed Grouse, 5; Blue Jay; American Crow, very common; Redpoll; Snow Bunting, flocks; Northern Shrike, 2; White-breasted Nuthatch, 3; Chickadee, common; Acadian Chickadee, 5.

Queens:—American Crow, very common; Long Sparrow, March 18, 1, heard sing, Liverpool; Snow Bunting, a flock of 50; Chickadee.

Shelburne:—Canada Goose, large flocks, Barrington; American Coot, 1; Canada Grouse (Spruce Partridge), not plentiful; Ruffed Grouse, fairly plentiful; Downy Woodpecker, common; Canada Jay, quite common in November; Northern or American Raven, not common; American Crow, abundant; English Sparrow, abundant; Snow Bunting, only one flock; Junco, several seen, all winter; Song Sparrow, 1, February 13, Barrington; Chickadee, common; Golden-crowned Kinglet, few, November; Ruby-crowned Kinglet, few, December.

Shelburne also gives an interesting list of water birds, many of which are seldom seen far inland:—Pied-billed Grebe, Loon, American Herring Gull, Shell Drake, Mallard Duck, Black Duck, Green-winged Duck, Blue-winged Duck, Blue-bill Duck, Old Squaw, Whistler.

REPORTS FOR NEW BRUNSWICK.

Kings:—Tree Sparrow.

Gloucester:—Blue Jay, flocks; American Crow, 4; Snow Bunting, large flocks; White-throated Sparrow (Old Tom Peabody) 8, New Brandon.

Kent:-Redpoll; Horned Lark (Shore Lark) 2.

Throughout the tabulation the numbers have been given up to fifteen when reports indicated them. Where no numbers are given the numbers reported have exceeded fifteen.

REMARKS:—The bird described in a report from Colchester, as being a little smaller than the English Sparrow

with a red crown and throat, etc., is probably the male Redpoll. Compare the bird with the description in some good Bird-book, e. g., Chapman's Handbook of Birds of Eastern North America, published by D. Appleton Co., New York.

The Northern Shrike is one of our most interesting winter birds. I have seen him strike down the English Sparrows in the street. He also is said to kill other small animals. He has the habit of hanging his prey upon the thorns of the Hawthorn, and in the forked branches of other trees. The trees thus adorned remind one of a butcher's shop, hence he is often called, "Butcher Bird." Our report shows he is also a musician as well as a freebooter. Listen for his song. "Often in the warm days of March he may be heard singing on the top of some tall tree." His food consists chiefly of mice, noxious insects, and the English Sparrow, so he is a bird worthy of all protection.

The Screech Owl and a smaller species have been reported from Shelburne. Colchester also reports two Owls but neither describes nor names them. A Colchester report also mentions seeing a Robin, March 14, Middle Stewiacke. Robins frequently remain with us for the winter, which probably accounts for this record. The spring migrants are readily distinguished from winter Robins by their brighter coloration. Watch for them.

Note that the Canada Goose has been common in Shelburne, Barrington, all winter; a report from St. John, N. B., mentions a flock passing northward January 29.

It is also interesting to note that birds that come to us in the winter, from the north, seem to gradually thin out towards our southern limits, e.g., Snow Bunting, abundant in places north, seen but once or a few times south. The reverse is true of many birds that go south from us in the winter.

The Acadian Chickadee was formerly called Hudsonian Chickadee. Snow Bunting is synonymous with Snowflake.

A former provincial teacher, remembering the home

teachers and our interesting work of last year, writes from Philadelphia, saying that the first Robins she saw this year were at Mount Holly, New Jersey, March 17. On that date she also recorded bees and a junco.

This serves as a very good introduction for spring work. We hope to have reports from many more places for next month. Watch for spring migrants and report as directed in the March Review.

Find a family of thrushes and carefully note what takes place. The old male thrush will sing the sweet song in loud, clear, flutelike notes once, and then stop to listen while the young birds try to imitate the song. Some will utter one note, some two. Some will utter a coarse note, others a sharp note. After a while they seem to forget their lesson and drop out one by one. When all are silent the old thrush tunes up again, and the young thrushes repeat their efforts, and so it goes on for hours. The young birds do not acquire the full song the first year, so the lessons are repeated the following spring.

BIRD PICTURES FREE TO TEACHERS.

The sum of \$15,000 has been contributed to the National Association of Audubon Societies for the purpose of helping teachers to give simple instruction in bird study to their pupils during the year 1914. The Audubon plan of helping teachers in this connection is as follows:

Any teacher or other person who will interest not less than ten children in contributing a fee of ten cents each to become Junior Members and will send this to the office of the National Association, will receive for each child ten of the best colored pictures of wild birds which have ever been published in this country. With each one of these ten pictures goes an outline drawing intended to be used by the child for filling in the proper colors with crayons. Each picture is also accompanied with a four page leaflet discussing the habits and general activities of the bird Each child also receives an Audubon treated. The cost of publishing and mailing button. this material is a little more than twice as much as the child's fee.

The teacher who forms such a class receives without cost to herself one full year's subscription to the beautiful illustrated magazine "Bird-Lore." This is the leading publication in the world on bird-study. To the teacher also there is sent other free literature containing many hints on methods of putting up bird boxes, feeding birds in winter, and descriptions of methods for attracting birds about the home or school house.

The ten subjects supplied to children this year are as follows: Nighthawk, Mourning Dove, Meadowlark, Flicker, Sparrow Hawk, Screech Owl, Purple Martin, Cuckoo, Humming Birds and Robin.

In 1913 school children to the number of 53,-157 availed themselves of this opportunity. Hundreds of enthusiastic letters have been received from teachers.

As long as the Association's special fund for this work holds out this offer is open to any teacher in the United States or Canada. Any teacher reading this notice may immediately form a class, send in the dues and receive the material, or further information will be gladly furnished upon request.

T. GILBERT PEARSON. Secretary.

1974 Broadway, New York City.

HOW TO STUDY "THE ESSAYS OF ELIA."

Prose selections are recognized as the hardest of all lessons in English. It is difficult to give the variety that is easily got in poetry, and the appeal to the ear is not so strong. There is great temptation to dwell upon questions of language, upon derivation, distinctions of meaning, and grammar. It is not easy to find out how to interest the young student. But interest is the first essential, whether we are thinking of the ultimate and really important aim in teaching literature, namely, to lead the student to enjoy good books; or of the more immediate and pressing one, which is to prepare him for examinations.

To what point in the Essays of Elia are we to direct the pupil's attention? Compare them with other Essays. What do we get from them? Macaulay's Essays give us historical and literary information. Addison and Steel wrote with the aim of reforming manners and customs, and give us lively pictures of the life of the time. But Charles Lamb offers us neither improving information nor instruction. His Essays read as if he wrote them for his own amusement, for the pleasure of expressing his likes and dislikes, his opinions, fancies and dreams. They reveal to us one of the most charming and lovable men that ever lived. And if we do not gain this impression from reading them, we have missed all that they mean.

Collect the essays that are professedly autobiographical, and see if you cannot sketch his life from "The Old Benchers," "Christ's Hospital," "The South Sea House," and the others. What do you learn from these of his birth and education, position in life, family, friends, occupations? What important event in his life is never touched upon? Go on from the outward accidents and events of life to the character and disposition of the man. You will find passages of self revelation in nearly all the essays. Look for them in "A Chapter on Ears" "Witches and other Night-fears," "New Year's Eve." Do not neglect "Old China." What do you learn from these of his tastes; his preferences among men, books, surroundings; his affections; religious belief; his amusements? What contemporary writers were his friends? From what poets does he quote? Make one essay throw light on another. Study the description of himself in the Preface to the "Last Essays." With the

description of his sister, under the guise of a cousin, in "Mackery End," compare the account of their life in "Old China." Some passages in "Detached Thoughts on Books and Reading" should also be read with this essay.

Notice that while he is constantly revealing himself, and is never afraid of the pronoun "I," and while he himself is more interesting than anything else that he writes about, he is as far as possible from being self-centred. Life is full of interest to him. "Glad did I live," is as true of him as of the writer of those words, and that gladness made his life, with its awful tragedy, not resigned, but gallant. In "New Year's Eve," he tells us some of the things in which he found pleasure—and in "Dream Children," of those blessings which were not for him, except in dreams.

Study his descriptions of persons and places. How does he convey them? By a complete, closely woven picture, or by a succession of scattered touches? In what kind of person did he find most interest? With what feelings did he study and describe them?

Mr. Ernest Rhys, in an introduction to the "Essays" in the Canelot Series, has this pregnant saying. "There is more in "Elia" than a fine set of literary exercises, as the Essays seem to be too often regarded. One finds in them, indeed, the perfect expression of Lamb's whole feeling about life."

It is no light thing for young people to have their outlook upon life influenced by one who saw it as "the gentle Elia" did, with such courage, such imagination, and such sympathy.

(To be continued).

THE SINGING WIRES.— Most of us have wondered at the curious "singing" of the telegraph and telephone-wires often heard along quiet country roads. Professor Field of the University of Ottawa suggests that the noises are due to vibrations transmitted to the wires by the posts, which receive them from the earth, and that they are the results of earth vibrations identical with those that the seismograph, or earthquake-detector, records. "The sound of the wires," Professor Field adds, "is the song of the barometer; if it is low, a change in the weather may come in two days; if sharp, it may be immediate."—Youth's Companion.

FOR COUNTRY BOYS.

A SUPERINTENDENT.

Every boy ought to know how to measure land by "pacing," and this is one of the practical things that may be taught in the schools. Measurements obtained in this way are not expected to be exact, but they are near enough to exact measurements for many purposes. It is not advisable to take up the subject before the sixth year in most schools, as the pupils are not able to comprehend it fully before this time. The pupils should be thoroughly familiar with the tables of length and square measures.

LENGTH OF PACE.

The length of a pace should be as near one yard as possible, and with a little practice boys will be able to get the right length. It is a good plan to measure off, on the floor, five or more yards in a straight line. Mark the yards distinctly with crayon. Now let a boy start at one end, putting his toe on the first line, then step on each line for the entire distance. A boy soon learns how long it is necessary for him to step to cover a yard. After some practice of this kind let a boy take five steps on some part of the floor that is not divided into yards. Mark the starting point and the end of the five paces. Let the boy measure the distance between the marks to see how near to fifteen feet he paced. A little contest between the boys in a class may be arranged and much interest added to the work in this way. It is suggested that it is better to do things of this kind at some time outside of school hours. THE ROD.

By skilful questioning bring out the facts that a pace is about a yard and that a rod is five and one-half yards, or a little over five paces. By making the paces a very little longer, five paces will cover a rod, and for the purposes of "rough" measurements, this is near enough to the exact measure. It will be well to mark off a rod on the floor, and to have the boys practice in pacing this until they can cover the rod in five paces. For small fields the rod is the standard unit for length and for getting the area. Only fields that are nearly rectangular in shape can be measured in this way and it should be understood that all the fields given in the examples in this article are rectangles.

MEASURING.

Having learned that five paces equal one rod, the number of rods in any distance is easily found by dividing the number of paces by five. Of course the best way is to pace off real distances and this should always be done when it is possible. The teacher can also give many problems based upon imaginary distances or fields. For example: A walk is 40 paces long. How many rods in length? Every five paces equal one rod, therefore, 40 paces ÷ 5 = 8 = the number of rods.

The following simple examples are given as illustrations:

1. The front of a lot is 75 paces long. Find the distance in rods.

Ans.: 15 rods.

2. A boy paced the distance between the school building and the nearest house and found that he made 125 paces. How many rods in the distance?

Ans.: 25 rods.

3. One side of the school yard is 80 paces in length. How many rods?

Ans.: 16 rods.

4. From the door of the schoolhouse to the postoffice it is 320 paces. What is the distance in rods?

Ans.: 64 rods.

5. A farmer found that there were 220 paces in one side of a field. What was the distance in rods?

Ans.: 44 rods.

Let the boys measure distances about the school grounds by pacing. Then ask them to measure the same distances with a cord that is just a rod long. Of course a regular tape measure is better than a cord.

AREAS.

An acre is 160 square rods. The area of any field, in acres is found by dividing the number of square rods in the field by 160 square rods. For example: A rectangular field is 100 paces long and 80 paces wide. Find the number of acres in the field.

100 paces in length = 20 rods.
80 paces in width = 16 rods.
The area is 320 square rods.
320 square rods ÷ 160 square rods = 2.
The number of acres is 2.

Note.— It is taken for granted that the pupils understand how to find the area of a rectangular field when the length and breadth are given.

The following examples are given for illustration. The teacher will readily make as many more as may be necessary. It is suggested that all original examples should be worked out by the teacher before they are given to the class.

1. A farmer wished to find the number of acres in a small field. He found that the field was 80 paces long and 50 paces wide. What was the number of acres?

Ans.: 1 acre.

2. The length of a field is 240 paces and the width is 50 paces. Find the area in acres.

Ans.: 3 acres.

3. A farmer planted a field of corn which was 125 paces long and 80 paces wide. How many acres did he plant?

Ans.: 21/2 acres.

4. A farmer bought a field that was 225 paces long and 80 paces wide. He agreed to pay \$200 an acre for it. He wished to find the approximate cost. How much was it?

Ans: \$900.

- 5. A farmer paid \$600 for a field. He wished to find the approximate cost per acre. He found that the field was 240 paces long and 50 paces wide. What was the price per acre?
- Ans.: \$200.
 6. A farmer paid \$1,200 for a field. He wished to find the approximate cost per acre. He found that the field was 160 paces long and 100 paces wide. How much did he pay per acre?

Ans.: \$300.

7. A real estate dealer bought a lot that was 300 paces long and 80 paces wide. What was the number of acres?

Ans.: 6 acres. —Western School Journal.

THE QUESTION BOX.

- 1. M. L. W., writing on March 13, says: "A flock of small birds have been here for a month. They come to the barn for hay-seeds. I think they came during the cold week in February. They are about the size of the Pine Warbler, dark grey above with two white bars on the wings, light grey under-parts, with rosy breast and rose-coloured patch on head from bill to back of crown. Will you kindly tell me if it is the Redpoll."
- 1. In all probability the Redpoll (Acanthes linaria). But the crown patch would be crimson.

- 2. Is the three-toed Arctic Woodpecker common in all parts of New Brunswick in the winter?
- 2. This bird is given as an uncommon resident throughout the year. It has been taken in October and in February.
- 3. I have lately seen birds in flocks, which I have been told are Redpolls. Some of them have breasts suffused with red, while others have not. Are they a different species?
- 3. Probably old and young redpolls; in which case the breasts would show a colour more rosy than red in the adults, while in the young the colour would be wanting. All would show a crimson head patch.
 - 4. S. B. J.-

1. Principal.

Archimedes first established the truth.

2. Subord. Noun. In appos. with "truth."
That a body plunged in a fluid loses as much weight.

3. Subord. Adjectival — qualifying "weight." As is equal to the weight of its own volume of that fluid.

Detailed Analysis of 3.

Subject: as* (relative pronoun).

Verb is

Complement: equal to the weight of its own volume of that fluid. (Adjectival).

*After such, same, so much, so great, etc., the rel. employed is not who but as.

FOR EMPIRE DAY.

Some teachers are no doubt already looking for material for Empire Day lessons and exercises. We suggest a consideration of the following poems:—

Tennyson's, Ode on the Death of the Duke of Wellington.

Browning's, Home Thoughts from Abroad.

Drayton's, Agincourt.

Doyle's, Private of the Buffs, The Red Thread of Honour, The Loss of the Birkenhead.

Scott's lines on Pitt, Nelson and Fox in the introduction to the first canto of 'Marmion. The

Poems of Henry Newbolt (to be had in Nelson's Sevenpenny edition, sold here for twenty cents).

Alfred Noyes's Drake.

Good selections may be found in *Poems of English History*, J. A. Nicklin. *Lyra Heroica*, W. E. Henley. *Lyra Historica*, Windsor and Turrall. *Carmina Britannica*, C. L. Thomson, *Poet's Walk*, Mowbray Morris.

MEMORY GEMS.

I hear from many a little throat
A warble, interrupted, long;
I hear the robin's flute-like note,
The bluebird's slenderer song.
Brown meadows and the russet hill,
Not yet the haunt of grazing herds,
And thickets by the glimmering rill
Are all alive with birds.

—William Cullen Bryant.

The willow's whistling lashes wrung
By the wild winds of March,
With sallow leaflets lightly strung
Are swaying by the tufted larch,
The elms have robed their slender spray
With full-blown flowers and embryo leaf;
Wide o'er the clasping arch of day
Soars like a cloud their hoary chief.

Holmes.—

I heard the sparrow's note from heaven,
Singing at dawn from the alder bough;
I brought him home, in his nest, at even;
He sings the song, but it pleases not now,
For I brought not home the river and sky—
He sang to my ear—they sang to my eye.
—Emerson.

Do you ask what the birds say? The sparrow, the dove, The linnet and thrush say, "I love, I love." In the winter they're silent, the wind is so strong; What it says I don't know, but it sings a loud song, But green boughs and blossoms, and sunny, warm weather And singing and loving all come back together.

Leaf from leaf Christ knows, Himself the Lily and the Rose.

Sheep from sheep Christ tells, Himself the Shepherd, no one else.

-Samuel Taylor Coleridge.

Star and star he names, Himself outblazing all their flames.

Dove by dove, he calls

To set each on the golden walls.

Drop by drop, he counts
The flood of ocean as it mounts.

Grain by grain, his hand Numbers the innumerable sand.

Lord, I lift to thee In peace what is and what shall be.

Lord, in peace I trust

To thee all spirits and all dust.

—Christina G. Rossetti.

THE ROBIN.

My old Welsh neighbour over the way Crept slowly out in the sun of spring, Pushed from her ears the locks of gray, And listened to hear the robin sing.

Her grandson, playing at marbles, stopped, And, cruel in sport, as boys will be, Tossed a stone at the bird, who hopped From bough to bough on the apple-tree.

"Nay!" said the grandmother, "have you not heard, My poor, bad boy, of the fiery pit? And how, drop by drop, this merciful bird Carries the water that quenches it?

He brings cool dew in his little bill And lets it fall on the souls of sin: You can see the mark on his red breast still Of fires that scorch as he drops it in.

My poor Bron rhuddyn! my breast-burned bird, Singing so sweetly from limb to limb, Very dear to the heart of our Lord Is he who pities the lost, like Him."

"Amen," I said to the beautiful myth, "Sing, bird of God, in my heart as well; Each good thought is a drop wherewith To cool and lessen the fires of hell.

"Prayers of love like raindrops fall,
Tears of pity are cooling dew,
And dear to the heart of our Lord are all
Who suffer, like Him, in the good they do."

J. G. WHITTIER.

AN APRIL DAY.

All day the low-hung clouds have dropped Their garnered fulness down, All day a soft gray mist has wrapped Hill, valley, grove and town. There has not been a sound today To break the charm of nature, Or motion, I might almost say, Of life, or living creature; Of waving bough, or warbling bird, Or cattle faintly lowing, I could have half believed I heard The leaves and blossoms growing. I stood to hear, I love it well, The rain's continuous sound. Small drops, but thick and fast they fell, Down straight into the ground. For leafy thickness is not yet Earth's naked breast to screen, Though every dripping branch is set With shoots of tender green.

SUMMER SCHOOL OF SCIENCE

FOR ATLANTIC PROVINCES OF CANADA

Session of 1914 at Charlottetown, P. E. Island, July 7th to 29th

NATURAL SCIENCES, LITERATURE, ETC., TAUGHT. SPECIAL ATTENTION GIVEN TO AGRICULTURE and SCHOOL GARDENING, Also PHYSICAL TRAINING A LARGE NUMBER OF SCHOLARSHIPS FOR COMPETITION. TUITION FREE.

All information cheerfully furnished by J. D. SEAMAN, Secretary, 63 Bayfield Street, CHARLOTTETOWN, P. E. I.

MEDICAL INSPECTION OF SCHOOLS.

The Public Health Journal for March continues its reports of Medical Inspection in Canadian Schools.

Dr. John K. McLeod, City Medical Officer of Sydney, N. S., draws attention to the fact that Sydney took up this work in 1907, three years ahead of Toronto, and that it has been of much benefit to the city in more ways than one.

British Columbia is as yet the only Province in the Dominion, having Provincial Legislation, governing and controlling Medical Inspection of Schools. It is expected that Ontario will soon have a provincial law establishing such inspection.

Interesting reports of the work of Medical Inspectors of Schools and school nurses are sent from Victoria, Vancouver, New Westminster, Nelson, South Vancouver, from Montreal, Westmount and Lachine, and from ten towns in Ontario.

THE STUDY OF BIRDS.

When studying the birds this spring, do not entirely overlook their place in literature and mythology. There are many beautiful bird poems. Shelley's "Ode to a Skylark" and Bryant's "To a Water-fowl" are among the gems of literature. "Robert of Lincoln," by Bryant, appeals pleasantly to overyone, and the "Sand-piper," by Mrs. Thaxter, is a general favorite. Longfellow's "Herons of Elmwood" and "Springtime at Killingworth" contain many beautiful thoughts.

The dove, like the lily, is symbolical of peace, and has an interesting history.

On account of his supposed supremacy over other birds, the eagle has been made the emblem of many countries. He has been celebrated as a bird of might ever since Pindar wrote of the Theban eagle.

The owl, Minerva's bird, has always been given credit for wisdom; while Juno's peacock has always been called vain.

The swallow has an interesting history. He is sometimes called "The Bird of Consolation," because, according to a Scandinavian story, he spread his wings under the cross to lighten its weight for the Saviour.

An old Greek proverb warns men not to harbor swallows, as they are babblers. It is said that a swallow chirped about the head of Alexander the Great to warn him that his family were plotting against him.

The Emperor Charles, when besieging a town of Flanders, is said to have taken a swallow under his protection. Longfellow has told the story in his poem. "The Emperor's Bird's Nest."—Exchange.

HISTORY PAPER.

- 1. Six events in the reign of Henry VIII.
- (1) He married Katherien of Araggon.
- (2) He soon got tired of her.
- (3) He wanted to get rid of her.
- (4) He wanted a divors.
- (5) He got a divors for her.
- (6) I don't no.
- 2. Wolsey was called the boy bachelour, because he passed the labour examination when he was fourteen. My sister passed it when she was twelve.
- 3. On the side of the king there were all the people who had long hair, but when they had their hair cut short they went on the side of parlyment."—Punch.

Is the word "succeed" so stale that we must always say "make good?" Is the word "win" so weak that we must always say "win out?"—Youth's Companion.

CURRENT EVENTS.

The threats of armed rebellion in the north of Ireland, against Home Rule, which would give Ireland a separate parliament such as we have in Canada, became so alarming that the British Government began to move troops to the northern counties as a precautionary measure. Then it appeared that many of the army officers objected, and would rather resign their commissions than aid in suppressing a rebellion in Ulster. This immediately raised the question of whether parliament should rule the army, or whether the army should take control, as in the days of Oliver Cromwell; and the crisis has led to the resignation of the Secretary for War in the British Ministry, and also of Sir John French, chief of the general staff of the British army, and Sir John Ewart, adjutant-general of the forces. With the consent of the King, Premier Asquith has placed himself at the head of the War Office, and will go back to his constituents for re-election. So the month ends with the Prime Minister out of Parliament for the time being, and with threats of a mutiny in the army as well as an Orange rebellion; and yet nearly everybody believes that nothing very serious will come of it all, except, perhaps, a reorganization of the army, to bring it more fully under the control of the civil authorities.

After a week of heavy fighting in and around Torreon, there is no certain news of the result of the attack, but there are rumors that Villa's army has been overwhelmingly defeated. It is also reported that Zapata, the leader of the revolutionists in Southern Mexico, has been killed in battle with the Federal troops in another part of the country.

The United States Congress is still debating the question of repealing the Panama Canal tolls exemption, at the request of President Wilson, in fulfilment of the concessions made in the Hay-Pauncefote treaty.

The work of building the city of Canberra, the new capital of Australia, will begin at once, and will probably be finished in about three years, so far as to make it ready for occupation. One remarkable feature of the new city is to be a series of artificial lakes or basins, of considerable extent, which are expected to have a moderating influence on the climate.

Sonjatin is the name of a new substitute for rubber tubing which comes from Germany. It is not only cheaper, but more durable than rubber, and resists higher pressure.

Cellophane is a new substance resembling transparent paper, and said to be insoluble in water, and unaffected by ethers, alcohols, and alkalies.

Recent experiments with the wireless telephone have given wonderful results. A conversation was kept up between two Italian battleships, until they were forty-five miles apart, and the signals from a Canadian wireless station were heard at a distance of over four thousand miles.

A bill before the British Parliament will prohibit the importation into the United Kingdom of the plumage of wild birds, and forbid any person possessing or being concerned in the sale of such plumage.

A widow's pension bill is before the New York state legislature. It is based upon laws adopted in several countries of Europe, and provides a certain monthly payment for widows, who have children to support.

In Japan, they punish the parents of boys who smoke cigarettes, as well as those who sell to the boys.

The Suez Canal is to be deepened to a depth of thirtynine feet, and other costly improvements will be made to enable it to compete with the Panama Canal. It has the great advantage of affording the shortest route from Europe to the Far East; and it has no locks and no tides.

The great barrage of the Euphrates, which is to restore by irrigation the fertility of Mesopotamia, and thus add an enormous area to the corn lands of the world, has been completed and formally opened for use.

The actual work of construction of the Panama Canal is now completed. The work yet to be done is chiefly dredging made necessary by the numerous landslides.

Inquiries into the death of Benton, the British subject killed in Mexico, seem to have established beyond a doubt that he was killed in the presence of Villa, and that both Villa and Caranza sent out false stories in respect to his death. The immediate result of the investigation is that the rebels of the north, who, partly because of their well chosen name Constitutionalists, have had the sympathy of many in the United States, are losing that sympathy.

Castro, the former military dictator of Venezuela, is in Trinidad, where he is supposed to be planning another Venezuelan revolution.

The situation in Brazil is not clear; but there are indications that the uprising, or threatened uprising, is over for the present.

Very heavy military expenditures in Russia are causing alarm in Austria, as well as in Sweden. Many think that another Balkan war is impending, and that Russia is preparing to move in that direction.

The Canadian government has sent the steam whaler, Herman, to search for the lost ship Karluk, of the Stefasson expedition. The Russian authorities have been notified that the Karluk is supposed to be drifting westward, and may reach the Arctic coast of Siberia.

The number of immigrants to Canada last year was more than four hundred thousand, and one hundred and fifty thousand of them were British.

New York City is celebrating the three-hundredth anniversary of its settlement, the Dutch having established a trading post there in 1614.

A special commissioner sent by the Canadian government to examine the place reports in favour of the development of St. Croix Harbour as a winter port. This harbour is at the head of deep water navigation on the St. Croix, and just above St. Croix Island, where the French made their first settlement in 1604. After the lapse of many years, Champlain's selection of a port seems to have been justified; though the milder winters and the better soil, which the early settlers found in the Annapolis Valley, were sufficient reason for their abandoning St. Croix and making their permanent settlement at Port Royal.



SCHOOL AND COLLEGE.

The statement of the Rhodes Scholarship Trust for 1912-13 has been issued. During the year there were one hundred and seventy-five scholars in residence at Oxford, of whom seventy-three were from British Colonies, eighty-eight from the United States, and fourteen from Germany. Among those who obtained distinctions was Mr. A. L. Burt, Ontario, who divided the best prize with another student, and took the Robert Herbert Memorial Prize. One Canadian, Mr. L. Brehaut of Prince Edward Island, was awarded the B.Sc. degree; and Mr. J. E. Read of Nova Scotia, obtained the degree of B. C. L. Eight Canadians took honours in various subjects, Mr. Dyke, of British Columbia and Mr. McNair of New Brunswick winning first class honours, the first in Natural Science, the second in jurisprudence.

An analysis of the lines of work taken up by Rhodes Scholars who have left Oxford shows that one hundred and forty-four are engaged in educational work, and one hundred and thirteen are practising law. The next largest number, twenty-five, is of those engaged in the practice of medicine. Out of over four hundred ex-scholars, only eleven have remained in England.

Dr. Carter, chief superintendent of New Brunswick Schools, attended a convention of Superintendents at Richmond, Virginia, February 23rd, 28th. This convention is a department of the National Education Association of the United States, and was attended by nearly three thousand superintendents, and other educational officials

from all parts of the United States. Special sessions were held of different departments of the Association, such as The School Garden Association, The National Council of Teachers of English and others. Dr. Carter was the only representative from the Maritime Provinces, and the only Provincial Superintendent at the convention. He also visited Hampton Institute, and some of the schools of New York City.

Woodstock, N. B., is the latest town to report an increase of salary for teachers. Provided their contracts are renewed for next year, first class teachers in this town will receive an increase of \$50.00 a year, and second class teachers one of \$50.00.

The latest reports received of the murder of Dr. C. B. Robinson, in Amboina, on December 5th, indicate that his death was sudden and probably painless. He fell a victim to the superstitious fears of some Boetonese, who took him for a mythical bad man, that they believe goes about in November and December to kill children. Five of the murderers were arrested and confessed. The Director of the Bureau of Science, Manila, writes of Dr. Robinson, "He had been an enthusiastic and untiring worker, and the results of his efforts in Amboina will redound to the credit and the advancement of Botanical Science."

The School Board of Amherst, N. S., have resolved to supply free writing materials, including pens, ink and the necessary paper, blotters and perishable supplies to the pupils in the schools. It has also been decided to establish an A. class in the County Academy. The Amherst Daily News says, that the credit for these important steps

are largely due to the unselfish labours of Mr. B. J. Lawson, who is retiring from the office of Chairman of the Board after a year of hard and efficient work in the service of education.

A free Night School for Jewish students has been established in St. John, and already twelve pupils have taken advantage of the opportunity for learning English.

Three Fredericton teachers, Miss Sadie Thompson, Miss Marion Cadwallader, and Miss Margaret Lynds, have gone to Ottawa to take the two months special physical training course, provided by the Militia Department.

The Alberta Educational Association is to hold its fifth annual convention at Lethbridge, April 14-16. The President of the Association is Dr. A. Melville Scott, formerly on the University of New Brunswick staff. Among other speakers, Professor J. W. Robertson will address the convention.

The many Old Boys of Trinity College School, Port Hope, will be glad to learn of the establishment of a bursary for "the study and practise of reading in public." The principal object is the promotion of expressive, intelligent and effective reading of a chapter in the New Testament.

The donor is Mr. J. A. Culverwell, of Port Hope, who has deposited a capital amount for a nine-year bursary. The prize is to be awarded yearly on the judgment of the headmaster, the Rev. F. Graham Orchard.—Toronto Mail and Empire.

Over sixty girls are being taught in the open-air elementary school at Dyfatty, Swansea, notwithstanding biting winds and sharp frost. It is stated that the average weight of these scholars has increased by nearly three pounds during the past three months, whilst children in the enclosed school had only slightly increased in weight during the same period.

The school house at Pugwash, N. S., was struck by lighting on March 19, and the ensuing fire entirely destoyed the building with all its furniture and equipment.

Since the opening of the new Agricultural School at Woodstock, N. B., on March 9th, the results obtained have been more than satisfactory. The school opened with an attendance of twenty-five and at the beginning of the third week sixty-five students were in attendance at the lectures on Monday morning.

Alfred T. Seaman, aged twenty-one, son of Principal J. D. Seaman, of Charlottetown, has been selected as Rhodes scholar for Prince Edward Island. He is a gold medalist of Prince of Wales College and has an excellent record as an athlete.

RECENT BOOKS.

A History of Cavalry—Colonel George T. Denison. The MacMillan Company of Canada, \$2.50. One of the most striking and valuable books written by a Canadian is Colonel Denison's History of Cavalry. The first edition, which was published in 1877, gained the Emperor of Russia's prize for the best work on the subject in competition with officers of all armies, and was translated into several different languages. A second edition has just

been published, and is now in the hands of the booksellers. A preface to the second edition, which is a very important part of the book, brings the history of Cavalry down to the present time. The work is the result of great labour and research, and a marked peculiarity of the book, is, that the conclusions and lessons given by the author thirty-six years ago are now being accepted as correct by many of the best authorities on military questions — when the book was written it was thirty years ahead of the times — the times have now come abreast of it.

The experiences of the Boer War, and the war between Japan and Russia, have proved how well Colonel Denison had appreciated what the effect would be of the improved fire arms upon modern war. Rarely has an author been more completely vindicated by the passing of time. The book gives a sketch of the history of the world in one particular phase, and is interesting reading to the general reader.

Professor Lyde, author of several well known text books of geography, believes that "Geography is the most educational of all school subjects except Literature." In this belief he has devoted the introductory chapters of his School Geography of the World to certain important principles of the science that are obviously connected with the relation of man to the planet on which he lives. These principles are then applied at some lengths to familiar and important countries, as the British Empire, and the United States of America. The eighth edition of this book is by far the most useful, as it has added to the text one hundred practical problems and exercises, and a list of essay subjects. A most useful handbook for teachers. [Adam and Charles Black, London, 411 pages. 3s. 6d.]

From Messrs. Black comes also More Pictures of British History, containing 60 illustrations (32 in colour), and simply worded stories of our history from the time of the Druids to the ninetenth century. Every story has its picture, and together they cannot fail to interest the lucky children who have the book in their hands. [70 pages, 1s. 6d].

The same firm send us a charming little French story book for class reading, called Soirces Chez les Pascal by F. B. Kirkman, M. A. M. Pascal tells his children some familiar fairy stories, they chat about them and look at the pictures. This book with its coloured illustrations is wonderfully cheap at sixpence. [Adam and Charles Black. 48 pages, 6d.]

Macaulay's Essay on Clive appears in an attractive little volume edited by A. J. F. Collins, M.A., with a biographical and critical introduction, and the full notes that are necessary for young students, to whom Macaulay's wealth of allusion and reference presents many obscurities. [University Tutorial Press. 108 pages, 1s. 6d.]

The name of Sarah Louise Arnold is a guarantee for a text book in English. With two colleagues, Miss Arnold has brought out a new series of reading books for beginners, called *The See and Say Series*. Book I is a "Picture Book" which by means of pictures and stories teaches the sounds of the letters and gives simple lessons in word building. Book II is a "Word Book." A teacher's manual accompanies each book, and the series is intended to present the study of words apart from the reading lesson, and to teach

Educational Review Special Offer for May and June

SUBSCRIBE NOW FOR 1914-15

MAY AND JUNE ISSUES FREE

In May we publish a special Empire Day number. The beautiful picture supplement will be a reproduction of Sir John Millais' famous picture, "The Boyhood of Sir Walter Raleigh."

Examinations are coming. Both the May and June issues will have sets of test questions, and hints to classes preparing for examinations.

What are you going to do this summer? Professor Perry's Bird studies, Professor DeWolfe's Botany papers, and an article by Mr. Vroom on Our Native Ferns, will give fresh interest to your excursions in wood and field, and send you back to school in August with new plans and enthusiasm for nature study

THE REVIEW WILL GIVE YOU DETAILS ABOUT THE SUM-MER SCHOOLS AND THE HANDS ACROSS THE SEA TOURS

To any teacher sending us ONE DOLLAR, on or before May 15th, we will send the May and June numbers, and the full set from August 1, 1914, to August 1, 1915,

SHOW THIS TO YOUR FRIENDS

the children to recognize the sounds represented by each letter, or combination of letters, so that they can readily master the words they meet in their readers. The authors are confident that these books will lessen the time heretofor given to reading, relieve the teacher, and remove obstacles in the way of spelling. The little volumes are very attractive. [Ginn & Co., 35cts. each. Teachers' Manual, 50 cts.]

George Eliot's Mill on the Floss has been added to The Standard English Classics published by Ginn & Co. This novel is edited by J. Milnor Dorey, Head of the English Department in the High School of Trenton, N. J. The editor has travelled through the scenes which form the background of the story and has produced a very readable introduction. The book is illustrated, and the notes contain suggestions for discussion and study, as well as explanations. [Ginn & Co., 554 pages, 50 cents.]

We of an older generation, who studied French from the pages of Fasquelle, Pujol, and their kind, look enviously at the books used under what is known as the Direct Method of teaching modern languages. Lectures Illustrés, by E. Magee and M. Anceau, intended for use by pupils who have had a year of French, would convince any child that French was a language to be read with pleasure, and not merely studied with pain. Lessons in Elementary Grammar and free composition are provided for. Really charming illustrations accompany each story and poem, and the price of the book, clothbound and containing 63 pages, is only 1s. 6d. [A. & C. Black].

THE MAGAZINES.

The Public Health Journal, the official organ of the Canadian Public Health Association, has issued, in the February and March numbers, papers that should be read by every one interested in education or in children. Besides the very full and interesting reports on Medical Inspection in Schools, to which we refer in another column, the March number has an article on Feeble-Minded and Backward Children, an account of the Housewives' League of the United States, and an address on children's health by Dr. Bech of South Africa, that ought to be read by every mother of school children. This is by no means a complete list of the contents of this most valuable magazine, which we should like to see in every household in Canada. The April number will discuss fully the problems of the feeble-minded. [Toronto, \$2.00 a year, 20 cents a copy.]

OFFICIAL NOTICE.

Teachers are requested to observe carefully the provisions of Reg. 20 (1) (3) with reference to May 23 and 24, which fall upon Saturday and Sunday respectively, this year.

The exercises in connection with Empire Day, will be held upon Friday May 22, Victoria Day falling upon Sunday will be observed as a holiday on Monday, May 25.

W. S. CARTER,

Chief Superintendent of Education.

Why Our Students Succeed.

From the day a student enters our College to the day of graduating every hour of time is put to the best possible use. Teachers and students work together with a definite purpose. Courses of study full and thorough but no aimless work, no useless repetitions, no nonsense. Every step a preparation for practical business life.

Personal interest taken in the progress and welfare of every student.

Students can enter at any time. Catalogue free to any address.



S. KERR,





Anyone sending a sketch and description may quickly ascertain our opinion free whether an invention is probably patentable. Communications strictly confidential. HANDBOOK on Patents sent free. Oldest agency for securing patents. Patents taken through Munn & Co. receive special notice, without charge, in the

Scientific American.

A handsomely illustrated weekly. Largest circulation of any scientific journal. Terms for Canada, \$3.75 a year, postage prepaid. Sold by all newsdealers.

MUNN & Co. 361Broadway, New York Branch Office, 625 F St., Washington, D. C.

Canadian History Readings

Published by
The Educational Review.

Contains a capital selection of stories about leading incidents in our history. It is published in 12 parts. The twelve parts may be obtained complete for 75 cents by sending that amount to the

Educational Review, St. John, N. B.

Slate Blackboards

CHALK CRAYONS, SCHOOL SLATES, SLATE PENCILS, LEAD PENCILS, SCHOLARS' COMPANIONS.

W. H. THORNE & CO., Limited.

HARDWARE MERCHANTS,
Market Square, SAINT JOHN, N. B.

FIRE INSURANCE.

INSURE WITH

THE SPRINGFIELD FIRE AND MARINE INSURANCE COMPANY

Established 1849. Cash Assets Eight Million Dollars.

KNOWLTON & GILCHRIST, 132 Prince Wm. Street, ST. JOHN, N. B.

Applications for Agencies invited from Teachers

Gen. Agents Maritime Provinces.

