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MISSING

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Devoted to Advanced Methods of Education and General Culture

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The Departments of Education and Agriculture for New Brunswick will conduct two Rural Science Schools during the summer vacation of 1915, one at Woodstock and one at Sussex. These schools will open on July 14th, and carry on work for four weeks.

Our schools will be doubly condemned if they send forth boys and girls with no desire to pass on to others what they themselves have received — no desire to be entrusted with work for the nation and the race. What social service can rank higher than that of training the citizens of the future? If the task of the teacher is belittled, it is partly because teachers themselves fail to realize the full scope of their task and still more because they do not work as a "band of brothers."—*Selected.*

There has been much discussion in the United States on the question of "teaching the war" in school, many people maintaining that, for different reasons, the subject should be avoided in the schools of a neutral nation. G. Stanley Hall, President of Clark University, in an article in "School and Society," represents the effect of the war as a "vitalizer" of history, geography, civics and other studies and declares that it is a "pedagogic blunder to exclude a topic so quickening to intelligence, so rich in matter for which every youthful mind hungers."

The official report of the Rhodes Scholarships for 1913-1914 has just been received.

The number of scholars in residence at Oxford, 1913-1914, was 177, of whom 76 were from the Colonies of the Empire, 88 from the United States and 13 from Germany. During the year 76 scholars completed the term of their scholarship, and at the beginning of the October term, 1914, 63 new scholars (Colonial and American) came into residence.

The course of study followed by the greatest number of scholars is Law. Twelve men took the course for the B. C. L. degree, and 38 entered Jurisprudence in the Trial Honour Schools for the B. A. degree. In the report of the lines of work taken up by the scholars who have completed their terms we find that 167 are engaged in Educational work and 130 are practicing Law.

Since the outbreak of the war, a large proportion of the Colonial scholars in residence have taken commission or enlisted in the Imperial Army. They have been given leave of absence and will be allowed to resume their scholarships at the end of the war.

NATURE STUDY OF ANIMALS.

H. G. PERRY.

On winter tramps by brooks and ponds, through waste fields and along country roads examine carefully the bushes, reeds and old stems of golden rod, etc., for signs of animal life.

Active animal life abounds in almost every locality, but it is not with this that we are now especially concerned, but with the little dormant creatures snugly tucked in their warm winter beds and rocked in nature's cradle,— the cocoons, plant galls and insect nests (Brown tail moth), one is apt to find on such tramps.

Keep the cocoons in insect cages for spring work; the plant galls are for immediate use.

I. Suggestion for School Exercises.

Select a golden-rod-gall and help your pupils describe it. Make sure they know what to look for, then direct them to bring in several for class work.

Ask for measurements and drawings, and direct a dissection of the gall by splitting it a little to one side of its longitudinal axis.

Of what kind of plant tissue is it composed, near the outside and near the centre? After several have been opened what do you find at the centre? Measure the little pupa, note its color. How did the insect gain admission? Are these enlargements (galls), natural to all golden-rod stems? What caused the gall? At what time of year did it begin to grow? What use has it been to the insect?

Explain to your class how stimulation in the form of pressure upon a rapidly growing portion of a plant induces an abnormal growth of its tissue at that point, e. g. trees serving as posts for wire fences show enlargements in a few years, where the wire is attached to their trunks. This gall has been formed in much the same manner, and the object of irritation was a tiny larva, that hatched from an egg deposited at the centre of the stem, while the plant was young.

Make notes of these facts and place whole galls in wide mouth bottles covered with cheese-cloth. Keep where they may be under observation for several months.

Take up the Pine-cone Willow-gall in much the same way.

In dissection split through the middle of the stem. Of what is this cone composed? What has happened to the central axis of the bud? Of what are the scales modified forms?

Look in the central axis for the insect: in what state do you find it, larva or pupa? Where and when was the egg deposited? Write a paragraph on the value of these cones to their insect guests.

These insects are internal parasites upon the willow; name some external parasites of the willow and other trees.

Among the scales of the Pine-cone Willow-gall you may find another insect, a cousin of the one in the stem; the eggs of grasshoppers have also been found.

Bring in several of these cones during the latter part of April;—place in jars properly covered, and watch for the appearance of the insects. Keep records and write a short description of all the different forms that appear.

Various species of the rose are also infested with a gall. Gather several of these. Are they as symmetrical as the other two just mentioned? Draw, measure and dissect several and note the number of pupae in each. These are called compound galls. Why? Keep several in jars for spring work, and examine frequently; note the size and color of the insects as they appear.

These insects belong to the family Cynipidae of the order Hymenoptera.

II. Outlines of Life-history of Galls.

The golden-rod galls are enlarged portions of the stem of the golden-rod (Solidago), about three-quarters of an inch in diameter. Children are always interested in finding out that they are caused by a tiny baby fly, long before it had wings. It hatches from an egg deposited in the stem when the plant was young, so each gall is the fairy home of a little larva which feeds on the soft pulpy tissues within, and is protected by the harder tissues without. It sleeps during the winter and awakens in the spring, a beautiful two-winged fly about half as large as the house fly, gnaws its way out through the side of its home, spreads its wings and flies away, and thus its life cycle is completed. This fly is called *Eurost Asteris* and belongs to the family Trypetidae, which is represented in

different parts of the world by very injurious insects.

One Trypetid fly is a great pest in Mexico. It lays its eggs in the orange, and its larva is known as the "Morelos orange fruit worm." Another is the Apple Maggot, which tunnels through the pulp of the apple in all directions. This insect has been reported as abundant in New Hampshire and Maine for the last fifteen years. "The first occurrence of the Apple Maggot or Railroad Worm in Nova Scotia, was discovered at Smith's Cove, N.S.," in the summer of 1912. (Experimental Farm Reports for year ending March 31, 1913.) The same report speaks of the Apple Maggot as one of the four worst orchard pests in the province of Quebec.

THE PINE-CONE WILLOW-GALL is formed on willows, especially *salix discolor*. This gall is caused by a small gall-gnat, *Cecidomyia Strobiliodes*, which lays its egg in a terminal bud. The egg hatches, and the little larva lives at the heart of the bud, and dwarfs the growth of the stem so that the leaves (scales), become crowded on the short axis and form the cone-shaped gall.

The life history is very similar to that of Eurosta, only it passes the winter in the larva state, taking a short nap in early spring, and later emerges in the winged form.

A closely allied gall-gnat is the Hessian Fly (*Cecidomyia destructor*), which lives in the larva state in the stems of wheat, and annually damages the wheat-crop of America to the extent of many million dollars.

Another form preys upon clover and other grass crops.

In the adult form these gnats are seldom over one-eighth of an inch long. The antennae are long and many jointed and clothed with whorls of short hair; the wings have few veins and the body and wings are clothed with hairs, which are easily rubbed off.

If I left a watchword with you, it would be: "Learn to keep your eyes open, and to see chances where you can be useful." You will have a life then and a career behind you that kings will envy.— *Dr. Grenfell.*

IS THE TEACHER INTERESTED IN HIS WORK? HIS ATTITUDE TO REFORMS.

We print the following communication in the belief that it will interest some of our readers, and not in advocacy of the movement for spelling reform. In the matter of spelling, the REVIEW has always kept, and is as yet content to keep, "in the time-worn rut."

THE EDITOR EDUCATIONAL REVIEW.

Next to clergymen, teachers perhaps come in for the heaviest share of modern criticism. "Your teacher does his work," says the man in the street, "but is he interested in it? Does he fight like the business man to get the best possible results in the shortest possible time? Is he interested in short cuts, new methods? Has he pioneering instincts, or is he an uninspired hireling of the state, grubbing for the biggest possible salary, for the least possible work?"

The reader's answer to these questions would be by no means unfavourable to the teacher, could he have seen the large concourse who met under the heaviest shadow that has yet brooded over the Empire, at the Conference of Educational Associations held annually in January at the University of London. Many of the keenest male members of the profession were absent; their duty had called them elsewhere. But those that remained seemed to have abated not one jot or tittle of their old energy and enthusiasm. They attended meetings, examined the latest educational apparatus and text-books (how many teachers do not spend lavishly of their substance in thus equipping themselves with the best tools?) debated, conferred, explained.

One criticism, often levelled at the teacher, is that he is a creature of prejudice, with a mind impervious to new ideas. Suspicious of schemes and educational experiments, he asks only to be allowed to keep in the time-worn rut.

If this be true, how comes it that so many teachers attended the meeting of the Simplified Spelling Society, thus demonstrating their interest in a reform still hotly debated. True, they have in one sense a mandate from the highest educational authorities to encourage the work of the Society, for has it not received the imprimatur of such men as Sir William Ramsay, Vice-Chancellor Michael Sadler, Sir James Murray, Principal James Donaldson, Mr. J. L. Paton, to say nothing of its distinguished President, Professor Gilbert Murray. Nevertheless, when we come to the

practical application of the Society's principles, it must be admitted there are one or two lions in the way.

Ferocious beasts they may be, but evidently not indomitable, if we are to judge from the hopefulness that pervaded the Society's meeting during the Conference. An encouraging message was read from Mr. F. W. Goldstone, M. P., Secretary of the Organizing Committee of the National Union of Teachers: "As the result of considerable experience in the teaching of children, I have come to the conclusion that very much valuable time is wasted in teaching the intricacies of English spelling. The curriculum is now so extensive that it would be of considerable advantage to divert some of the time required for English spelling to subjects which would allow fuller scope for the cultivation of the initiative and observing faculties of children."

Miss Lucy Silcox, Headmistress, St. Felix School, Southwold, spoke from the point of view of the secondary schools, while the voice of the day-school was heard in the admirable speech of Mr. John Perkins, Headmaster, Sir John Cass Foundation School, Professor Rippmann forcibly summing up. India, according to Professor Mark Hunter, Madras, University is ripe for spelling reform.

The spelling reformers are not to rest content with pious opinions, but are attempting boldly to touch the springs of official action by means of a petition which they wish to present to the Prime Minister on the conclusion of the war. This petition, briefly, asks that a Royal Commission may be appointed on the whole question of spelling reform. It is hoped that the enthusiastic backing of the teachers will influence the authorities. Certainly many signed the petition at the close of the meeting. Reformed spelling may yet be carried over the heads of the indifferent. That Government may not be wholly impervious to the charm of a new idea was proved by the announcement of the Chairman, Mr. William Archer, who pointed to the recent action of the Civil Service Commission in setting as a dictation test a passage in reformed spelling to be turned again into ordinary script.

CHRISTINA JUST,
Secretary Simplified Spelling Society.
44 Great Russell Street,
London, W. C.,

AMENITIES OF THE WAR.

Herr Max Nordau, writing in the Vossische Zeitung about Christmas amenities on the Western front, tells the following story from the trenches on the Aisne:—

"The French learnt from a wounded German that a Bavarian Prince was in command in the trench opposite them. This commander had on the previous day excited the admiration of his enemies by his lion-like bravery. They decided to honour the hero as he deserved. The French captain in command of the company was an excellent musician. He got together from his men an orchestra of trumpets and concertinas, and they even found a violin. After two days' practice he wrote a program ornamented by one of his men, announcing that at 5 o'clock on the following afternoon a concert would take place in honor of the brave Bavarian Prince. The program was fastened to a stone and thrown into the German trench. At the appointed hour there was a blare of trumpets, and the captain appeared, armed only with a baton. The concert began, and the program was played through. At the end the whole company sang the "Marseillaise.

"There then appeared an officer from the German trench, who stood at attention and saluted. It was the Bavarian Prince. The French captain returned the salute, while there was a thunder of applause and cheering from both trenches."

The following wise words from one who is honored throughout the British Empire, meet the perplexities of many.

The Bishop of London energetically asserted the right to pray for victory. "When I see," he exclaimed, "all the mourning of the mourners and all the distress of the anxious souls to-day, I say to myself: 'How much more miserable should I have been as an Englishman if my country had not joined in the war; if we had on our safe island watched Belgium trampled under foot, and never stirred a finger; or if we had seen our friends in France have their country devastated before our eyes! No; there is something worse than death, and that is dishonor. And it is because I believe from the bottom of my soul that what have done in this crisis is what Christ would have done — plunged in to save the weak, plunged in, in the cause of honor, truth and the abiding character of a treaty — because I believe with all my soul and conscience I can pray for victory today."

LESSONS ON THE POTATO.

L. A. DeWolfe.

No single lesson on any plant completes the topic; for, being alive, plants must be studied in all stages of their life history. A winter lesson on potatoes, therefore, merely opens the way to more careful study the following summer.

A study of the tubers is interesting in winter. Aside from the shape, size and color, which vary with the individual and the variety, the "eyes" are worthy of observation. Do they look like human eyes in any way? What are they? This question is answered by watching the sprouts grow during the next month or two. What are the sprouts? In summer, the children will discover that when these sprouts come above the ground, they bear leaves. It might be wise not to decide what the "eyes" and sprouts are until we can observe the summer development.

In the meantime, examine the twig of a tree — say that of an apple or a willow. On this twig are buds, systematically arranged. Make sure that the arrangement is systematic. Where are the buds closer together, near the tip of the twig or towards its base? Where are the "eyes" of the potato most thickly clustered? Are they systematically arranged. Look at a long slender potato for this. Keep the comparisons between the twig and the potato in mind until spring. When growth begins, compare them again. Your children will then find that buds on the twigs develop into leaf-bearing branches, just as potato "eyes" develop into leaf-bearing sprouts. Moreover, one can always trace branches back to stems. Buds on the stems made branches possible. If the children should conclude that "eyes" must be buds, what is the tuber?

Another proof that the tuber is a stem, is the fact that sometimes little tubers instead of sprouts grow from the "eyes." If a little tuber is a branch, it follows that a big tuber bearing it might properly be called a stem.

Of course, it is much shorter to tell the children a tuber is a stem, and save all this time. But think of the pleasure of discovery you thus deny them!

In the winter, one might profitably collect as many varieties of potatoes as possible. Study the points considered in judging potatoes. The color of skin, its roughness or smoothness, depth of "eyes," uniformity of size, firmness of flesh, etc., are points to observe.

Even now children will plan what potatoes they will plant in their home gardens next year. Discuss with them the kind of soil best suited to potatoes. Will they do well on clay soil? When potatoes are "wet" after being cooked, is the variety always to blame; or might the same variety be "dry" on a different soil? Try planting the same variety on different soils.

At planting time, a lesson on propagation is in order. Do we plant potato seeds? What do we plant? Why? Do we propagate any other plants by cutting up and planting pieces of the stem? Try it with willows, roses, snapdragons and geraniums.

Do potatoes produce seed? We'll begin to suspect they do when we see the blossoms grow next July. What are blossoms for, if not to produce seed?

Why do we not grow potatoes from seed? Save some potato "balls" next fall to plant the following spring. We may learn something by so doing.

Do you know anything about seed selection in general? That is a very important topic. In particular, selecting seed-potatoes now suggests itself. How many of your farmer-friends select theirs in the field at digging time? Can you find out why that is best?

What diseases affect potatoes? The potato beetle ("bug") is not a disease, but a pest. Study the insect, its life-history and methods of control.

The commonest diseases are the blight and the scab. Both are caused by extremely small plants (fungi), which feed upon the tissues of the potato. The blight affects the leaves, and the scab attacks the tuber.

Since these are of so great economic importance, I suggest that those interested should write to the Department of Agriculture, Ottawa, and ask for a bulletin on Potato Culture. Textbooks on botany will give information about fungous diseases; but the technical language there used should not be passed out to children. If the teacher wishes the information for herself, all right.

Try to learn, through bulletins and otherwise, which varieties of potatoes are best in any given locality. Besides studying potatoes from the gardening and botanical standpoint, consider

their uses. Aside from food, the greatest use is in the manufacture of starch. Let the children grate a potato, stir the pulp in water, strain, evaporate the liquid, and see what is left.

Have them draw potato tubers now, and draw the whole plant next summer. Discuss the geography and the history of the potato. Do we export or import them? Where do we sell them? This is a big subject for the right kind of teacher.

HIGH SCHOOL LITERATURE.

THE PRINCESS.

ELEANOR ROBINSON.

I have had requests for some suggestions for teaching Tennyson's "Princess." I should be very glad if teachers would make such requests more definite and detailed. Methods of presenting and studying a piece of literature must vary so much with the experience, attainments and tastes of both teacher and student, that it would be a great help towards making these suggestions more useful if I knew, for instance, whether the pupils were at all familiar with Tennyson or if this poem was to be the introduction to him; whether they had read any poetry other than that prescribed in the course of instruction; if they liked poetry; if they could easily master a story told in verse; if they had a fairly good vocabulary; if they had access to books of reference, and to a complete edition of Tennyson, or were dependent upon their text books; if they could read aloud decently; if they could be depended upon to read the poem, for the story, out of school, so that the lesson time might be given to detailed study and appreciation; or if they needed constant help in their reading; how much time could be given to the literature lessons. As to the teacher — has he had much experience, or little, or none? Does he read poetry, and especially Tennyson's poetry, for his own pleasure? What difficulties does he foresee in teaching this poem? Has he a definite aim, other than that of getting ready for examinations, in teaching literature? Does he want general suggestions, or detailed ones? Has he found any of the notes in the REVIEW particularly useful, and if so, which ones? Information, on any or all of these points would be of use. Meanwhile, I will give what advice I can.

And my first bit of advice is — get the prescribed edition (Professor Woodbury's, Longmans' English Classics), and study very carefully both the Introduction and the General Suggestions. I am assuming, and I hope it is not too large an assumption, that you have made yourself familiar with the poem by repeated readings, and that you can follow and apply the editor's appreciative comments, and see the value of his wise advice about how to help your pupils to enjoy it. Lay to heart especially the following passages: "It is the peculiar aim of poetry to give pleasure of a particular kind; whatever lessens that pleasure or destroys it, attacks the life of poetry at its source.———." "Unless the student is pleased, and pleased in the way which belongs to poetry, he will neither understand, love, nor value it."

After reading and thinking over these two chapters, go over them pencil in hand, and mark such passages as need illustration from the poem. For instance, on page xxvii, we find, "the metrical effect of the hurried or checked lines." Number in the margin, or write in full in your note book, I. 166,

"Many a long league back to the North. At last."

And as many more hurried or checked lines as you can find. Illustrate as fully as possible in this way the paragraph on page xxvi, beginning, "From the start," especially, "the constant use of image," and, "where it does not use images." Compare in this respect, Florian's account of Melissa's trial.

"With hooded brows I crept into the hall,"

iv. 206, with the description of the girls coming across the Park,

"Some cowled and some bare-headed, on they came."

vi. 61, and decide which passage differs most from prose, and how. Another passage to be fully worked out is on page xxvii. "the little pictures, the more melodious and perfect lines, etc." It will be surprising if such a study, faithfully carried out, does not greatly increase your own pleasure in the poem and make you eager to bring it before your students.

But you have to consider not only your reading, but your readers. So go through these chapters again, this time marking and making notes on what you think best suited to the needs

of your class. You will, possibly, have to leave out a good deal that you yourself enjoy, for you cannot force enjoyment upon others. And note what Professor Woodbury says of the difficulty of the poem.

What is the minimum acquirement to be expected of a High School class? **A firm grasp of the story.** The questions in Appendix v. sections one and two, will be of assistance; or it may be necessary to put simpler questions. Some readers are very lazy about getting the incidents of a plot clear, and in order Try to get them to see that in grasping the incidents, and realizing how one depends upon another to make up the whole thread, or set of threads, in a story, they are gaining a certain power that will be of increasing use and pleasure.

Some appreciation of the sound of the poetry—of beautiful phrases, lines, and paragraphs; of the suiting of sound to sense. Unfortunately, through our neglect of good poetry in the lower grades of school, many children lose the keen enjoyment of rhyme, metre, and beautiful phrasing, so noticeable when they are little, and come to the formal study of great poems with ears dulled to their beauty. Then, very often, the reading is left to be a matter for the eye alone, and so a world of delight is never entered. Draw the attention to beautiful passages, and ask the students to pick out single lines or phrases that please them. Follow the advice on page xxvii. "The power to read verse," etc.

Appreciation of the beauty and suggestiveness of the imagery. "The Princess" is particularly rich in imagery and in pictorial passages, and these are often combined, as in,

(*a*). "All her thoughts as fair within her eyes,
As bottom agates seen to wave and float,
In crystal currents of clear morning seas."

(*b*). "light
As flies the shadow of a bird, she fled."

Of rather special interest are the images used in describing the Princess. Collect them, and compare her father's words,

"All she is and does, is awful."

Do the images suggest this quality of awfulness? Compare the imagery used in the description of Melissa, and of the girls seen together, e. g.

"as flies
A troop of snowy doves athwart the dusk."

Set the pupils to picking out passages from which pictures could be painted, e. g., The lines about Psyche and her "arrow-wounded fawn." II, 251; and lines whose sound suggests the sense, as:

(*a*). "To plunge in cataract, shattering on black blocks."

(*b*). "the splash and stir
Of fountains spouted up and showering down."

(*c*). "And murmuring of innumerable bees."

Connected with this study of the imagery and pictorial passages is the poet's way of reckoning time. How old was Psyche's child? How long did the Prince pace the terrace? Compare the three statements:

1. Within a fortnight.
2. Before the new moon became full.
3. "Ere the silver sickle of that month became her golden shield."

What is gained by stating the time in the third way?

In proportion to the ability of the class, and the time at your disposal, you will take up some study of the characters, and some discussion of the arguments. The suggestions for this in the introduction are excellent. But whatever lines of study you follow, keep steadily before you Professor Woodbury's concluding counsel.

"It will matter little whether a student has garnered a good deal of curious and interesting knowledge about matters spoken of in the poem; but if he has come to like and value ten lines of it only, that is the real gain, for they will be a standard of literature with him, a vital standard which has passed within and become part and parcel of his tastes."

BATHING HABITS OF BIRDS AND BEASTS.

Pigeons, larks and cockatoos like their bath in the rain. Game birds and poultry take dust baths. The common sparrow likes a dry shampoo in the dust and a plunge bath in the water. Reptiles soak themselves; elephants daub their calves with mud, then wash it off. Rhinoceroses, buffaloes, dogs, bears and tigers like to wallow; the equine tribe favor a roll in the sand; cats, mice and their respective relatives lick themselves clean; bats lick and scratch, and it is said that the continual scratching of monkeys is not so much in the search of parasites as a kind of self-currycombing.

WHO, WHAT AND WHERE?

NO. V.

DEFINITIONS AND THAT SORT OF THING.

1. What, according to George Eliot, are the essential attributes of a lady, and who possessed them?

2. What does Tennyson name as "the sins of emptiness?

3. What is the great art of letter-writing, as defined by Sam Weller?

4. "Anne smiled, and said, 'My idea of good company, Mr. E.——., is ——." Who was Anne? What was her idea of good company? Did Mr E.—— agree with her?

5. What state of mind is described by Bacon as "heaven upon earth?"

ANSWERS TO JANUARY QUESTIONS.

1. Damon and Pythias, two youths of Syracuse. Damon sentenced to death by the tyrant Dionysius, had leave to go home to settle his affairs, leaving Pythias as his surety. Damon being delayed, Pythias was led to execution, but Damon arrived in time to save him. Dionysius was so impressed by their friendship, that he pardoned both.

2. The cat in Hans Andersen's story, "The Ugly Duckling." She said to the duckling, "I tell you unpleasant truths, perhaps, but that is how you may know your true friends."

3. Selima, the "Favorite Cat Drowned in a Tub of Gold Fishes."

"No Dolphin came, no Nereid stirred;
Nor cruel Tom nor Susan heard,
A favorite has no friend!"

4. (*a*). Cassius to Brutus.—"Julius Caesar." iv. 3.
(*b*).—David, apostrophising Jonathan.—2 Samuel, 1. 26.
(*c*).—Elaine, of Lancelot.—"Lancelot and Elaine." 1082.
(*d*).—Robert Browning of his friend Alfred Domett, the "Waring" of the poem of that name.

5. (*a*).—"Heracleitus" by William Cory.
(*b*).—"In Memoriam," xxiii.
(*c*).—"St. Andrew's Day, in "The Christian Year," by John Keble.

COMMENTS ON JANUARY ANSWERS.

Only two sets of answers came in. A sad falling off! Where are M. V. L., Morleena Kenwigs, Peggotty and the rest? Hans Andersen's truthful and disagreeable cat was unknown or forgotten, but quotations bearing on question 2, were given from Bacon and Bulwer-Lytton. No. 5 c, was not attempted.

Marks: 20 allowed. M. L. L. Club, 16; Jill, 10.

BIBLE READINGS FOR OPENING EXERCISES.

1. Ecclesiastes, iii. 11-17.
2. St. Luke, ii. 41-52.
3. Psalm xv.
4. Ecclesiastes, v. 1-7.
5. St. Luke, iv. 38-44.
6. Psalm xix.
7. Ecclesiastes ix, 13-18.
8. St. Luke, v. 1-11.
9. Psalm xxii, 23-31.
10. Ecclesiastes xii, 1-7, 13, 14.
11. St. Luke vi, 27-36.
12. Psalm xxvii, 1-6.
13. Isaiah xxvi, 1-8.
14. St. Luke vi, 37-45.
15. Romans xii, 9-21.
16. Psalm xxxiii, 1-12.
17. St. Luke vii, 11-17.
18. St. Matthew viii, 23-27.
19. Psalm xxxiv, 1-10.
20. St. Luke xii, 16-21.
21. St. Matthew xii, 46-50.
22. Psalm xxxiv, 11-22.

A CHINESE SMALL BOY ON WAR.

We cannot give the name of the writer, but by the kindness of Rev. C. G. Sparham we can give the early attempt of a young Chinese boy, who is only just beginning to learn English, to describe the war. He is in one of the L. M. S. day schools near Hankow: "Now there is a real battle in Europe. This began because the Prince of Austria went to Servia with his wife. One man of Servia killed them. Austria was angry, and so fight Servia. Germany write a letter to Austria, I will help you. Russia write a letter to Servia, I will help you. France did not want to fight, but they got ready their soldiers. Germany write a letter to France. You don't get ready or I will fight you in nine hours. Germany to fight them; pass Belgium. Belgium say I am a country, not a road, and Belgium write a letter to England about Germany to them. So England help Belgium."

The simplicity, clearness, and directness of the explanation makes the statement most interesting. — *Yarmouth Herald.*

God give us men! A time like this demands
Strong minds, great hearts, true faith, and ready hands.— *Holland.*

For the REVIEW]

ARITHMETIC IN GRADES THREE AND FOUR.

I doubt if there is anything new to be said on the subject of arithmetic in the lower grades. The importance of this subject in the school curriculum has never been questioned; Educational Journals and Teachers' Institutes have vied with one another in the endeavor to find out the best possible methods of presenting its difficulties to the various grades, and yet so long as inexperienced teachers are continually taking the places of experienced ones, and old problems are thus becoming new problems, it will be necessary to go on discussing the same old difficulties year after year.

Number work in grades one and two has quite recently been the subject of a paper in these pages, but perhaps a glance at some of the difficulties to be encountered in grades three and four, particularly grade four, may not be out of place at this time.

Pupils entering grade three are supposed to have covered the operations on numbers up to one hundred. The obvious thing, then, is to complete the tables of eleven and twelve, and drill thoroughly for accuracy.

When one stops to consider that on a knowledge of the tables hangs all the future work of division, both short and long, one does not doubt the value of the months of drill which teachers find so necessary at this stage.

The drill on the table of twelve may take the form of changing feet to inches, inches to feet, individual things to dozens and dozens to individual things. "How many dozen in a basket containing 117 eggs?" is a much more interesting problem than, how may twelves in 117. To compute how many inches in six feet and eleven inches seems to have raised the child to the dignity of working problems, and yet is only a drill on the table of twelve, with the added advantages of involving the process of addition.

To obtain rapidity and accuracy in addition and subtraction will require all the time that can possibly be spared in this grade, and I know of no better way of keeping children sharpened up in all matters of mental drill, than by taking places in a class. Inattentive pupils soon become attentive with the prospect before them of gravitating toward the foot, and even the very slow ones sometimes taste the joys of "going up."

Grade three is pre-eminently a grade for drill, the continuation of grade two work, and the introduction of simple problems involving yards, feet, inches, pecks, bushels, dollars, etc.; but in grade four, one ventures out into new and untried fields. One can hardly enumerate the new work to be covered — multiplication of numbers involving six and seven digits, short division, long division, subtraction, factors, the use of the decimal point, finding averages, reading and writing numbers of twelve figures and upwards, Roman numerals, and problems of many kinds are expected to be taught in one short year; and the surprising thing is that with pupils of average ability, it can be done.

With accuracy in the tables secured in grade three, multiplication offers no particular difficulties, but how about the much-discussed subject of long division? Are its difficulties real or imaginary? My own opinion is that the difficulties of teaching long division have been very much over-estimated.

With no particular method in teaching the subject except the scriptural rule "line upon line, precept upon precept, here a little and there a little," one can obtain, I think, very satisfactory results.

Just before attacking this subject, it will be found helpful to use as mental arithmetic such questions as: How many yards of cloth at fifteen cents a yard can I buy for seventy-five cents? This paves the way for dividing by numbers larger than twelve, and proves a great help when judging how many times our divisor is going to be used. It is a good plan to begin to teach long division early in the school year — usually several weeks before Christmas. This gives even the slowest child a chance to become thoroughly acquainted with the process before the end of June. Moreover, there are so many practical questions involving long division, to be worked, that knowledge of it quite early in the term is really a necessity.

Here is one teacher's method of handling the subject: The first day, one or two simple questions are worked out with the class, the process being explained as clearly as possible, and the subject dismissed for the time. This is repeated for perhaps two weeks, the children actually doing the work while the teacher asks

questions and explains difficulties. The class is then warned that on a certain day they will be expected to work a question without assistance. Most of the children look quite confident of the outcome of this test — but there are surprises. Perhaps half the class displays with pride the question correctly worked. Half as many more have met with difficulties, easily explained — due perhaps to inaccuracy — and the rest are entirely at sea. The difficulties are soon cleared up, and then comes the real work of making the process clear to the dull ones — a process not one whit more difficult than teaching subtraction to the same individuals.

Teaching children to write numbers involving billions, millions, etc., is one of the things calling for patience and ingenuity, and yet it is wonderful how soon the immature brain of grade four seizes on the idea presented.

It is comparatively easy to teach the child to read numbers correctly, but when it comes to writing them for himself, he finds it a rather more difficult undertaking. Suppose he is asked to write the number 17,009,084. He has been drilled on the different families, billions, millions, thousands, etc., and knows their relative positions. The first step is clear. He writes the seventeen and places after it a comma, and the position of that comma cannot be changed. A reminder that the nine in the thousands' place must fill three places and still read nine, does away with the tendency to represent the family of thousands by a single nine; and the same statement concerning the eighty-four which must fill three places and still read eighty-four soon results in a correct placing of those figures.

Should any family lower than the first one in the given number not be represented, the child soon sees that in order to make the number read correctly when completed, the space must be filled in with ciphers.

Of course there are children, and will always be children, to whom this explanation will mean very little. In such cases, I have tried starting with twelve ciphers divided into periods of three and named respectively, billions, millions, thousands, etc., and by actually placing the number under the corresponding cipher above, have seen the light of undersanding gradually break on the slow mind, and have allowed the child to use this device in writing a series of numbers and getting them placed correctly for adding. This, however, might have its objections in any but extreme cases.

A tendency to shirk names and explanations, and to ignore decimal points is one of the difficulties to be overcome in this grade. If one will accept slip-shod work of this kind, one will get it from nearly every member of the class, but to insist on this attention to detail means just as surely to get it, and to get also greater accuracy in the work itself.

One could never hope to explain the various problems to be covered, without the help of mental arithmetic. A mental problem, simple in itself, but whose working out is similar to that of the larger question to be solved, often proves most illuminating.

Above all, ch ldren of these grades can be treated as though they possessed both intelligence and the power of application. They have both; and do not require every dose of arithmetic to be sugar-coated by being put into the form of a story. Too much "story" and explanation and "method" serves only to hopelessly befog the child who is much better able to grasp a straight statement. Neither is it necessary to base one's questions on things relating to dollies and doggies and kittties — practical questions relative to everyday life will be found to be much more apppreciated. When one sees the "devices" and "methods" adopted, or presumably adopted, since they occupy a large amount of space in some school journals — to teach children the most ordinary combinations in arithmetic, one sometimes wonders if the race of children with intellect is supposed to have become extinct.

Text-books have their places, but only as a guide in the hands of the teacher or as a special treat for the class on rainy days or Fridays.

There is no royal road to teaching arithmetic. After one's best efforts, there will always be members of the class whose number work is the teacher's despair. But if the majority of the pupils in grade four can answer intelligently simple questions based on the work covered, and can work addition, subtraction, multiplication and division with a fair amount of speed and accuracy — accuracy to be demanded rather than speed, although the latter is to be most earnestly coveted — the teacher of a large class in this grade is justified in feeling a certain amount of satisfaction over the result of the year's work.

HINTS FOR FEBRUARY AND MARCH.

Do not forget to drill on the spelling and pronunciation of the word February. This is necessary in almost all grades.

If the little ones have not yet learned the rhyme—

"Thirty days has September,"

this is a good time to teach it, and for those who are far enough on, to practice writing the names of the months, with the abbreviations. Almost endless exercises in easy composition suggest themselves.

1. Write a sentence about each one of the Winter months; of the Spring months; of the months that have thirty days; of the months that have thirty-one days.

2. Put on the blackboard, or dictate, sentences like this: Longfellow was born on the twenty-seventh of February. The first day of March is Saint David's day. And have the children write them, using the abbreviated date.

3. Make sentences telling something that we do in each month of the year; telling why you like different months.

For number work, numerous little addition problems about the days of the months may be made. How many days in the three winter months? and so on, with different combinations. Put a list of dates, 1902, 1903, 1904, etc., on the board and let the children find which are leap years, by finding the multiples of four. Remember that the even century is not a leap year unless the first two figures make a multiple of four. The year 1900 was not a leap year, but 2000 will be. How many days has a leap year? Find out by addition.

The subjects for reading and observation named in the January REVIEW are suitable for February. Suggestions for Longfellow's birthday will be found in the REVIEW for February, 1914.

The lengthening days and the increasing power of the sun furnish topics for morning talks. If calendars are kept and the weather noted, comparisons may be made of the number of stormy or sunny days in the different winter months? What signs are there that March is a spring month? If there are English or foreign children in the school they may be able to tell something of different conditions in March. An old English rhyme says:

March brings breezes loud and shrill,
Stirs the dancing daffodil,

The American poet Bryant writes—

The stormy March has come at last,
With wind and cloud and changing skies.

How does March get its name? From the Roman god of war, Mars. Here we come to history again. The names of all the months were given by the Romans. Why is it that September, which is really the ninth month of the year, has a name that means the seventh (from the Latin *Septem*, seven)? Because the year used to begin in March. Longfellow says in the third verse of "The Poet's Calendar"—

I Martius am! Once first and now the third,
To lead the year was my appointed place,
A mortal dispossessed me by a word,
And set there Janus with the double face,
Hence I make war on all the human race,
I shake the cities with my hurricanes,
I flood the rivers and their banks efface,
And drown the farms and hamlets with my rains.

Sometime in March teach the older children how to find when Easter will come in any year. Easter Day is always the Sunday following the first full moon that comes after the 21st of March. So that Easter never falls earlier than March 22nd, nor later than April 25th. This year Easter Day is the 4th of April. Let them work this out with a calendar that shows the phases of the moon.

March winds are proverbial, and the winds, their directions, the good and the harm they do, offer another subject for talks and compositions. For reading, story telling, or memorizing, take Stevenson's "The Wind" and "Windy Nights," Howitt's "The Wind in a Frolic," the story of the Wind and the Sun, Aerolus and the bag of Winds. The last two are good stories to dramatize, which is a big word much used now to describe what we used to call "playing at stories."

To illustrate simile and metaphor compare the proverb, "March comes in like a lion and goes out like a lamb" with William Watson's,

"March that comes roaring, maned, with rampant paws,
And bleatingly withdraws."

The lives of St. Patrick and David Livingstone,

the great missionary and explorer (born March 19, 1813), give material for stories of heroism and devotion.

Christina Rossetti's, "Winter Rain," and "The Wind," by Dorothy Wordsworth, are suitable for the primary children.

THE WIND.

What way does the wind come? What way does
he go?
He rides over the water, and over the snow,
Through wood and through vale; and o'er rocky
height,
Which the goat cannot climb, takes his sounding
flight,

He tosses about in every bare tree,
As, if you look up, you plainly may see;
But how he will come, and whither he goes,
There's never a scholar in England knows.

— *D. Wordsworth.*

WHAT O'CLOCK ARE YOU?

By Francis Kirkland.

It was John's turn to think of a new game to play, for the old games were worn out; so John stopped his sister Emily on the stairs, and asked, "What o'clock am I?"

Emily looked at her brother. His lips were drawn together for whistling, but no sound came. His left arm was bent, as if he were carrying a burden.

Emily clapped her hands. "You are nine o'clock, schooltime," she said.

"Right!" cried John. "Now you try it."

Emily thought for a moment; then she went to the door and looked up and down the street. She came back and shook her head. After a moment she ran to the door again. When she closed the door she pretended to hold something in her hand.

"Oh," said John, "you were looking for the postman. You are eleven o'clock."

"That is right," Emily answered. "Let's go and tell Marion."

Marion laughed. "Now you both guess what time I am."

She lay down on the floor and put one arm under her head; then she started up and rubbed her eyes. Afterwards she lay down again.

"Seven o'clock!" cried Emily. "Marion never likes to get up."

And so it went, until every hour of the day had been acted in many ways.— *Youth's Companion.*

REPORT ON NATURE STUDY OBSERVATIONS.

By R. P. Steeves, Director Elementary Agricultural Education for New Brunswick.

The following letter was sent out in October last to all teachers doing school garden work in the public schools in New Brunswick:

"To the School Garden Teachers and Pupils:

A series of observations extending over a period of two months (October 20-December 20), is asked for. These observations may include any or many realms of Nature Study. Personal observations and studies of objects (animals, plants, physical nature environment), are desired. These should include records, notes, drawings (made at time of observations), and conclusions arrived at. Dates should be given in every case.

A neat and accurate summary of the two months' work is asked for from every pupil entering the contest.

It is intended to have all articles sent in, handed to competent judges. The four best in every County will be duly recognized, and the names of winners will be published in the Educational Review.

Every paper must bear the name of the worker The name of the school (number of district), name of teacher (school or department), the grade of the pupil and pupil's age must be given.

Papers must be sent in not later than Dec. 28.

(Sgd.) R. P. Steeves,
Director Elementary Agricultural Education."

Only such work as pupils might voluntarily undertake was desired. It was not asked for as a part of the school work, but as work outside of school, carried on by individual pupils on their own account. Naturally such work would reflect the teaching given in the school, as each pupil in what he did would be applying the ideas that he had gained there.

Pupils from five districts, representing as many counties, have sent work that they have done, and it has been examined with some care.

Following is a list of pupils by counties:

Albert four, York five, Queens three, Restigouche six, Kent fifteen.

The following list indicates the position of pupils in the several counties:

RESTIGOUCHE.
(District No. 14. Dalhousie.)

1. Frances Macpherson, 2. May Barrieau,
3. Nan Wetmore, 4. Peter Stevens.

KENT.
(District No. 1. Richibucto.)

1. Eleanor O'Leary, 2. Joy Whiteside,
3. Rufino Johnson, 4. Alma MacKinnon.

ALBERT.
(District No. 4. Coverdale.)

1. Blair C. Mitchell, 2. Currie A. Collier,
3. Emma Wilson, 4. Audret Gaskin.

QUEEN'S.
(District No. 8, Johnston.)

1. Robert Fanjoy, 2. Ethel Fanjoy,
3. Gladys Fanjoy.

YORK.
(District No. 3, St. Mary's.)

Jennie E. Allen, Napoleon Godbout.

The papers show much neatness; care has evidently been taken. Most of the exercises show that the pupils are greatly interested. The pupils in the Albert County school have shown the most originality. Individual work is more marked.

After the report on the work received between the 20th and 28th of December had been made out, the following came in from York County. Their order of merit is as follows:

YORK COUNTY.
(District No. 9, Southampton.)

1. Eva A. Scott, 2. Perley Scott,
3. Norman Corey.

A TALE FROM THE FLEET.

One realises the wonderful spirit of the Navy (says the "Nation") not merely in the story of the loss of the Formidable, but in accounts of the slighter accidents of the fleets. The other day, for example, the commander of a destroyer, rolling heavily in a gale, and with her engines disabled, tried to lessen the strain by ladling out oil. The seaman engaged in this work was washed overboard, and washed back again by a returning wave. He picked himself up, saluted his officer, and said: "Very sorry, sir; lost the bucket."

USEFUL BOOKS.

The MacMillan Company has recently issued a "Manual of Weeds," written by Miss Ada E. Georgia of the New York State College of Agriculture at Cornell University. The book is attractively gotten up and is the fifth volume of the excellent series of Rural Manuals, edited by Dr. L. H. Bailey for the use of Agricultural Colleges, High Schools, and those interested in rural affairs. The publication of the "Weed Manual" will fill a long felt want, for there has been a steady and constant demand for authentic information regarding weeds and their control. Many experiment stations in the United States and the Federal Department of Agriculture at Ottawa have issued bulletins describing various weeds and their control, but here we have the latest information on this subject well arranged and presented in a most attractive and readable form.

The book deals with practically all the weeds known to occur in the United States and Canada. and nearly every weed is illustrated with a black and white drawing by F. Schuyler Mathews

In order to show the scope and character of the work, it may be best to give in bare outline a brief summary of the various chapters. The preface gives us in a few brief sentences the viewpoint of the author. It is well worth repeating here.

"Nature is the great farmer. Continually she sows and reaps, making all the forces of the universe her tools and helpers. The sun's rays, wind, rain, frost and snow, insects and birds, animals small and great, even to the humble burrowing worms of the earth, all work mightily for her, and a harvest of some kind is absolutely sure. And to the people who must wrest a living from the soil, not only for themselves but for all mankind besides, it must seem the that Nature's favorites are the hardy, aggressive, and often useless and harmful plants which they have named weeds."

This opening paragraph is indicative of the author's approach to her subject, and clearly shows her appreciation of Nature's great forces and an intimate acquaintance with them. The first chapter presents in a clear and forceful manner the answer to the question, what are weeds, and then proceeds to outline in detail the main principles which should govern all efforts towards their control. Following this is a chapter on the financial losses due to weeds, and here is presented the startling facts as to the enormous losses now suffered by the American farmer

The next chapter is a short and concise account of weed dissemination, which will well repay careful reading by all those interested in the improvement of agricultural conditions. There is also presented a concise account of the various chemical herbicides which have proven efficient in the control of certain obnoxious weeds.

Following these introductory chapters is the main part of the book,— the descriptive list and means of control. The plants are arranged according to families, the ferns, horsetails, grasses being discussed first. The nomenclature of Gray's Manual, seventh edition, is used throughout. Under each plant there is given its common and scientific name, and the following valuable information is printed in smaller type at the beginning of the discussion,— other English names native or introduced; annual, biennial or perennial; how propagated; time of bloom; seed time; range; habitat. Then follows a discussion of the plant itself, its characteristics, mode of growth, methods of reproduction, and any other important facts deemed necessary for a clear conception of the weed under discussion. The means of control are given as fully as possible, and all sources of information seem to have been fully consulted. The three hundred and eighty-six illustrations should aid greatly in identification. In all, five hundred and twenty-eight weeds are fully discussed.

The book concludes with a bibliography, a list of weeds known to be poisonous or mechanically harmful to animal life, an excellent glossary of terms, and a well arranged index.

The scientific accuracy of the book is excellent. Thus we have an authoritative book on this important subject, which should prove of great value not only to agricultural colleges, high and normal schools giving courses in agriculture, individual farmers, but also to nature study teachers in our common schools, who are always on the search for non-technical subject matter presented in an accurate and readable form. It is to be hoped that the material contained in this book will be used by the grade teachers in widening the scope of their subject matter.

ROBERT MATHESON.

Cornell University, Ithaca, N. Y.
December, 1914

BOY SCOUTS AND THE WAR.

The fact that Boy Scouts in England and on the Continent are doing good work in the war, has given fresh impetus to the organizations in Canada. The Canadian General Council of the Boy Scout's Association has sent a travelling secretary, Mr. F. R. Perrott, of Ottawa, to the Maritime Provinces to organize Scout Bands and to stir up the interest of the public. New Brunswick has already added about 150 new scouts to her bands. The following account of the activities of the boys will be of interest: Some thousands of Scouts are actively employed in England, France and Belgium along the lines indicated by Baden Powell in his original order. All Scouts employed are recognized by the government or police departments and are paid a shilling a day. In regard to their official standing, a bulletin was issued stating that "Scouts have been recognized by the government as a non-military body, and no Scout or Scout officer in uniform must on any account carry arms." Further, it is stated that "The uniform of the Boy Scouts (B. P. hat or sea scout cap, and official fleur de lys badge essential), is recognized by His Majesty's government as the uniform of a public service, non-military body." Among the services rendered by the Boy Scouts in England, are those of two thousand who are watching the telegraph wires to prevent them from being tapped. Another body went into the country and helped with the harvesting. Others are in camp watching and patrolling an aircraft factory. At Wolverhampton, under the suggestion of Sir Richard Paget, each Scout has undertaken to raise six chickens to help the food supply, while in another district all the waste land has been planted by the Scouts with turnips for the same purpose. They have helped the Prince of Wales with his National Relief Fund; made bandages; sixty of them, all cyclists, have relieved the telegraph department, overwhelmed with work; and another public department required the services of one hundred Scouts continuously for a week. In France their work has been confined largely to Red Cross work . In Canada, they have also helped in the work in various ways of the organization. In Belgium, they are apparently divided into two classes, one serving at the front as volunteers, the other doing non-military work, but the

Germans evidently, according to a recent letter from the Secretary of the Boy Scout Association in England, to the Chief Scout Executive in the United States, Mr. James E. West, regard the Belgian Boy Scouts as combatants. The work of the German Boy Scouts is unknown, but their training was largely military and the capacity in which they, as a body, may be utilized during the war, can only be guess work at best. The idea of the Chief Scout is that the work of the British Boy Scout will be entirely protective and preventive, as is that of the police; the Boy Scout having, of course, no power to arrest. These boys have received careful training in the principles of first aid, in woodcraft, in organization and in the use of individual powers. They are taught the value of courtesy, of gentleness, of courage and of charity. To-day, when the European nations are fighting for honor and liberty, they should be a valuable asset in the preservation of national composure.— *St. John Globe.*

DISCIPLINE.

[A paper read by Miss V. Lena Scott, of Bairdsville, N. B., before the United Institutes of Carleton and Victoria Counties, at Woodstock, on Thursday, December 17th, 1914, slightly abridged.]

Some very wrong-minded person long ago spread the report that teaching was humdrum work. Unthinking people have believed it ever since. Dickens, and other story-tellers have repeated the falsehood so skillfully that it is not uncommon to find, even among teachers themselves, a notion that school-keeping is dull and the teacher a monotonous-minded person deserving only pity. This is a curiously mistaken idea. Of all the interesting things in the world children are the most universally attractive. So various, so surprising, so naturally merry, so fascinating, and to the on-looker so suggestive of happy experiences of one's own past, are the personalities sent to school, that it is only an unnatural and wrong-headed judgment, that fails to see more attractions than drawbacks in teaching.

Boys and girls are activities that cannot long be left in safety without well-understood, well-planned, well-directed and well-organized industry. These young people can take the full measurements of a teacher in less time than inspectors can. Unconsciously they yield obedience, respect and admiration to teachers who are "masters of their job," but no force on earth can make them yield these cardinal elements of the learner to those who are weaklings in the profession.

Discipline, like the bridle in the hand of a good rider, should exercise its influence without appearing to do so. True discipline can be secured only when the utmost regard has been shown for the liberty of the pupil.

The iron school of discipline was wont to kill the individuality of the child, by suppressing every actor out of harmony with the mechanical system of order in the school. Unhappily this style still clings to many of us, but not to the majority.

No child or adult is disciplined until he has secured self-control at all times. The aim of the teacher, therefore, should be to enable the child to master every action of his own. Iron-bound rules and regulations never obtain such a reward. By no amount of force, by no number of commands, shall we secure unto the child freedom and mastery of itself.

To instill such a form of discipline into the pupil, one must resort to considerable tact and ingenuity. "Liberty ceases to be such, when it infringes on the rights of others," so the activity of the child ceases to be liberty when the exercising of such activity is a detriment to the progress of the other pupils.

This leads us to the idea of discipline for the welfare of the school as a whole. And if for the school as a whole, why not carry such a form of discipline all through life for the welfare of society as a whole? Our whole career is one of action. If during the years of school life when impressions life-long are implanted in us, we are continually restrained from assisting ourselves, how will our after life be affected by such childhood habits? The law of habit will here assert itself and tend to make us dependent upon others. Such a conception of one's conduct, in manhood, would soon reduce us to a race of weaklings, rather than a society of independent, inventive and progressive individuals.

It behooves us then, as moulders of the plastic minds, entrusted to our care, carefully to weigh the motive underlying each act of the child, ere we ruthlessly crush the unfolding of a new idea in his mind. It behooves us constantly to encourage proper activity with a view to developing the child's individuality and independence.

The activities of a child may fittingly be likened to the unfolding of a flower. Each act constitutes

a petal of life. Crush it or remove it from the child nature and we possibly produce an imperfect individuality, as readily as the plucking of the petals from the unfolding flower produces an imperfect bloom.

No better opportunity of noting the ability of the untrained teacher to cope with discipline is offered, than that of watching a normal graduate on the first day of her career, as a teacher in charge of a school. To this teacher every spontaneous act of the pupil is a violation of her conception of right discipline. Down comes the cruel master — suppression. Years of teaching, however, lead this same teacher to recognize the futility of such a system. She learns that each pupil is an individual, different in countless ways from any other; she learns that she must carefully study each mind before her, that she must encourage many and hinder few of the actions of the young minds; in other words, she must call into use all her acquired knowledge of experimental psychology and resort to it every day. Nothing save observation and experiment can provide the teacher with the proper equipment for the enforcing of right or true discipline.

Teach the child that order and regularity are necessary to the welfare of the others, that minimum noise on the mechanical movements is something to be proud of. By such means one soon has the pupils moving in a quiet and orderly manner, not because of a law which demands such a method of moving, but because of the pride they take in so moving and acting. The teacher who secures discipline through the least imposition of fixed rules or regulations, has invariably secured the right kind.

Next to the liberty of the child we should consider his independence. Freedom implies independence and thus following our idea of liberty for the child we must allow him the maximum independence compatible with the collective interests of the school. Most of us are prone to depend in some degree on others, but he who is least dependent derives the greatest feeling of freedom as a result. Then as teachers we are to instill the idea of independence into the child. Teach him to solve his own difficulties without continuous resort to the teacher. By catering to his every call for aid, we suffocate an inborn activity, which unless freely exercised soon may become latent and useless to the child.

We may summarize that all true discipline should primarily hold liberty and independence in the foreground. Each of these attributes of the child's nature must be instilled with due regard to the collective interest of the school. Associate all mechanical movements with the idea of pleasing appearance and beauty. Never crush the youthful endeavor to help oneself. Observe closely the unfolding of each bud of life, and adapt measures of discipline to serve each individual. Only by the using of such methods can we fulfil our duty towards the child and the state by laying the foundation for a future generation of strong, incentive and resourceful men and women.

Sympathize with the children; they need your sympathy, they crave it. Their trials and difficulties are as important to them as are the burdens of daily life to their elders. Teachers and parents too often forget this fact and allow themselves under troubles of their own, to become cold and unsympathetic. Childhood needs love and sympathy as the plant requires sunshine. The teacher who finds it necessary to be severe in order to maintain discipline belongs to a passing generation of pedagogues.

Last of all, teachers in the country be happy. It is your great privilege to get close to the people and your pupils. Impress your own standard on the community and set yourselves to looking for kind hearts, high principles, courage, patience and self-sacrifice. You will find them and you will be helped as much as you will help if you take the true spirit.

Do not be in a hurry to get away to a larger place, but get what bit of experience you can in your present surroundings, and when you go leave a circle of warm friends behind you.

CURRENT EVENTS.

The United States Supreme Court has decided that boycotting is an unlawful conspiracy in restraint of trade, and that individual members of an organization that boycotts are liable for three times the damage the boycott may do to those against whom it is directed. The principle involved is that while an organization may have every right to take concerted action for the benefit of its members it has no right to injure others.

The Antarctic exploration party under Sir Ernest Shackleton left South Georgia last month on its way to the Antarctic Continent. They will visit the unknown regions, instead of following the trails of Scott and Amundsen.

The latest reports from our Arctic coast have brought no further tidings of the Stefansson expedition. Stefansson and ten others of his party have now been missing for about a year; and it is now proposed to send out a relief expedition equipped with flying machines, in the hope of finding them.

Figures show that in America, of every four million persons travelling by railway, one is killed; and that this is eighteen times as many as are killed on the railways in England, in proportion to the number carried.

The last rail of the Canadian Northern line between Lake Superior and the Pacific Coast was laid last month, and before many months the ballasting will be completed. There is yet an uncompleted link in this system north of Lake Superior; but we may expect that before very long all three of the transcontinental railways,—the Canadian Pacific, the Grand Trunk Pacific and the Canadian Northern, —will be in operation from coast to coast.

One of the worst earthquakes known in modern history occurred last month in Italy. It is estimated that forty thousand people were killed, and as many more injured. Fifty or sixty towns and villages in the centre of the kingdom were destroyed. In the city of Avezzano, which had twelve thousand inhabitants, three-fourths of the number were killed, and a majority of the survivors injured. Yet this frightful loss of life seems but a trifle, when we compare it with the number of those who have lost their lives on the battlefields of France and Belgium and Poland, since the war began.

Six months of the Great War have passed, and, except for the early success of the Germans in overruning Belgium and northern France, neither side has won any great advantage. Perhaps not military force, but economic pressure, may finally decide the conflict. Germany's commerce is interrupted by the superiority of the British fleet. The German government has found it necessary to seize all the supplies of wheat in the country, and will probably take over other food supplies. They claim, however, that they have food enough to last until the next harvest, even if all foreign supplies should be cut off. Another serious shortage for them is in the supply of oil, as the part of Galicia which yields that product is now in the hands of the Russians.

France, it has been said, is fighting to save her territory; Russia is fighting to preserve her national life and her religion; Germany is fighting to impose her order on the rest of the world, for she really believes that her government is the best in the world; Britain is fighting for disarmament and universal peace.

While the winter has not stopped the war, it has, of course, seriously interfered with military operations. Lord Kitchener is reported to have said that he does not know when the war will be over, but it will begin in May. At different points along the western battle line, where both armies are entrenched, the French have made slight advances; but the Germans have driven them back at Soissons, and are now within a short distance of that important city. Where the British hold the line, in the vicinity of Ypres, several violent German attacks have been repulsed. A second British army, in which the Canadian troops are included, has been landed in France, where they may be ready to meet the Germans if they should attempt to make another advance in force before the winter is over.

The part of the battle front held by the British extends but a fifth of the whole distance between the Swiss frontier and the coast; yet both the French and the Russians are satisfied that Britain is doing her full share in the war, at sea and in the field. A French writer says: To find men, and even to train them, is nothing; but to officer and equip them, while keeping General French's army in ammunition, while working for the Belgian army that has lost all its arsenals and revictualing centres, and for the French army that has lost its chief industrial departments, that is a giant's task, of which England alone is capable.

A new phase of the war is to begin in the spring, when Lord Kitchener will have a new army of two million men in the field; when the French also will have new forces of more than a million; and when, it is probable, more than one of the neutral nations will have entered the war on the side of the Allies; but it will be a very difficult task even then, to drive the Germans out of Belgium.

Another field of war in which colonial troops are employed is on the Egyptian frontier, where the advancing Turkish forces have reached the Suez Canal, though not in large numbers, and have been defeated in a battle in which the New Zealand contingent had its first engagement.

The Germans are said to consider this chiefly a war against Great Britain, but to the people of Eastern Europe it is a war between Russia and Germany. Along the Russian frontier, unchecked by winter weather, the fiercest fighting of the war thus far is now in progress. Winter, indeed, seems to be of some advantage to the Russians; for the freezing of the lakes and marshes which form the natural defences of East Prussia has opened a way for a Russian invasion in the north. The second attempt of the Germans to capture Warsaw seems to have failed; and in the south the Russian armies have taken possession of the most important passes of the Carpathians. Yet the Germans seem to have men to spare for strengthening the Austrian forces for another invasion of Serbia. The winter campaign between Turks and Russians east of the Black Sea has apparently ended in a decisive victory for the Russians.

Another raid upon the English coast was prevented by a battle in the North Sea, in which four of the largest German ships were met and defeated by five large British vessels of the swiftest type. One of the German ships was sunk. It is the first time in history that ships of this size have ever met in battle.

Fifty-seven natives of Fiji have recently passed through Montreal on their way to England, where they expect to enlist in Kitchener's army.

More than eighteen thousand dollars in money has been contributed to the Patriotic Fund by the Indian tribes of the Dominion, and a considerable number of the Indians have enlisted in both first and second contingents.

The Dominion Parliament now in session will probably take measures to raise a hundred and fifty million dollars in war taxes. This will help us to realize that it is our war, and not one at which we are mere onlookers.

A German named Werner Horn has been arrested in Maine for attempting to blow up the railway bridge at

Vanceboro. He pretends to be an agent of the German authorities, and claims that the crime was an act of war. The Canadian Government has asked for his extradition.

The rebellion in South Africa is practically over, and the Union forces may safely proceed against the neighboring German provinces. German Southwest Africa will be annexed to the Union.

It is believed that the continuance of the fighting in Mexico is principally due to the failure of Carranza to settle the land question. Both Villa and Zapata would confiscate the great estates and divide them among their followers. Latest rumours indicate that Carranza is again in power in the City of Mexico, while Zapata has retired to the south, and Villa will possibly become an independent ruler of Northern Mexico. This means the breaking up of Mexico into two, and possibly into three or four smaller states.

A German proclamation states that on the eighteenth of this month the waters surrounding the British Isles will be declared a war zone, and all trading vessels found there, including neutral vessels, will be sunk by submarines. A blockade by submarines is something new, though quite in line with the terrorizing plans of German warfare; but it remains to be seen whether the neutral nations will submit.

SCHOOL AND COLLEGE.

An Officers' Training Corps has been established at Acadia University. Their drill began on December 21, under Sergeant Major Long, who was appointed by the Militia Department.

The Acadia Bulletin for January has a list of fifty-three Acadia men who have enlisted.

The cadet corps of St. Anne's College, Church Point, N. S., have the honour of winning the Grand Imperial Challenge Shield for shooting. 516 cadet corps in different parts of the Empire competed for this prize, which was won last year by an Australian corps. A bronze replica of the shield will remain the property of the college. Ten silver medals and £15 were also won by this corps. The presentations of the prizes were made on January 19, by Dr. A. H. MaKay, Superintendent of Education, and J. A. McDonald, Esq., of Halifax, each of whom made interesting addresses, congratulating the college on the efficiency of its training.

The short course at the Agricultural College, Truro, N. S., began on Tuesday, January 5, with two hundred in attendance.

At a Christmas concert, the pupils of the school at Kemptville, N. S., under the superintendence of their teacher, Miss Lizzie Vine Hatfield, raised $16.00 for Red Cross work.

The teachers and students of Kentville Academy recently contributed nearly sixty dollars to the Belgian Relief Fund.

Mr. Harry McCleave of Stewiacke has been elected Rhodes Scholar for 1915 by the Senate of Dalhousie University. Mr. McCleave received his early education at Fort Ellis School and Colchester Academy.

The University of Mount Allison has offered a $50 scholarship for competition in Grade XI of the Parrsboro High School. This school has now $150 in scholarships, and more than $100 in prizes for competition in the coming year.

The examinations for the Macdonald scholarships for short courses in engineering at the Technical College, Halifax, were lately held in New Glasgow. The scholarship for the sons of industrial workers was won by Clarence M. MacKay of New Glasgow. James F. Kelly of Stellarton won the scholarship for the sons of railway workers, and the scholarship for the sons of miners was awarded to Donald McAskill of Stellarton.

To fill the vacancy created by the death of Miss Laura Lathern, late teacher of English and Latin at the Ladies College, Mount Allison, Dr. Campbell has secured the services of Miss Dora E. Faulkner, daughter of Hon. George E. Faulkner, of Halifax. Miss Faulkner is an honor graduate in English of Dalhousie College and has taught in the Ladies' College at Halifax.

In connection with the Agricultural short course in the Fisher Vocational School, Woodstock, N. B., there is going on a series of evening lectures on subjects of general interest, illustrated by the reflectroscope. Among the lecturers we notice the name of Miss Hazel Winter, Supervisor of Women's Institutes.

The Board of Education of the Diocesan Synod of Fredericton report an attendance of sixty-eight at the Rothesay College for boys, the largest attendance in the history of the school.

The fine new school building in Smythe Street, Fredericton, was opened in January.

The Art Club of St. John, N. B., is carrying on an Art school. Classes in drawing and painting are held on Monday, Tuesday and Friday afternoons, and Saturday morning. The Club has received a grant from the Royal Canadian Academy of Arts, of $100, to be used for the benefit of advanced classes in life study.

A number of important changes have been made in the teaching staff in St. John. Leave of absence has been granted to Mr. Charles Lawson, teacher in grade eleven at the High School, who has volunteered for foreign military service.

The Board has received the resignation of Mr. William H. Parlee, Principal of Centennial School. Mr. Parlee has been on the teaching staff of this city for about thirty years, and during that time his services have been of a very valuable nature.

Mr. Grover Martin, of the tenth department of the High School, has been promoted to grade eleven to take the place of Mr. Lawson during his absence. Mr. Arthur W. Hickson has been transferred from the High School staff to the principalship of Centennial School, in place of Mr. Parlee. Mr. Stuart Henry has been transferred from King Edward School to grade ten, High School. Mr. John R. Gale, who formerly taught in Alberta and British Columbia will succeed Mr. Hickson at grade nine, High School. Miss Elizabeth Adams, of King Edward School, has been appointed to take Mr. Henry's place at that school.

At Albert School, Miss Beulah Knowlton of grade one, Centennial, has taken charge of grade one, in succession to Miss Gregory, who has resigned. Miss Emma Babbitt, assistant teacher, succeeds Miss Thompson of grade two, who has resigned to accept her pension. Miss Thompson has taught in the city for over thirty years. Miss Gladys Shaw, a graduate of the High School, who holds a first class license, has been appointed assistant teacher.

At St. Peter's Girls' School, Sister Adrienne has been appointed to take Miss Hogan's position, the latter having retired.—*St. John Globe.*

BOOK REVIEW.

Britain's Case Against Germany, by Professor Ramsey Muir, Professor of History, Manchester University, Manchester, England, is the title of a book recently published by Messrs. Longmans Green & Co., London, and New York. It contains about 200 pages, is bound in cloth, and sells at $1.00 net.

The author sets forth a strong case for Britain in six chapters, designated as follows: I, The Summer of 1914; II, Germans Political Theories; III, The Two Germanies; IV, How Prussia Rules Germany; V, Recent German Policy; VI, The Alternative to the Doctrine of Power.

The volume is not only a clear, concise, popular exposition of the events immediate and remote, which led up to the war, the political theories advanced by Nietsche and others, the dominance of Prussia, the war-policy of Germany, and her studious care to avoid all movements, which tended to the settlement of international disputes by other means than an appeal to the sword, but it shows the reader the philosophical side of history, and something of the intricate international problems that have engaged the attention of statesmen for the last one hundred years.

The book has a peculiar value for teachers, and should be read in every Canadian school.— H. G. P.

LOOK IT UP IN HEATON.

Heaton's Annual — the Commercial Handbook of Canada — 1915 edition, price $1.00, postage 12c. Heaton's Agency, Toronto — The eleventh edition has come to hand. Year by year the Annual has been gradually developed to meet the requirements of those who want a Canadian book of easy reference.

The second half of the book contains a concise, up-to-date description of all the towns in Canada of any commercial importance, including the leading hotels in order of merit, the existing industries and special opportunities for new industries. The railway connections, banking facilities and population of smaller places are given under the head of "Banking Towns." To this is added a section covering such subjects as agriculture, commerce, education, finance, fisheries, forests, fox-farming, immigration, mining population, railways, game-laws, water powers, etc., an admirable, up-to-date pocket encyclopaedia of the resources of the Dominion. From a scientific point of view, perhaps the most valuable feature is a chapter headed, "Where to Find it." This is a complete economic bibliography of the Dominion and Provincial Government Reports and standard publications relating to Canada, to which foot note references are given throughout the text.

THE MAGAZINES.

The opening article in the February *Canadian Magazine* is an account of the heroic attempt of Inspector Fitzgerald and three constables to reach Fort McPherson in February, 1911. The writer, A. V. Thomas, calls his story "Heroes of the Canadian Arctic" and draws attention to the similarity between the journey of Inspector Fitzgerald and that of Captain Scott in the Antarctic. The second of the "Famous Canadian Trials" to be narrated is the incident of the assault upon Thomas Walker in 1764, known as the "Walker's ear case." The Library table has a very interesting review of the first twelve volumes of the "Chronicles of Canada." "Tramping in unfrequented Nova Scotia" is a pleasantly written account of a walking trip from Musquodoboit Harbour to Marie Joseph. Six short stories are contributed this month, and the illustrations, as usual, are very attractive.

The Living Age is full of good things, substantial and light. In the latter class "The First Hundred Thousand" tells of some of the ways by which the Scottish element in Kitchener's Army is being shaped into discipline soldiers. "Look here, Dunshie," says the Captain, (to the private who has refused to scrub floors on the plea that he "jined the airmy for tae fight the Germans"), "glad to hear you want to fight the Germans. So do I. So do we all. All the same, we've got a lot of dull jobs to do first. Coals and floors and fatigues like that; they are your jobs. I have mine too. Kept me up till two this morning. But the point is this. You have refused to obey an order. Very serious, that. Most serious crime a soldier can commit. If you start arguing now about small things, where will you be when the big things come along — eh? Must learn to obey. Soldier now, whatever you were a month ago. So obey all orders like a shot. Watch me next time I get one. No disgrace, you know! Ought to be a soldier's pride and all that. See?" "Yes — sirr," replies Private Dunshie, with less truculence, and is dismissed. The Captain turns to his disciple, "That chap's all right. Soon find out its no good fussing about your rights as a true-born British elector in the army."

We have received the first number of "School and Society," a weekly educational journal, which begins publication with the new year under the editorship of Dr. J. McKeen Cattell, professor of psychology in Columbia University and the Teachers' College, editor of "Science," "The Popular Science Monthly" and "The American Naturalist." The journal will emphasize the relations of education to the social order, scientific research in education and its applications, freedom of discussion, and reports and news of events of educational interest. The first number opens with an article by Dr. Charles W. Eliot, president emeritus of Harvard University, entitled "Educational Evolution." There are departments devoted to discussion and correspondence, quotations, books and literature, educational research and statistics, societies and meetings, educational events, and educational notes and news.—The Science Press, Garrison, N. Y. $3.00 a year

The training of children in fire prevention and safety precautions is one of the first duties both of the parent and teacher.— *Conservation.*