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MISSING

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The teachers of the lower grades in St. John schools have petitioned the school trustees for an increase in their salaries, and everyone who knows the conditions will admit that the request is just and reasonable. Teachers have waited patiently for recognition of their need of increased incomes to meet the increasing demands upon them. Public opinion is coming to their aid, and we may hope that they will not have to wait much longer. Meanwhile it rests with them, more than ever, to

prove themselves worthy. Dean Briggs' advice to Wellesley College girls is always timely: "If you have to earn a living and begin at the bottom, make the bottom stronger because you are there. Then trust to time. So few workers in proportion to the whole number give themselves intelligently, loyally and unreservedly to their immediate duty, that if you thus give yourself, you cannot but succeed."

Sometimes I think that our happiness depends chiefly on our cheerful acceptance of routine, on our refusal to assume, as many do, that daily work and daily duty are a kind of slavery. How long it takes us to learn that "the word of God is not bound," that what enslaves us is not the routine of life, but the chafing at the routine! How long it takes us to see that every life without a light in it is dull, that no life with a light in it can be dull, and that whether the light is there or not is a matter of our own will!—*Dean Briggs.*

We understand that the meeting-place of the Summer School of Science for its twenty-eighth session in 1914 has not yet been fixed upon. The last two sessions, both largely attended and very successful, have been held in Nova Scotia. It is now the turn of some community in New Brunswick to enjoy the benefit of a meeting, and to offer the advantages of the school to its teachers at close hand.

We are glad to note that the teachers of Kings and Queens Counties, New Brunswick, have put on record a resolution to the effect that no teachers should engage to teach in their home district for a lower salary than they would accept if living away from home.

The "Highroad" books of the Royal-School Series, suggested by Chief Superintendent Carter as useful for supplementary reading are advertised in this issue by E. G. Nelson & Co.

BOTANY.

L. A. DEWOLFE.

No family of plants claims our attention more strongly than the *leguminosae*. Other plants do not square their accounts with the soil until after they are dead. This family, however, owes no board bills. In fact, it not only pays its own way, but leaves an amount on the credit side to help the less fortunate plants that may follow after it.

Everyone, doubtless, knows how clovers and allied plants enrich the soil by allowing bacteria to live in small lumps on their roots. If any reader be not familiar with this fact, he should read in some botanical text-book about "nitrification" and "root-tubercles."

Since this is a family of benefactors, we cannot become too well acquainted with it. Different members show much variation, and include herbs, shrubs and trees. To learn the flower structure most commonly met, however, I suggest a study of the sweet pea. Notice the peculiar irregular corolla, with the one larger petal covering the others in the bud, and spreading back when in full bloom. Particularly, however, should we notice the stamens. There are ten; but the filaments of nine of them grow together, forming a sheath, and one is separate. This occurs in no other family.

There are peculiarities about the leaves in many species. In the peas and vetches, for example, some of the leaflets have become tendrils, and to make up for the loss in green surface, the stipules have become large and leaf-like.

School children should be familiar with the clovers of the farm. The red, white and alsike are everywhere. The crimson clover is becoming more common. Alfafa, which is closely related to the clovers is, also, being grown experimentally. In the west, it is one of the most important fodder crops. The yellow or hop clover is a common weed. Similar to clover, too, is Melilot, or Sweet Clover.

The vetches, or wild peas, are common in hay-fields; and are often sown with oats. Two or three species can be found without trouble. I find the hairy vetch, called "moose-pea," in many localities. The Beach Pea will be familiar to those living on the sea-shore. The ground-nut or wild bean is common in our river valleys. It likes to climb among the branches of low willow shrubs. The Canadian tick-trefoil often grows with it.

It is, of course, needless to mention the peas and

beans of our gardens as belonging to this family. It also furnishes a few ornamental trees and shrubs, among which are the Locust (Acacia) Honey Locust, Siberian Pea Tree, Red Bud, Genista and Wistaria. The Genista is a common greenhouse plant, which will bloom in the house during the winter, and again out-doors in the summer. The Wistaria is an attractive climber; but is not perfectly adapted to our winters. It is, however, worth trying.

Children will be interested to know that licorice comes from the root of a plant belonging to this family.

The next family worthy of attention is the *Umbelleferae*. It can be identified almost at a glance by the compound umbels or umbrella-like clusters of flowers. Each individual flower is small. Apparently it has no calyx. The calyx really forms an extra coat to the ovary; and has, therefore, practically lost its identity. Each flower has five stamens. Notice where they are attached. Study carefully such a plant as the Caraway to learn the family characteristics.

In our vegetable gardens we can find four members of this family, viz.— carrot, parsnip, parsley, and celery. There are also a wild carrot and a wild parsnip, both of which are troublesome weeds. The former frequently grows in hayfields in August, after the hay crop is harvested. Its flower-cluster is somewhat the shape of a bird's nest. It is also called Queen Anne's Lace. Caraway, as everyone knows, also prefers a hayfield.

Along river banks the Cow Parsnip is abundant. Its leaves are as large as rhubarb leaves, and the flower cluster is nearly one foot in diameter. The plant grows five or six feet high.

In ponds two very common plants are the water parsnip and the water hemlock. The poison hemlock, which Socrates had to drink, was probably of this group.

In moist ravines in spring one finds the Sweet Cicely fairly common. I have found it in the same locality and blooming with Dutchman's Breeches, which is not of this family.

To make a complete collection of either of the foregoing families will take the student into all kinds of locations— wet and dry; sunshine and shade; cultivated and uncultivated ground. Incidentally he will learn much besides being able to identify the plants named here; for, of course, he will not close his eyes to plants of other families.

NATURE STUDY OF ANIMALS.

Suggestions for the last part of November and
the first part of December

H. G. PERRY.

As general work for the grades, the lower, the intermediate and the advanced, base your studies for this month on the dog, varying the work according to the grade, and making the exercises largely of the nature of a comparison with some other well known animal, e. g., the cat.

Since we are studying things, not books, it would be well to have at hand some good natured dog that would not object to being handled. This will add interest to the work, and give you a chance to show your pupils how to carry on nature study work.

We suggest the following exercise:—

Study the general shape, size and covering of the body of the dog, and compare with the cat. Which has the softer coat. Which the firmer body and why? Explain how its habits of life tend to produce a muscular body. In what position is the dog's body when running fast? What other motions or gaits has the dog? Watch him trotting along a path, does he always carry his body in a straight line with the path? Does he stealthily stalk his prey like the cat, or run it down in wolf-fashion? How does he capture and hold his prey?

Compare the limbs of these animals, also their feet and claws. The advanced grades should make out a similarity of skeletal structure of these parts. Compare the size of the claws. The cat's claws are retractile, which explains why her feet seem so soft at times. Can the dog retract his? Does the dog use his claws in catching and in helping to hold his prey? What is their use? Boys will be eager to tell about dogs digging out burrowing animals, thus suggesting an answer. Which animal has the firmer and heavier pads, and why?

Note the shape of the pupil of the eye in each animal. Can both see equally well in the dark? The dog uses his eyes very little in the chase, but his sense of smell is so keen that he readily follows the track of the fox or rabbit, made hours before. Does he also use this sense in recognizing his friends and in detecting strangers?

Notice the listening attitude of the dog, and the position and shape of his ears. Are they well

adapted for catching sound? Can man hear and smell as keenly as the dog?

Examine the teeth of the dog, and make out a formula for their arrangement, according to directions given in the October REVIEW. Is he as well provided with molars as the cow? Watch him gnawing a bone and notice the teeth he uses. The long canine teeth are called tushes in the dog. Find these teeth in other animals and note how they compare in length with those of the dog.

Consider the food of the dog. On what does he chiefly feed? Note that he has not yet learned to chew his food properly, but gnaws it off in small chunks and gulps it down. What do you infer regarding his powers of digestion?

How does the dog express emotions of attention, delight, affection, fear, shame and anger? Do you know of other animals that are equally demonstrative?

There are said to be as many as 200 different breeds of dogs, all derived from wolves or wolf-like animals. With the aid of your pupils make a list of the principal breeds. How many breeds are represented in your community? Pick out and discuss the more economic breeds, pointing out the chief value of each.

The dog is the great companion animal of man, and has been associated with him long before the dawn of history. One author has said that "the dog is the most companionable, and has the most human qualities and intelligence of all our domesticated animals."

These are but a few topics for the nature study of the dog; others of greater interest may be at hand, be free to use them, and all that you use make your own — fill with your own personality.

Encourage the collection of stories about dogs; have several read in the school. Direct the advanced grades to longer stories as "Beautiful Joe," "The Call of the Wild," etc., etc. Here also is a splendid opportunity for story-telling, composition work and essay writing.

The study of insects is not entirely passed with the passing of summer and early autumn. The Fall Cankerworm is common during November, and for many reasons deserves special attention at this time. This rather delicate silky-winged moth is at this season of the year found flying in the vicinity of our orchards, and at night is attracted to nearby lighted windows. These are the

males. Direct your pupils to search the orchards on mild nights with a lantern for the wingless females. They have a rather large body, and appear quite spider-like, as they are found crawling up the trees, and are about the same color as the bark of the tree. You will readily find them, for the males are always near.

Where are they going, and what is their object? Place several in a wide-mouthed bottle along with a small twig of apple tree, cover securely, and in a day or so you will find sheets of eggs attached to the twig. Search the ends of the twigs of apple tree for similar bunches of eggs. Read in Reports about the ravages of this orchard pest. This worm, together with its cousin, the Spring Canker-worm, works great damage in our orchards.

Our winter birds, especially the Chickadee, eat great quantities of the eggs and female moths. It is said that "the English Sparrow was imported largely to destroy these cankerworms, but they have greatly increased where the sparrow has become most numerous, and where our native birds have, in consequence, been driven away."

Plant galls furnish another line of very interesting nature work. Galls are abnormal growths of plant tissue caused by stimuli produced by some organism other than the plant itself. They assume various forms in the tissue of leaves, buds, and young stems. As the modification always takes place in rapidly growing parts, they are formed chiefly in spring and early summer.

Among our most common galls are those found on the leaves of the willow and elm. In the oak gall the entire leaf is modified. Stem galls are common in the golden rod and the wild rose, while a cone gall is found on some species of the willow.

Collect several of each of these galls, and as many others as you can find. The pupils should become familiar with the form and appearance of each. Dissect several carefully, so as not to injure the insect within. Is the insect active, in the larval stage, or in the resting, pupal stage? In either case note its size and shape. Questions at once arise as to how it reached its present location in the plant tissue, on what does it feed, what becomes of its excretions, etc., etc.

Bisect the cone gall of the willow longitudinally, and note its structure. Here the modification takes in a whole branch. Notice how the leaves have been dwarfed to form the scales, and the stem shortened. In the center of the cone, in the stem region, you will find the insect larva or pupa,

which has caused these changes. Look carefully among the scales of the cone for grasshopper eggs, and larvae or pupae of the saw-fly, the moth and the gall-midge, which are often found in such locations.

Keep galls for spring hatching. Those on the leaves of the willow should be kept moist and cool, in natural conditions as near as possible; while those from the golden rod and the rose may be kept in closed bottles in the schoolroom. You will be surprised at the number of insects that will come out of one rose gall.

The aquarium will also provide interest, especially for older pupils.

Collect sediment, leaves, small bits of twigs, sand and mud from the shaded side of a pond, in a glass fruit jar, and allow it to settle, standing the jar in the window. Examine the side farthest from the light for small green bodies attached to the glass and extending into the water for about an eighth of an inch, with the free end surrounded by a number of small arm-like parts. Tap the glass hard enough to set it vibrating and notice the sudden contraction of this little organism. It is now a small oval green mass, but watch it a few minutes, for it will soon extend itself out into its original form. This is a hydra, or fresh-water polyp, an animal belonging to the same great group as the sea-anemone, jelly-fish and coral. Examine one with a hand lens. Count the number of arms in several; is it fairly constant? Note the conical part around which they are arranged. This is the mouth, and it opens into a cylindrical cavity, from which branches extend into the arms.

Carefully turn the jar half around, so the hydra are next the window. On which side do you find them the next day? Why did they change their location, and how do they move from place to place? The teacher should read an account of the hydra in some good school-text.

Work may be extended to other topics, such as: the food of the hydra, how it captures its prey, the stomach and digestion, reproduction, etc., etc. A compound microscope will be of great advantage for working on these topics. For example, mount one in a drop of water on a glass slide, over it place a cover glass supported by small bits of a broken cover glass around the edge, and examine first under low power for movements of contraction and expansion; then under high power for cell structure, especially the nettle-cells in the

arms. These cells are among the most interesting structures in the animal world. The boy, who while in bathing has happened to strike a jelly-fish, has learned something of their power. You can cause the nettle-cells of the hydra to act in a similar way by drawing a drop of strong vinegar under the cover glass.

CENTENNIAL ANNIVERSARIES OF THE WAR OF 1912.

J. VROOM.

XVI.—The Burning of Newark.

December 10.—There came a marked change in the character of the war as the second winter drew near. No longer a series of petty raids and half-hearted invasions, it became a war of hatred and revenge. And for this change, perhaps, a certain brigadier-general of militia named McClure, who had been left in charge of the United States forces on the Niagara frontier, was chiefly to blame.

After the battle of the Thames, it was expected that Harrison would continue his advance, and attempt to occupy Burlington Heights. To defend this important position, Vincent had withdrawn his forces from the Niagara peninsula. McClure, therefore, was in full possession. According to his own account his men were ungovernable. With or without his consent they ravaged the country until they were driven back to Fort George by the return of the British troops.

But no unmanageable militiamen and volunteers were responsible for what followed. When McClure had decided to abandon Fort George and retreat to the opposite side of the river, he resolved to conclude the work of devastation by burning Newark.

The little town of Newark, the first capital of Upper Canada, was conveniently near to Fort George, and some of McClure's men had been quartered upon its inhabitants. Consequently it had suffered from their depredations less than the surrounding districts. But now the soldiers were ordered to set fire to the houses in which they had been unwillingly harboured; and no pity which they may have felt for their hosts could save the dwellings from the flames. On the night of the tenth of December, after a very brief warning to the inhabitants, the cruel order was carried out; and four hundred women and children were left to face the winter night without food or shelter,

while they watched the destruction of their homes.

The immediate result was a more rapid advance of Colonel Murray, who had been sent forward by General Vincent to drive out the invaders. General McClure fled with such haste that he left his tents standing, and some of his cannon and stores fell into the hands of the British. Three days after the burning of Newark, the British flag was again flying over Fort George, there to remain. The next thing to be considered was retaliation.

NOTES ON HIGH SCHOOL LITERATURE.

Some General Suggestions.

Teachers who have two or more High School grades under instruction find it very hard to give time enough to the set books for each year. Three-quarters of an hour should be the shortest period for a literature lesson, and an hour is much better. Where it is impossible to give this time to each class, try grouping your classes, and giving two, or even three, the same work. The books for grades IX and X might be taken in alternate years, or, as I am told one principal in New Brunswick is doing now, half the year may be given to the course for Grade IX, and the rest to Grade X work. As in the examinations the stress is laid on the books set for Grade XI, it might even be practicable to let all three grades do "As you Like It" together. An ungraded class can work together at a Shakespeare play with excellent results, because the work can be so varied. Where you are taking a class like this, divide the pupils into three or four groups, according to their ability in this subject. (The division will not altogether correspond with their division into grades.) For home or seat work set the same number of groups of questions or suggestions, e. g., if they are working at character study, questions might be graded thus: 1. How can you tell from the play that Celia was kind (or unselfish or practical)? 2. Tell all that you can find out about Celia from Act I, Sc. III. 3. Contrast Celia's character with Rosalind's. Then all three divisions could join in a discussion of Celia.

The advantages of grouping the classes and taking fewer books are:—

1. The longer time possible for each lesson.
2. The stimulus given by studying in a larger class.
3. The opportunity for the teacher to concentrate her own preparation.

Method of Presentation.

Always give your class a view of the book or poem as a whole before any detailed study is attempted. This is best done by reading it through to them, while they follow the reading in their books. I know that some teachers object to this plan and insist upon having each verse or paragraph studied and fully understood before they go on to the next. A teacher with a real gift for his subject can make any method successful; but in the hands of any but a genius, I believe that to put the detail before the whole is to lose the chance of securing interest. We do not look at a picture in that way. At our first glance we try to see in a general way what the painter wants to show us; afterwards, by careful scrutiny, we discover the details which make up the whole. And in approaching a piece of literature thus, we are following the writer's order. Before he begins to write, he must have his general conception. For a novel, a ballad, or a play, he knows the story he is going to tell; for a lyric, the mood or feeling he wants to express. So we must try to find out, first, what he wants to tell us, and then increase our understanding of it by studying his work in detail.

Selections from Cowper.

In teaching the selections from Cowper's Poems set for Grade IX in New Brunswick, the difficulty is that so few of them are of a nature to interest or please young people. "John Gilpin" is delightful to old and young alike, but it should be familiar to children long before they reach Grade IX. From the others choose those which show one of the author's most striking merits — his power of telling a simple story or incident, with clearness, grace and pathos or humour. "The Loss of the Royal George," "The Needless Alarm," ("in its humble way one of the most perfect of human compositions"), "Ode to Apollo," "The Epitaph on a Hare," "The Poplar Field" may be chosen to illustrate this power of his. In addition I should read to the class "The Colubriad"—the story is told in prose in the poet's letter to the Rev. William Unwin, August 3, 1732 — and "The Retired Cat." These show also his interest in and close observation of animals. In what other poems is there evidence of this?

"Boadicea" and "The Loss of the Royal George" should be memorized, and with the for-

mer should be compared the beautiful lines in Tennyson's "Boadicea," beginning, "Fear not, isle of blowing woodland."

With "Alexander Selkirk" compare fully Tennyson's picture of the loneliness of the shipwrecked Enoch Arden, from "The mountains wooded to the peak" to "no sail." The comparison will bring out Cowper's distinctive simplicity.

"The Loss of the Royal George" is a masterpiece. Find out what makes it so. What are its merits? "Vigour of description," "force of pathos," the "simplest possible language." How many figurative expressions can you find in it? Compare what Cowper says in writing of another poet. "To make verse speak the language of prose without being prosaic, to marshal the words of it in such an order as they might naturally take in falling from the lips of an extemporary speaker, yet without meanness, harmoniously, elegantly, and without seeming to displace a syllable for the sake of the rhyme, is one of the most arduous tasks a poet can undertake."

Together with "To Mary," read the still more beautiful sonnet in the "Golden Treasury," "Mary! I want a lyre with other strings." Palgrave classes this sonnet in the very first rank.

"The Judgment of the Poets" would have special point if read on one of our cold May days, and if the pupils would collect references in the English poets to May and June.

The poems on the slave trade may be passed over lightly. "Pity for Poor Africans" shows how the poet can bring his humour to a serious subject, and it gives a perfectly accurate view of the chief obstacle to reform, the selfishness of the great merchants. But these poems are more nearly connected with history than with literature. Read the lines beginning "Slaves cannot breathe in England," in "The Time Piece," Book II of "The Task," and compare the part taken by the American poets, Longfellow and Whittier, in the fight against slavery.

The lines on "The Shortness of Human Life," so unlike Cowper in tone and in expression, are not original, but a translation from a Latin poem by a contemporary.

There remain "My Mother's Picture," and "The Castaway," which should be studied with some fulness. "The Castaway" should be learned by heart, so that the full beauty of the words may

be tasted. Readers of Charlotte Bronte will remember how Caroline Helstone recited it to Shirley, pacing up and down in the twilight, and the discussion between the two girls on Cowper's character. Explain from the Bible the reference "No voice divine the storm allayed," and compare "The billows swell, the winds are high." Olney Hymns No. 37.

Of the lines "On Receipt of My Mother's Picture," Cowper writes, "A poem which, one excepted, I had more pleasure in writing, than any that I ever wrote. That one was addressed to a lady whom I expect in a few minutes to come down to breakfast, who has supplied to me the place of my own mother — my own invaluable mother, these six and twenty years."

Some Typical Questions.

Is the tone of the poem as a whole, happy or sad? Is it gloomy? joyful? Try to find the exact word for it. In lines 15-20 what does he propose to do for his mother? for himself? Compare lines 112-121. Study carefully the two wonderful little descriptions, ll. 28-31 and 36-45. What do you think of the metaphor in lines 88-99? Of the wording of those lines? Express in a sentence the gist of each division of the poem as printed in the text book. What is the force of "O" in line 1. [It expresses longing], of "but" in line 2? [It softens the force of "roughly."]; What is the antecedent of "it" in line 10? Express in your own words "Thy constant flow of love — too often makes." What is the meaning of "humour" here? Of "numbers" line 71?

From what you know of Cowper's poems you find that he was inclined to be melancholy when he was thinking of — whom? or what? When did he write in a happy strain? Mr. Goldwin Smith says, "An ink glass, the killing of a snake in the garden, a cat shut up in a drawer, sufficed to elicit a little jet of poetical delight."

Have at hand a complete edition of Cowper's Poems, from which to illustrate and supplement your lessons. And if you really want to get, and give, a fair understanding of the man, and at the same time a familiarity with some of the very best English prose, have also his letters. They are to be had in a good little edition, with an introduction by E. V. Lucas, in the World's Classics, published by Henry Frowde, Oxford University Press, for one shilling, net.

I have been asked to recommend books with notes on Palgrave's "Golden Treasury." Here are two: "Notes to Palgrave's Golden Treasury," Macmillan & Co., 60 cents; "The Golden Treasury Edited for the Use of Schools," Ginn & Co., Boston, 59 cents.

BUSY WORK.

[A paper read by Miss Gertrude Coughlin at the Charlotte County Teachers' Institute at St. George, October 3rd.]

While discussing this Institute with a fellow teacher last August, I mentioned that there was to be a paper on "Busy Work." She exclaimed, "Well, I shall certainly go, because I have been trying to find out just what busy work is ever since I have commenced to teach." At the time I was rather surprised at the remark, but since collecting material for this paper, I, too, have wondered just what it was.

Some maintain that busy work is for pupils who have finished seat work, in other words, work provided to keep children out of mischief. Others call industrial work, as making borders, chains, paper folding and cutting, busy work.

These may be placed under that head, but to me nearly all primary seat work is busy work, any game used in teaching or reviewing is busy work, and under the same head comes correlation work.

Viewing the subject from this standpoint it is totally unnecessary to put forth an argument defending its position on the time table, because all see readily that it must have a place. In rural schools it is indispensable.

Then select the plans that you judge to be instructive. Always have on hand an unlimited supply of material. You will be surprised to see how readily the children will furnish you with fruits, leaves, seeds, strings, pasteboard, in fact, almost anything that will be required.

Work the busy work idea into all subjects. A teacher has but to glance over a suggestion for busy work in order to ascertain whether it can be utilized. The progressive teacher keeps up a constant search for new material, because she realizes that in order to keep up the child's interest, she must have variety. Care should be taken that the child is familiar with the plan before a change is made. In the beginning teach the pupils the proper method.

Reading.

Busy work in reading is given to children just beginning school. Perhaps the first work given would be word building from letters. The words will be built by pupil and teacher, before being built by the pupil himself.

I. Each child is given an envelope containing bits of cardboard, each bearing a printed letter. Next he is given a hen cut out of cardboard, or a dog, or a cat, or a fish, the form depending on the word which had just been taught, and which you will build. We select a fish. On each side print "f-i-s-h." The teacher using a large pattern traces a fish on the board. Pointing to "f," ask, "Who can find a card with this on it? Lay that letter near the fish on your slate. Now who can find 'i?' 's?' 'h?'" Placing each in turn near the last one put up. Do this at least three times. Have the word erased, and make believe their slate is a pond. Fill the pond with fish.

Each new word in Part 1 of the Primer will furnish busy work, and after helping with two or three words the class will readily build any word. The make believe games play a very important part in Grade I, so that the slate may be a trap to catch rats, a nest to hold eggs, a pen for pigs, a barn for cows.

II. After the class has learned to print the word furnish each child with a slip of paper on which the word is printed. In preparing these slips use two sheets of carbon paper, and three copies are thus made at once. The children will enjoy printing on the slips. Vary this by using different colored ink to print the word.

III. Provide each boy and girl with a sheet from an old picture book. These are good because many of the words are those that are used in the primer, but a sheet from a magazine or paper will answer the purpose. Children's Pages appear in all the up-to-date papers; always save these, they are very useful. Ask the child if he sees a word he knows, then tell him to draw a circle (I call them fences) around it, and to do this to every word he knows. At the end of the period collect the papers and correct. Put the name of the child who has found the most words, on the board. This is an incentive.

Each teacher has her own way of giving seat work. My plan is to teach a lesson, then give seat work on the lesson, or give work on a lesson to be recited. A primer class has recited a reading

lesson; as busy work ask the class to print each word they remember three times. After they have learned a number of words, ask them to make a list of the words they remember. I have had pupils who have been in school but three months, print a list of over fifty words. Again, from a number of words that have been printed on the board, print those you can name. Make stories with the words. Arrange the list alphabetically. For a change have the words formed with beans or peas, colored beads or berries from the mountain ash, and afterwards printed on the slates or on paper. Children are very fond of this work.

Busy Work in Writing.

In teaching writing, I divide the alphabet into seven groups. Write each group on a card for each pupil. Group 1, "c, o, a, e." Group 2, "i, u, w, v, x." Group 3, "n, m, r, s." Group 4, "t, d." Group 5, "l, b, h, k." Group 6, "j, y, g, q, z." Group 7, "h, f, y." Have these letters (a) pricked round with a pin; (b) traced with a lead pencil; (c) copied on a slate. Vary this by using cards of different colors, but be sure to give the same group until the letters can be formed with some kind of accuracy. Write each child's name on a card and give him this to copy from. Have it kept in his desk to be referred to at any time. Let him change cards with other pupils, and so learn to write names of all the class.

Busy Work in Drawing

Give colored cardboard squares, oblongs, triangles, to trace. Have them cut in different sizes. Teach children to place smaller ones inside a square or oblong, then have them formed with tooth-picks, pith cubes, or seeds, etc., and place forms inside. From these teach to draw a square with rulers, and draw figures inside of squares. Draw triangles or oblongs between lines and thus make borders.

Next have circles traced. Use these in making borders. Then try ovals. From ovals form chick, hen, duck. Change to apples, tomatoes, turnips, carrots, which have been cut from seed catalogues. When a child can readily trace an object, he will soon learn to draw it free hand. When he discovers that he can draw one object, he will try others. You will find that drawing will furnish an unlimited supply of busy work. For model drawing use the models made in paper folding.

Mechanical or Industrial Busy Work.

In an age when industrial education is so insisted upon, it is necessary to furnish this kind of busy work. In choosing the following I have tried to select work that would teach the child something.

1. Cutting and mounting pictures that can be used for stories. This will teach the boys and girls form, and will prepare them for paper-cutting. "The Ladies Home Journal" prints a page of pictures each month. The circus picture was good, and furnishes the theme for a most interesting story. A child may make a circus if he is supplied with a pencil, paper, scissors and a number of animal cookies. These paper animals will furnish a subject for work in oral composition. All children love animals and are anxious to learn how and where they live. In passing I might say that the page of the Journal entitled "Flossie Fisher's Funnies" may be mounted and used for picture stories in Grades 3 and 4.

The girls enjoy making the paper dolls, and will furnish dollie with many and varied styles of dresses. Here is a chance to teach harmony of colors in Grades 2 and 3.

Each child may make a picture book. An animal book will be much prized; a book of birds is a joy; little people of other lands with pictures showing dress, games, manner of living, furnish a book that will be of use in every grade until the child enters High School. An inexpensive book may be purchased for the mounting. The pictures are cut from magazines, farm catalogues, picture-books and post-cards. The girls are very fond of a flower book, and, by the way, this book can be used later in teaching copy drawing.

In all these books have the name of the picture printed underneath.

To make a border for the blackboard the pupils will trace and cut out from the pattern the figure desired. These are pasted on the board to form a border. Oak or maple leaves, fruits, all make pretty borders for the Autumn months; holly and candles for December, hearts for February, chickens for Easter, and butterflies for June. Do not put a border on the board in September and leave it there for two or three years. In a rural school all grades may help with this work. Grade 1 will trace, Grade 2 cut the pictures out, Grade 3 color them and Grade 4 will paste on the board. This will interest all the pupils, and the border will be much more appreciated.

Very pretty booklets for words mis-spelled may be made by the children. They are made to represent a butterfly, an apple, a maple leaf, etc., The covering may be ornamented by simple drawings by the older pupils; the younger ones will simply print the title and the name of the month. The leaves are made of any kind of paper that the child brings. At this time of year the pupils will bring in autumn leaves of all hues. Have these traced and colored. No two leaves are colored exactly alike, no pupils will color the same. Use these for borders or mount on appropriate cards.

Second Grade pupil will draw the birds, color them, and underneath draw in the nest, and print number of eggs laid.

Third year pupils are familiar with terms used in paper folding, then this will furnish work for them, because they will work from directions that have been printed on the board. The pupils of this grade in a rural school will make number cards for the primary classes.

(To Be Continued)

THE EMPTY CRAYON BOX.

A little thinking will enable a teacher to make some profitable use of the empty crayon box. By measurement the cubical contents may be computed and it may thus become a convenient measuring unit. Cutting off an end at the right length the dry quart, liquid quart and liter may be readily made. A sharp pen-knife and a few small brads are all that are needed in this. Ends and sides holding as they do by mortise and tenon, may be set to show various angles. Sides, ends, tops, bottoms can all be used in making models of various surface forms, rectangles, triangles, etc. The ingenious teacher will put some forms together for drawing models. Six-inch rulers, and decimeter rulers may be in the hands of each pupil by using materials from the crayon box. Even the physiology class may get an idea of the real capacity of the lungs, stomach, etc., by knowing the cubic inches represented by the crayon box.

The uses of the ordinary shade stick may be extended into the school-room. No teacher need be without a yard stick showing feet and inches. Also the meter with its divisions can readily be made from a shade stick. Nearly all arithmetics have the decimeter measure shown. A piece of paper cut the length of this measure and laid ten times on a shade stick gives the meter. It would be well if pupils could see these measuring units commonly in use and in comparison.—Western Teacher.

TEACHERS' INSTITUTES.

On Thursday, September 25, the Teacher's Institute for the county of Restigouche met at Campbellton, with thirty-eight members present, and the President, Mr. James B. Carr, in the chair. Addresses were made by the Chief Superintendent of Education, Inspector Mersereau, Mr. Fletcher Peacock, Director of Manual Training, and others. At the afternoon session a clear and forcible address on Manual Training was given by Director Peacock, and a Paper, "How to Teach Children to Solve Arithmetical Problems," by Miss K. McNair.

Mayor A. A. Andrew opened the evening meeting in the Assembly Hall in well chosen words. The address of welcome was given by Mr. A. E. G. MacKenzie, and a programme of speeches and music was carried out.

On Friday morning a paper, "Talks for Beginners," was read by Mr. L. D. Jones, and one on geography by Mr. George King. These were followed by discussions. At the Friday afternoon session Spelling was the subject under consideration. Miss Sarah Duffy read a paper on "Best Methods of Teaching Spelling in the Primary Grades," and "Spelling in Advanced Grades" was dealt with by Miss Jessie W. Currie, B.A.

A resolution was passed that the Restigouche County Institute should hereafter meet once in two years, alternating with the meetings of the Provincial Institute. Officers for the coming year were elected as follows: President Mr. L. D. Jones, Vice-President, Miss K. McNair; Sec.-Treas., Miss Jennie B. Carter; Additional Members of Executive, Miss Emma Harquail, Miss Annie MacInerney.

The visiting teachers had an opportunity to see the work done by the Campbellton Cadet Corps, who were drilled on the School ground under charge of Cadet Captain Gray.

On Thursday afternoon, by the kindness of the Board of Trustees, the members of the Institute were taken in motors to Morrissey Rock. The weather was glorious and the scenery, beautiful at all times, was exceptionally so because of the brilliant colour of the autumn foliage.

The Institute was voted a success. The tactful genial manner of Inspector Mersereau, and the kindly, encouraging, thoroughly practical talks of Chief Superintendent Carter gave a great stimulus to the work.

The twenty-ninth session of the Charlotte County Teacher's Institute opened at St. George on Thursday, October 10, at ten a. m., when the chair was taken by the President, Miss Emma L. Veazey, of St. Stephen. After the appointment of committees, the President read an interesting address. She spoke of the loss to New Brunswick

incurred by the increasing movement to the West, and urged the teachers to be more optimistic about their own province and to look for the best opportunities here. She spoke of the advantages of the Summer School of Science, and of the creditable showing made by Charlotte County teachers who attended the school. Chief Superintendent Carter, in his address, held out the hope that teachers' salaries would be increased, and advised the teachers to see that they deserved good salaries, and to set a fair value upon their services. Other points dwelt upon by Dr. Carter were:—The demand for vocational training, the advance already made in agricultural education and in physical training, the desirability of music in the schools, the importance of sanitary conditions in the school-room. He complimented Charlotte County upon the excellence of their school buildings.

Addresses were given by Inspector McLean and Mr. R. P. Steeves, after which Mr. W. McL. Barker, Principal of the St. George School, read an excellent paper on English Composition, insisting especially on the need for much practice in oral composition. This paper excited much interest and was discussed by Mr. Denham, Dr. Carter, Miss Eleanor Robinson, and others. Mr. W. T. Denham, Principal of the Milltown Schools, read a paper on Arithmetic in our Schools. Mr. Denham was very definite, taking up the course in Arithmetic point by point, and describing his method of dealing with each. He gave some general suggestions about the time to be given to the subject, advising not less than one hour every day, and that hour to be in the morning, when the mind was freshest. A good deal of discussion followed this paper, Mr. Barker and Mr. Higgins debating some of Mr. Denham's points. Dr. Carter thought that some of the arithmetic rules and exercises in the books might be dropped with advantage. Mr. Barker suggested dropping specific gravity.

In the afternoon Miss Annie L. Richardson, of St. Andrews, read an admirably useful paper on the Teaching of Geography in Grades VI, VII and VIII. As this paper will be published in whole or in part in a later issue of the REVIEW, we shall not comment further except to say that it won appreciation and approval from all who heard it.

At the public meeting in the evening Coutts' Hall was crowded. Mayor McGrattan, in a short and cordial speech, welcomed the members of the Institute, and said that if they had good schools at St. George, he believed it was due to the policy of the Trustees, who believed in engaging the best teachers, regardless of expense, and leaving them to act according to their own judgment. Senator Gilmore and Inspector McLean both spoke briefly, and Director Steeves put before the meeting the case for Agricultural Education. Mr. Peacock, Director of Manual Training, gave an able speech on Manual Training and Household Science, stating concisely the conclusions arrived at in the

Report of the Commissioners on Technical Training. Mr. R. E. Armstrong, of St. Andrews, and Mr. James Vroom, of St. Stephen, followed with short and interesting addresses. The St. George Cornet Band enlivened the meeting by carrying out an excellent programme. The good attendance on a very disagreeable night and the close attentions and enthusiasm of the audience, argued well for the interest in Education taken by the people of St. George.

Friday morning's session was opened by a delightful paper on "Ferns," by Mr. James Vroom. The speaker began by pleading for the study of ferns for the sake of the cultivation of the taste. He said that the recognition of beauty of form was almost entirely a matter of training, and that to learn to recognize that a fern was beautiful was an important step. He showed how this work might be correlated with drawing. After pointing out the distinctive characteristics of our native ferns and drawing attention to the fine specimens that illustrated his paper, Mr. Vroom expressed his regret that field botany — the learning to know and love the beauty of plants in their own surroundings — seemed to be out of date.

The Institute then divided into two sections. Principal McFarlane gave a lesson on Geometry to a class from the St. George High School; and Miss Gertrude Coughlin read a very practical paper on Busy Work to those interested in Primary teaching. Miss Coughlin was kind enough to allow us to print her paper, part of which will be found on another page.

Miss Eleanor Robinson, editor of the REVIEW, addressed the united Institute on training children to use books as a source of pleasure.

In the afternoon Director Steeves gave a very valuable address on the importance and benefits of the study of elementary agriculture.

Resolutions were passed expressing the regret of the members of the Institute at the deaths of the late Dr. John Brittain and Dr. G. U. Hay.

Much pleasure was expressed by the visitors at choice of St. George as a meeting-place. The great natural beauty of the town, the attractive school rooms, the excellent school library and the hospitality and interest of the townspeople all combined to make the Institute particularly pleasant. At the close of the meeting motor boats took the members on a delightful excursion up the Magaguadavic river to Lake Utopia.

The new officers elected are:— President, W. McL. Barker, St. George; Vice-president, Miss Mary Mitchell; Secretary-Treasurer, F. O. Sullivan; Additional members of executive, J. Kerr Higgins, Miss Elizabeth Wilson, Miss Annie L. Richardson.

On Thursday, October 16, the teachers of Kings and Queens Counties met in their thirtieth annual session, in the Consolidated School Building at

Hampton. Inspector A. J. Brooks presided and addressed the meeting at the opening session. He was followed by the Chief Superintendent of Education. After a vocal solo by Dr. Ryan, Principal C. T. Wetmore gave a paper on Physical Drill. On account of the rain the drill itself, which was to have been given on the school grounds, had to be omitted.

In the afternoon the Institute divided into four sections:— Primary, Intermediate, Advanced, Trustees and Ratepayers. The lesson in the Primary Section were on Writing, Miss Bessie Howard; Drawing, Miss Ruth Thurber; Sounds of Letters, Miss Jennie Dunn. There was also a paper on Primary Handwork by Miss May Saunders.

The Intermediate work was begun by Miss Kate A. Corbett, who read a short but suggestive paper on Home Geography. A paper on Elementary History, by Miss E. Louise Harris, gave as the aims to be kept in mind: 1. To interest the children in history. 2. To lay the foundation for future work. 3. To inculcate patriotism. Both of these papers were discussed. Several speakers agreed upon the importance of giving the children, after each oral lesson in history, a few simple facts and dates to fix the story in their minds, and that these facts should be frequently reviewed.

Mr. George Perry next gave a lesson to a class of teachers on the Construction of Clauses and Phrases.

Meanwhile Mr. N. S. Fraser was giving a chemistry lesson in the advanced section, and this was followed by a paper by Mr. Logan on the Application of Chemistry in Experimental Nature Work, and a lesson on Recurring Decimals, by Mr. John A. Draper.

Among other subjects of interest to the Trustees and Ratepayers, this section discussed the use of school buildings as social centres, teachers' salaries from the ratepayer's standpoint, and the practice of having one session only on stormy days. Speaking on the last point, the Chief Superintendent stated that there is no provision in the school law giving authority to principals or teachers to hold one session only, except in the city of St. John, and that the practice has been so much abused throughout the province that St. John is to be asked to relinquish the privilege. The law requires five hours of work for every teaching day, and teachers cannot fairly record one session, i. e., from nine o'clock to one, as a full day's work.

The public meeting on Thursday evening was largely attended, and presided over by Mr. J. M. Smith. The address of welcome was given by the Rev. A. H. Crowfoot, Rector of Hampton. Dr. Carter, in his address, spoke particularly of agricultural education and its great importance to the country. He showed how in the United States, it was the business men of many sections who, recognizing that the prosperity of the farmer underlay the prosperity of the whole community, had be-

stirred themselves in devising and financing methods of instruction on this subject. He congratulated Kings County on the lead it had taken in school gardens, nine out of twenty-one school gardens in the province being in this county. Mr. Fletcher Peacock, Director of Manual Training and Household Science, spoke convincingly of the importance of the subjects which he directs. He stated that the Commission on Technical Education had recommended the immediate outlay of a very large sum of money on instruction in Handwork in the Primary Grades, and a much larger sum in Technical Education in High and Continuation Schools. Mr. R. P. Steeves in a short speech urged the public to recognize the importance and commercial value of agricultural education. Mr. A. J. Brooks made his first speech as Inspector before the people of the district and was enthusiastically received. The programme was varied by some excellent music furnished by Miss Lloyd, Mr. Ralph March, Mr. Cecil March, Dr. Ryan and others.

On Friday morning, Director Steeves spoke to the teachers on The Kind of Training Needed for Agricultural Teaching. Mr. Steeves' speech was marked by its appeal to sound principles and their practical application. Some of his points were:— The child learns more in the first six years of life than at any other period. How? By contact with people and with things, by asking questions, by watching and imitating. This method of learning sets up certain habits. When the child comes to school, by following along these lines, the school can be made an aid to the home. Nature study should be begun with what the child has already learned at home. A great deal can be done without a school garden to interest the parents and to make the child feel that home and school are working together. Country teachers have the best opportunities. Mr. Steeves had the Bulletin on School Gardens distributed to the teachers, and informed them that another, on Experimental Plots, would appear later in the year.

Miss Jean Peacock gave a most interesting lesson to five little girls on making aprons. The lesson began with questions on the uses of aprons. From this was drawn from the children the points to be considered in choosing material. Packets or samples of different kinds of material were supplied and the children chose one kind for a sewing apron and told why they chose it and discarded the others. A cut-out apron was then given to each child and while they sewed Miss Peacock shewed how she taught new stitches, and explained that she had chosen this lesson to shew what could be done in schools where there was no equipment for domestic science.

On Friday afternoon Miss Jessie Weyman read an admirable paper on English Literature, which we hope to present before long to readers of the REVIEW. The paper was discussed by Miss

Eleanor Robinson, Mr. C. T. Wetmore and others. A short, sensible paper on English Composition was read by Miss Mabel L. Marven and after a brief discussion of this, the session closed.

There were some very pleasant interludes in the programme of work during the meeting. On Thursday afternoon the members from the various sections met in the Assembly Hall for music and conversation, and refreshments were served by the Domestic Science Department of the Consolidated School. At the close of the session on Friday morning, Director Steeves was called to the platform and Principal C. T. Wetmore in a few fitting words, expressed the regret of the members of the Institute in losing Mr. Steeves as their Inspector. Their appreciation of his work among them and their good wishes for his success in his new position. He then presented Mr. Steeves with a handsome travelling bag, the gift of the teachers of his former inspectorate. Mr. Steeves, in a very cordial speech, thanked the teachers for their kind remembrance of him.

The following officers were elected for next year: President, Mr. N. S. Fraser, B.A.; Vice-President, Mr. John A. Draper; Sec.-Treas., Mr. W. N. Biggar. Members of the Executive, Miss Cora Bennett, Miss Mabel Marven.

ELEMENTARY AGRICULTURAL EDUCATION.

Mr. R. P. Steeves, Director of Elementary Agricultural Education for New Brunswick, has asked us to insert the following notice:—

Teachers who have taken the Agricultural course in whole or in part, and who would like schools next term in which this special work may be taken up, would do well to send in their names at once to the Director at Sussex.

The Director adds, that he already knows of several good openings for efficient teachers of this subject.

From inquiries we have heard, we gather that there is some haziness among our New Brunswick teachers as to the extra remuneration for teaching Agriculture. Teachers who have qualified, either at the Rural Science School at Truro, or at the Summer School of Science, if they carry out the work, **including a school garden**, receive \$30.00 a year. In addition to this, those New Brunswick teachers who studied at Truro last summer will receive in December a bonus of \$15.00.

The authorities hope to be able to increase these allowances before long.

In Ontario, the grant to teachers of Agriculture is \$75.00 and where a school garden is carried on, an additional \$25.00. Trustees are allowed up to

\$100.00 as a grant for meeting the expenses of the work, and for the school farm or garden an additional \$25.00. Regulations require that instruction in the class room be given for two hours each week, and that the practical work carried on at home by the pupil be supervised by the teacher.

The Intermediate Certificate in Agriculture in Ontario is gained by work at two summer sessions at the Agricultural College at Guelph. Science specialists may take the last two years of their University course in Science at the Agricultural College, graduating with the degree of B. Sc. (Agr.); this preparatory to teaching Agriculture in the High Schools.

It is with pleasure that the REVIEW records the appointment of Mr. L. A. DeWolfe, M. Sc., of the Normal College, Truro, to be the Director of Rural Science Schools for Nova Scotia. For a month in the autumn and three months in the spring the director will visit schools taught by Rural Science teachers, and during the summer term he will teach in the Rural Science Training School at Truro. For the rest of the year he will teach in the Normal College, of whose faculty he continues to be a member, and keep in touch by correspondence with the Rural Science Schools.

It is a matter for congratulation that we should have in our own provinces men who have been for years in the closest connection with the schools, and who are eminently capable of directing this new and important educational work. Full of enthusiasm for their subject; well known and popular among the teachers, thoroughly familiar with the country and its conditions, and of proved efficiency in their former posts, both Director DeWolfe and Director Steeves are plainly the right men for their positions.

Director Steeves recommends the following books to teachers of agriculture:—

Beginnings in Agriculture, A. R. Mann, 75c.;
One Hundred Lessons in Agriculture, A. W. Nolan,
65c.; First Book in Rural Science, J. J. Green, 40c.

These can be had of J & A. McMillan, St. John.

What's the way to school, you say?
A boy's way, do you mean?
It's out of the yard and far away
Where the grass is fresh and green.
It's up a tree and out on a limb,
And down with a leap and cry,
And that's the way to school for him,
When I see him passing by.

A CHRISTMAS EVE IN THE FOREST.

A Christmas Play for Children.

JEAN T. LEAVITT.

CHARACTERS.

HANS, A Woodcutter.	SUNBEAMS.
BABY FIR.	FIR TREES.
CHRISTMAS FAIRY.	BIRCH TREES.
THE WIND.	

SCENE I.

[Trees standing about, the wind quickly and lightly passing back and forth. They wave and swirl their branches (arms) as he passes.]

Baby Fir, (sorrowfully).—All I can do is to grow, grow, grow.

Wind, (moving faster).—All I can do is to blow, blow, blow.

Baby Fir.—But, Wind, you can travel wherever you like, While I have to stay here all day and all night.

Wind.—I shouldn't like that, I can never be still, But I do as I'm told, and not my own will.

(*Wind runs out and trees are still.*)

Birch Trees.—O little Fir tree, do not be so sad. The sweet air blows on you, and the sun shines on you, and some day you will be a big tree.

Other Trees.—We do not complain.

Sunbeams, (dancing in).—Enjoy what you have, O Fir!
For it may not last, O Fir,
You have youth, health and beauty,
So now do your duty.
Be a good, sweet, contented little Fir.

(*Sunbeams circle round and dance in and out among the trees.*)

SCENE II.

(*Trees standing as before. Christmas Fairy comes in softly and hears the Baby Fir lamenting.*)

Baby Fir.—My brothers are so tall and strong, the woodcutter will see
That any one of them will make a splendid Christmas Tree.
They'll be so proud and happy when he carries them away
To make the children joyful on Merry Christmas Day.
But I'm so small, so very small, no one will mark or know
How thick and green my needles are, how true my branches grow,
Few toys or candles could I hold, but heart and will are free,
And in my heart of hearts I know I am a Christmas Tree.

Fairy (laughing softly).

I'll search and find St. Nicholas, the dear old Christmas Saint,
And in his fatherly, kind ear rehearse the fir-tree's plaint.
(*She hurries out.*)

(Hans comes in and looks about at the trees.)

A baby girl I have at home, and I've come forth to find
A little tree as small as she, just suited to my mind.

(He sees the little fir.)

Oh, here's a tiny baby fir—the very thing for me!
I'll carry it away to be my baby's Christmas Tree.

(He goes out.)

Birch Trees.—Oh, glad and proud the Baby Fir amid his
brethren tall,

To be the one thus singled out, the first
among them all.

Baby Fir, (smiling).—I'll stretch my fragrant branches, my
little heart beats fast,
I am a real, live, Christmas Tree,
I have my wish at last.

SCENE III.

(Trees standing as before, but Fir Trees looking disappointed. Hans and the Christmas Fairy come in.)

All the Trees address the Baby Fir.—

One red and shining apple, one orange bright as gold,
Six tapers and a tiny doll are all that you can hold.
But baby will laugh and baby will crow to see the
tapers bright.

Baby Fir.—Forest baby will feel the joy and share in the
delight.

(Hans carries off his tree.)

Fairy.—And when the tapers all are out, and baby gone to
sleep,

The little fir, in the silent night, a patient watch
will keep.

Though scorched and brown his needles, his heart
is filled with glee,

"I have not lived in vain," he'll cry, "I've been
a Christmas Tree."

[SUGGESTIONS.—If costumes are desired, they can be made of tissue paper, green for the fir-trees, crinkled white for the birches, yellow for the sunbeams. The Wind should have a loose robe with angel sleeves, or a cloak hanging loose from the shoulders, made of some thin grey stuff that will stream out behind him as he runs. A band round his head, with a gray goose wing at each side. Hans should have some bright colour about him,—a red blanket coat, or a red jersey, or a blouse with a red belt and a red cap, would do. The Fairy may wear any thin white dress, with gauze wings, a wreath of holly or red berries, and carry a wand with a gilt star. Diamond dust scattered over the dress would make it prettier.

But the dressing up part can be made as simple, or as elaborate, as is convenient, and a little ingenuity will suggest easy and inexpensive ways of indicating the character represented. All the children could wear their ordinary dresses and caps to suggest the character, *e. g.* the fir trees could have caps of green paper with fir twigs sewn on; the birches, caps made of birch bark; the wind, a cap with wings, and so on.

"I enjoy the coming of the REVIEW very much and I feel I can't do without it."—Subscriber.

GETTING READY FOR CHRISTMAS.

Custom almost demands that teachers give their pupils a "good time" on the Friday preceding the Christmas holidays.

To provide a new programme of entertainment from year to year, especially for teachers of advanced pupils, is rather difficult. Where the pupils remain under the same teacher, variety is necessary.

Doubtless the REVIEW will be pleased to assist us in our plans for this year's undertakings. This may be done by offering suggestions and publishing in the December issue the contributions of others.

I shall intimate a few of the methods I have found helpful, and in return shall be pleased for those who have used other forms of entertainment to pass them along.

When I have had the material and time to spare, the pupils have prepared a programme of suitable songs, readings, recitations and dialogues and have given a public entertainment. All teachers will agree that this becomes too exacting after awhile. Then we have spent our afternoons privately, playing games, before having our "treat" of candy, nuts, etc.

The games consisted of peanut hunts, carrying peanuts on a knife blade, bird puzzles, flower puzzles, cent puzzles and writing out answers to questions, the answers of which were geographical names. Prizes were awarded and the afternoon was pleasantly spent.

G. H. C.

WEYMOUTH, F. S., October 25, 1913

We gladly publish our correspondent's suggestions, and thank him for their timely arrival. We hope that other readers will follow his example in sharing their ideas for Christmas entertainments. Send them to us, if possible, before the twenty-fifth of November.

"No," complained the Scotch professor to his students; "ye dinna use your faculties of observation. Ye dinna use them. For instance—"

Picking up a jar of chemicals of vile odor he stuck one finger into it and then into his mouth.

"Taste it, gentlemen!" he commanded, as he passed the vessel from student to student.

After each one had licked his finger, and had felt rebellion through his whole soul, the old professor exclaimed triumphantly:

"I told ye so. Ye dinna use your faculties. For if ye had observed ye would ha' seen that the finger I stuck into the jar was nae the finger I stuck into my mouth."

POETRY IN THE PRIMARY GRADES

Winter Nights.

R. L. STEVENSON.

Whenever the moon and stars are set,
Whenever the wind is high,
All night long in the dark and wet,
A man goes riding by.
Late in the night when the fires are out,
Why does he gallop and gallop about?

Whenever the trees are crying aloud,
And ships are tossed at sea,
By, on the highway, low and loud,
By at the gallop goes he.
By at the gallop he goes, and then
By he comes back at the gallop again.

[Read the poem to the children in as spirited a way as possible. Try to make them hear the galloping of the imaginary horse. Tell them something about the writer.]

The man who wrote these verses was a very famous writer. He wrote many books for grown-up people; but he was very fond of children, especially of boys, and he has written some splendid stories for boys, and a whole little book of verses for children. He remembered about the time when he was little better than most older persons do, and he has told us a great deal about it. He lived in Edinburgh, a beautiful old town not far from the sea, and a very windy place. He was a very delicate little boy, and in cold weather had to stay in the house a great deal. Many a night he was too ill to sleep, and as he lay awake, he noticed everything in his room—the fire, the lights, the shadows, and all the sounds out of doors, and he had fancies about them, as sick children will. Let us read the poem again, and see what you can tell me about it. What kind of night was it? What time of night? Why wasn't the boy asleep? Do you ever lie awake at night? If so, do you listen to all the sounds outside? What do you hear? What did this boy hear? Was there really a man riding back and forth all night long? What made the boy think so? Why didn't he hear the man riding earlier, before the fires were out? Could he see out into the dark through his window?

What does he mean by the trees "crying aloud?" What noises have you heard trees make in the wind? Do you ever hear the wind on the telegraph wires? What kind of noise does it make? Why do you think the boy thought about ships tossed at sea? What tosses the ships?

I think that the writer wanted us to fancy that we heard the sound of the galloping horse. Shut your eyes and play that you hear a horse galloping. Then say the word to yourself "gallop, gallop, gallop." Does it sound like the noise the horse makes? Can you think of any other word that when you say it, sounds like the sound it tells about? [tinkle, crash, trickle.] Are there any long or hard words in these verses? Can you think why not? Who is speaking? Would he be likely to use long hard words? Tell in your own words what the boy heard. What line in these verses has the prettiest sound?

HOW TO WRITE LEGIBLY.

Now that the typewriter is in such general use in newspaper offices, it is seldom that the linotype operator gets such copy as used to be prevalent some years ago. But still there are a number of us that could profit well by a few rules that would tend to-ward making our writing legible:

1. Keep the letters separate, as half the trouble in poor writing is caused by jamming the letters together.

2. The most difficult letters to form are "i," "e," "m," "n," "u," and "w." Make these perfectly. Let there be a distinct difference between "u" and "n." Try writing "minimum."

3. Almost as difficult are "b," "v," "o," "w." Make the bottoms of your "v's" and "w's" sharp cornered and not rounded.

4. Never loop the tail of the "q," but always do so with "g" and "y."

5. Do not make your "d's" like "ct."

6. Make your "a's" and "o's" radically different.

7. In writing "r" always form it in the same style.

8. Join the hinder part of the "h," "y" and "p" to the stem.

9. Keep your "a's," "d's," "g's" and "q's" "fat."

10. Always loop your "l's" and never loop your "t's."

11. In dotting the "i" and "j" place the dot directly over the letter.—Van V. Boyce, in *The American Printer*.

WORD STUDY — FUNNY, QUEER.

CONVERSATION.—What do you mean when you say you have been having fun? What do you say about things that give you fun?

A thing is funny if it is laughable, or comical.

A thing that is unusual is queer, or strange, or odd.

Many persons say "funny" when they should use one of these other words to tell what they mean. Think what "fun" means.

To see a kitten chasing its own tail is "funny." It would seem "strange" or "queer" if a kitten liked to go into the water.

DRILL EXERCISE.—Decide which of the words you have just studied should be used in each of these sentences:

1. You must have thought it—— that you were not invited to the party.

2. It was —— to see the pigs scamper for the trough when John brought their food.
3. See this —— insect.
4. It is —— that she forgot her telephone number.
5. The clown did many —— tricks.
6. It was a —— day, with clouds, snow, rain, and sunshine.
7. The ball game between the fat men and the lean men was a —— sight.
8. The orchard was a —— sight when the blossoms were covered with snow.
9. It was —— that he should lose his way so near home.
10. Does your newspaper have a —— page.?

WRITTEN EXERCISES—Write a funny story about some little child or some pet animal. Or perhaps you can tell of some funny thing you saw at the circus.—School News.

CURRENT EVENTS.

The Dominion Government has awarded a contract for the mirror of a new telescope to cost over ninety thousand dollars. The mirror is to be six feet in diameter, and the telescope when completed will be the largest reflecting telescope in the world.

If experiments now being started in the Rocky Mountains prove successful, the whole Canadian Pacific Railway system may soon be adapted to the use of electricity as the motive power. It is said that there are water power sites available for developing the power over the entire system; and the point to be determined is whether the electric locomotive can be used on the heavy grades in the mountain sections.

Sir Ernest Shackleton has announced his intention of starting on another Antarctic expedition next year.

By a study of the tides, a geographer in the United States has come to the conclusion that a large body of land exists in the Arctic Ocean, somewhere to the north or northwest of the mouth of the Mackenzie River. This is possibly the Crocker Land supposed to have been approached though not actually seen by Arctic explorers; and it is the land which the Stefanson expedition is now seeking by sailing northward, and which the MacMillan expedition hopes to reach from the southeast. The latest reports from both expeditions tell of unfavourable ice conditions, but nothing that will seriously interfere with their work.

A Russian expedition which had been sent to explore the northern coast of Siberia from Bering Strait westward, and which when west of the mouth of the Lena had turned north to avoid the ice along the coast, found land which the discoverers have named Nicholas II Land, and followed its coast for about two hundred miles. The new land begins sixty miles north of Cape Chelyuskin, the northern point of the mainland of Siberia; and cannot be part of the extensive continent or archipelago supposed to lie north of Alaska. The two vessels engaged in the

survey were attempting to make their way to the mouth of the Yenisei, and complete the northeast passage to Europe. They will probably renew the attempt next year.

A monument to General Braddock, the famous British general who fell in the battle of Monongahela, in 1755, has just been erected at the scene of his last fight, near Uniontown, Pa.

An Italian inventor, named Ulivi, has given the world a new weapon of destruction, in the form of an instrument which throws out invisible rays capable of exploding a mine at a distance of a thousand yards or more. The rays are known as F-rays. The British naval authorities have been experimenting with these or some similar rays that can be used to explode submarine mines.

Canada's trade is in a more prosperous condition than ever before, the total exports for the last six months showing a large increase over those of last year. This increase was chiefly in the export of agricultural products, but the exports of minerals and of manufactured goods. It is expected that the export of agricultural produce will be further increased by the reduction of the United States tariff which has recently come into operation.

Denmark will accord home rule to Iceland; and it is expected that a new constitution will be adopted at the next general election in Iceland which will give the right of suffrage to everyone over twenty-one years of age, including women.

The largest water power in Iceland has been purchased by an English company, and will be used for the manufacture of fertilizers from atmospheric nitrogen. The waterfall to be used for this purpose is situated thirty-five miles from the coast, and a railway will be included in the work of development.

The Premier has turned the first sod for the construction of the new dry dock at Levis, Que., which is to be the largest in the world. The work is to be completed in three years.

Great Britain has accepted an invitation to send representative ships from the British Navy to join with the ships of other nations in the international fleet to pass through the Panama Canal at its formal opening in 1915.

The hundredth anniversary of the battle of Leipsic, which the Germans call the Battle of the Nations, was celebrated on the eighteenth of October by the dedication of an immense monument, nearly three hundred feet high, the largest and highest in Europe. It commemorates the great victory of the allies which freed Germany from the power of Napoleon.

Yuan Shi Kai has been formally inducted into office as the first duly elected President of the Chinese Republic.

The new Turco-Bulgarian frontier has been settled by treaty, and Turkey keeps Adrianople. It is a strong frontier city; but it means more than that to them, for it is their ancient capital and the burial places of their Sultans, and possesses many hallowed shrines.

The constitution of Mexico requires that one-third of the voters shall cast their ballots to make an election legal. It seems probable that this requirement has not been met in the recent election, and that Heurta will therefore remain in office as provisional president. As his government has not been and will not be recognized by the United States, and as the rebels in different parts of the country, but especially in the north, are still active and perhaps increasing their strength,

there is no hope of restoring order while he remains in power. It is believed that Britain, France and Germany are ready to support the United States in armed intervention.

Japan expects great benefit from the opening of the Panama Canal. Japanese goods that are now carried across the continent of America from Pacific ports can then be shipped direct to New York, and the raw cotton which Japan imports can be carried more cheaply. But yet more important will be the shorter route to Brazil which will be opened up by the canal; for Japanese immigrants are welcomed in Brazil, and will probably go there in increasingly large numbers in the future.

Under a new agreement which has just been concluded, China will recognize the autonomy of Mongolia, and Russia will acknowledge it as under Chinese suzerainty.

A new line of freight steamers between Canada and the West Indies has been established, the first steamer to sail during this month from Halifax.

SCHOOL AND COLLEGE.

Dr. Carter, Chief Superintendent of Education for New Brunswick, and Dr. Bridges, Superintendent of Schools in St. John, met the Executive of the Nova Scotia Education Association in Halifax on the 22nd of October, and provisionally arranged for an interprovincial educational convention, to meet on the 30th of June and the 2nd and 3rd of July next, in Halifax, under the presidency of the Chief Superintendents of Education for Prince Edward Island, New Brunswick and Nova Scotia.

Dr. Carter and Dr. Bridges while in Halifax visited the Halifax Academy, the Technical College and the Schools for the Deaf and Blind.

We notice in another column the appointment of Mr. L. A. DeWolfe to be Director of Rural Science Schools for Nova Scotia. The duties of the Director are:—To visit all schools taught by one holding a Rural Science Diploma; to interview trustee and parents, to try to secure their co-operation in encouraging agricultural education; to assist the teachers, and report upon their work; to give suggestions about the school gardens; to help to induce the pupils to make and care for gardens at home; to recommend extra government grants to teachers and sections doing this work; to distribute agricultural literature; and in all possible ways to assist in promoting, through the schools, all that pertains to the betterment of rural conditions—*Truro News*

The first Agricultural School Exhibitions for the County of Cumberland, N. S., were held on September 19th at Salem, East and West Leicester, Mansfield and Little River. On the twentieth a final exhibition was held in the Lodge Hall, East Leicester, where all the first prize winners of the various schools met in keen competition. The exhibits were divided into four classes:—Cooking and Sewing (girls over twelve); Cooking and Sewing (girls over twelve); Flowers; Grains and Vegetables. The girls exhibited cake, biscuits, bread, button holes and sewing on buttons, patches, darning, aprons. The flowers shown were sweet peas, asters, poppies, phlox and pansies. Grains and vegetables:—oats, wheat, turnips, carrots, beets, mangels, pumpkins, squash, cabbages, tomatoes and potatoes. The judges were Mr. N. H. Landells, B. S. A.,

of the Truro Agricultural College, Mr. W. W. Baird, B. S. A., and Mr. R. J. Robertson of the Nappan Experimental Farm.

The Northport, Cumberland County, N. S., School had the honour of carrying off four prizes for map drawing and free hand at the Halifax Exhibition in September. The teacher under whose supervision the work was done is Miss Grace Brownell, now of the Amherst School staff.

The Nova Scotia Technical Evening Schools are re-opening with increased attendance and great enthusiasm. Over 500 young men and women registered at the opening of the evening classes at the Halifax Technical College. At Amherst over 200 pupils attended on the opening night. At New Glasgow, Principal McLeod looks for 300 pupils. This school was addressed by Mr. John Fellows, of the Nova Scotia Steel Works, who assured the boys from the Works that those in charge were carefully noting the progress made by their employees in the Technical School. At Westville and Stellarton the attendance promises to be the largest for several years.

In Glasgow, Scotland, the School board can secure by compulsion, if necessary, the attendance at evening classes of all young persons, up to the age of seventeen, who have not completed their elementary school course at a day school.

Professor Robert Matheson, M. S. A., Ph. D., has resigned from the staff of the Nova Scotia Agricultural College to take an advanced position in research work at Cornell University. Dr. Matheson's place as Professor of Zoology and Provincial Entomologist has been taken by Mr. W. H. Brittain, B. S. A. Mr. Brittain is a son of the late Dr. John Brittain of MacDonald College which in itself recommends him, but he has high qualifications of his own for the post. He graduated with honours from MacDonald College, held an important position in the Department of Agriculture at Ottawa, and has been for the last two years Entomologist and Plant Pathologist for British Columbia.

The gold medal offered by the Sir Howard Douglas Chapter of the Daughters of the Empire for the best essay on the Old Government House at Fredericton, was won by Miss Ethel Vanwart. The competition was open to all pupils of Grade VIII in the Fredericton Schools. Mrs. A. J. Gregory, regent of the Chapter, presented the medal to Miss Vanwart at the Model School on Trafalgar Day.

Miss Frances L. Fish, B. A., now teaching at Campbellton, has been admitted as a law student by the examiners at Fredericton, without examination, on her degree. Miss Fish is the only woman to apply for admission since Miss Mabel French, of St. John, was admitted some years ago.

According to the Montreal Telegraph, the Province of Quebec now leads all Canada in the matter of school attendance. The Telegraph attributes this advance to the work done by the government in increasing grants to rural schools, to the campaigns carried out by the Protestant Committee of Public Instruction for the purpose of furthering consolidation, increasing teachers' salaries, and in every possible way increasing the usefulness of the schools in rural communities.

Clarence L. Moore, M. A., F. R. S. C., has been appointed Dean of the Nova Scotia Normal College Faculty, known as the Rural Science Teachers' Training School. This School has now virtually three terms each year: September to Easter, in the Normal College (winter term); Easter to end of June, in the Normal College, special biological course (spring term); July and August (summer term.—vacation course).

RECENT BOOKS.

A book that arrives at an appropriate moment, when our thoughts are being so strongly directed towards agricultural education in the schools, is *Rural Arithmetic, a course in Arithmetic intended to set children thinking on home and its improvement*, by John E. Calfee, Professor on Mathematics at Berea, Kentucky. The book purports to touch the important phases of farm management, and gives practical problems taken from every day farm life. The book contains useful information for farmer and housekeeper and has good illustrations and diagrams (Ginn & Co., 30 cents.)

We have received from the same publishers a very interesting history of *American Literature*, by William J. Long. The plan of this book seems an excellent one. It is in five chapters, each dealing with a period of American Literature beginning with the Colonial Period. At the end of each chapter is a summary, a list of selections for reading, a bibliography, and a very full set of questions and suggestions for research. It is an admirable book for High School or College Classes, or for Reading Clubs. The style is interesting and clear, and the illustrations good. The chapter on Emerson strikes us as particularly discriminating and useful. (Ginn & Co., \$1.35, 481 pages.)

The *Preliminary English Course*, A. M. Walmesley, M. A., can be very strongly recommended to teachers who want help, suggestions and material for English Composition. It is intended for a course in Grammar and Composition for intermediate grades, but the grammar is subordinate to the composition, and there is much more constructive work than there is analysis. There is a great deal of material for constructing sentences, and for reproduction and paraphrasing. A most useful little book. (University Tutorial Press, 160 pages, 1s. 6d.)

The publishers of the "Peeps" series are now bringing out "Peeps at Great Steamship Lines" and have sent us the story of *The Peninsular and Oriental*. In a lively style, the author, G. E. Mitton, describes a modern steamship, the Overland Route, the Suez Canal, gives the history of the Peninsula and Oriental and tells us something about the various ports entered. The really beautiful coloured illustrations add a great deal to the appearance of the book. We recommend it for interesting supplementary reading, or for a prize or gift book. (A. & C. Black, London, 88 pages, 1s. 6d. net.)

A good little book on *Laws of Health for Schools* comes to us from the same firm. This is one of the Edinburgh Medical Series and is written by A. M. Malcolmson, M. D. It is simple, clear and practical in its information and instructions. It contains directions on the care of the skin, hair, nails and teeth, as much elementary instruction

in anatomy and physiology as is essential to our understanding of the laws of health, and a chapter on the causes and prevention of infection. (88 pages, 35 illustrations, 1s. 6d.)

Would that all the children in our schools could have put into their hands such delightful books as the *Sentinel Readers*. The coloured illustrations in Books I and II are enough to charm any child. The reading in Book I is chiefly fairy or nature stories, interspersed with good and simple verse. In Book II, the first selection is an account of Polar expeditions, being in the story of Scott and Captain Bates. The books have been compiled, says the editor, "to be a medium not only of awakening intelligence and imparting knowledge, but of widening the sympathies of boys and girls in all humane directions." (Book I, 143 pages, 10d. Book II, 441 pages, 1s. Edited by E. E. Speight, A. & C. Black, London.)

WITH THE MAGAZINES.

St. Nicholas issues this month its fortieth anniversary number. To one who can remember the charm of it when it was only five years old, it seems to have lost nothing with age, even though in looking back we recall the contributions of Louisa Alcott, Susan Coolidge, Mark Twain and Frank Stockton. This number has a delightful paper under the heading "More than Conquerors" on Sir Walter Scott, his home, his books, and the struggle that made him a hero. In "Books and Reading," the subject this month is "Oliver Cromwell." Teachers who are looking for supplementary reading to interest their classes should see what *St. Nicholas* has to offer.

The Century for November has great variety in both articles and stories. "The Glowworm" by Henri Fabre, author of "Social Life in the Insect World" is very interesting not only for the information it gives, but as an illustration of the patient loving method of study of a real naturalist. The case for the Feminists is put by Edna Kenton in an article called "The Militant Women—and Women." John Corbin writes on "College Democracy" which, he contends is better maintained in Oxford than at the great American Colleges. Mrs. Burnet's story "T. Tembarom" is drawing to an end which will obviously be satisfactory.

The Canadian Magazine is truly Canadian this month, and full of value to teachers of Canadian history and geography. "The Glory of the Shannon" by Professor Macmechan, the story of the famous sea-fight with most interesting illustrations; "Chateauguay and de Salaberry," by Francis R. Carman, "Canoe, Sail and Stream" telling of early navigation on the Great Lakes, are all full of useful information.

The cream of the best English Reviews and Magazines is to be found in *Littell's Living Age*. "The Welding of the Empire" by Sir Gilbert Parker, in the number for October 18, is a picturesque review of the development of the great Dominions, especially Canada. Timely articles are on "Blundering Social Reform," "The Balance of Power in Europe," and "Some Problems of American Foreign Policy." Lovers of Dickens will enjoy the papers by Rowland Grey and Dr. Spriggs on "The Boys of Dickens" and "The Medicine of Dickens."