## PAGES

MISSING

# Educational Review. 



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> THE EDUCATIONAL REVIEW, St. John, N. B.

At the present time when the effect of the war is being felt in every department of life, the public are called apon to meet heavier expenses in the domestic world, just as the business man has to cut and scheme if satisfactory results are to be attained.

The Educational Review is no exception to this condition of things," ass, every department is showing a steady increase as to running expenses.

The cost of news print, has naturally jumped up the cost of printing, whilst the increases allowed in certain branches of labour has added to that increase, so that, for instance, this month's issue has cost nearly twice as much to publish as it did two years ago.

In 1915 the subscription price of the Review was one dollar. In 1917 the subscription price is still only one dollar, notwithstanding the fact that the actual running expenses have showed such an increase. Other Educational, and General magazines have commenced to charge more, and in the case of the daily papers, many of them have not only doubled their subscription price, but have increased their advertising rates considerably.

Up to the moment, we have managed to struggle on without resorting to either of these changes, feeling that we have the support of our readers, and advertisers, but we would like this to be of a more practical nature than it has been hitherto, in some cases. In other words may we ask those of our readers who have not as yet paid this year's subscription to please send along their dollar. By so doing it will not only prevent us having to increase the price of the Review, but it will help us to give you still better value than ever, to add other interesting and helpful features, which we are planning to let you have.

It will also enable us to keep up the high standard of our contributors, as well as add to such as we have the opportunity. Kindly therefore, send along any back subscriptions, and we on our part will do our very best to give you more reason than ever for turning to the Educational Review, month by month, and finding therein that which meets the requirements of your individual taste in educational literature.

The refunding of subscription to every tenth new subscriber, whose order is prepaid, will be continued during March and April, and a full list published in the May issue.

## Plant life

H. G. Perky.

Some Suggratons for Spring Study
Out on the hills along the shaded rocky ledges grows the pretty little rock fern, Polypedium vulgare. Its leaves or fronds are thick and leathery and you might not think it beautiful at all when compared with the more delicate forms of our summer ferns, but it keeps green all winter and as you find it peeping through the snow in early spring you suddenly realize that it has a beauty all its own. This little fern seems to prefer the tops and upper shelves of rocks where the soil is shallow and moderately dry. The leaves spring from a slender prostrate stem called a rootstock. Remove such a stem from among the dead leaves and moss in which it lies. On the lower side it gives rise to the roots, and the upper side it bears the leaves. At the tip of the rootstock is the bud, by means of which growth is continued from year to year.
The leaf varies from six inches to a foot in length and is made up of a rather slender leafstalk and a somewhat narrow pinnatifid or pinnate blade. The pinnules are narrow, usually blunt at the ends and slightly broader where they join the mid-rib The upper end of the leaf is always pinnulate.

During the latter part of June, on the back of the upper pinnules, appear double rows of low wart-like growths of a yellow color but which is turning dark brown with age. These are the fruit dots or sori, and each is made up of many little stalked capsules which contain reproductive bodies called spores. The capsules themselves are called spore-cases or sporangia. The capsule wall is very thin and consists of a single layer of cells. From one end of the little stalk over the spore-case and half down to the stalk again, is a row of ring (annulus) of thick walled cells, which in the ripe capsule, on becoming dry, tends to open outward. This ruptures the thin wall of the capsule and scatters the spores with considerable force. "By mounting sporangia under a low-power microscope, moistening them, and watching them as they become dry, this action may be seen."
Each spore under suitable conditions will grow into a new plant, but not into one like the parent fern. In fact the new form is so different that one would never recognize it as belonging to the same
group of plants. When the spore germinates it first produces a long single thread-like growth, divided by somewhat obliquely placed cross walls into three or four long cells. As new cells are formed at the outer end they become shorter and shorter and as the walls are placed more obliquely the structure tends to widen out and it finally grows into a flat heart-shaped green body about a yuarter of an inch in diameter. This little plant is called a prothallium.

In the notch or sinus of the plant is the growing point, the point at which cell division continues to take place. The formation of new cells does not


Figure 1. The Fern prothallium, archegonium, etc.
A. stages in the germination of the apore. B. young prothallum, showing first appearance of the growing point. the wedged-ehaped aplcal cell $x$ C. tip of the young prothallium beginning to take on the heart-shaped form: $x$ the growing point. D, mature pothallium, showing group of archegonia just back of the notch. and antheridia farther back among the rhizoids. r h. E. an open archegonium with egs ready for fertilization, and two sperms near the entrance of the neck.
keep pace with the rapid elargement of cells to the right and left of it, hence the point seems to fall behind the growth on each side of it and the heart-shaped form results.
The spores germinate readily and interesting experiments in growing fern prothallia may be carried on with little trouble in the school room. The cultures grow best in wide flower pots set in saucers of water. After filling the pot with earth to an inch of the top, with finely sieved earth as a top layer, it is often well to sterilize it, to kill fungi, by heating it for two or three hours in a steam sterilizer. When cool it is ready for planting. An
ordinary cooking steamer or metal pail with a shelf and closely fitting cover makes a good sterilizer.

The fruit dots are scraped from recently collected ferns, on a piece of white paper, and the sporecases crushed open and the contents blown gently over the earth in the flower pot. The top of the pot is covered with a piece of glass and the culture is watered from the saucer beneath. Care should be taken not to keep it too moist, otherwise fungi may spring up and "damp off" your growing fern crop.

The spores of Polypodium and of many others of our common ferns are said to retain their vitality for over a year; the spores of the genus Osmunda, however, live only a few days after maturity.
In cultures prepared in this way, and kept an ordinary room temperature, prothallia will begin to appear in from three to four weeks and be full grown in six weeks, and little fern fronds will begin to develop in two or three weeks more.
This is an interesting experiment and every High School pupil should be familiar with it. In this very way the many beautiful varieties of the Boston fern have been derived. According to experiments carried on with the Boston fern, in the Agricultural College of Cornell University, its spores germinate best on a medium composed of "well-decayed oak-leaf mold."
On the under side of the porthallium are numerous fine filaments or rhizoids, which act like roots in that they connect it with the earth and supply it with water and certain mineral salts from the soil. On the under surface too, but nearer the growing point, are very small flask shaped bodies with long necks, so small in fact that they can be seen only with the microscope. When mature the neck is open and leads to the enlarged portion, set in the tissue of the prothallium, and in which is produced a round reproductive cell, called an egg. The flask-like structure is called archegonium.
The microscope also shows, scattered among the rhizoids, other small rounded bodies reminding one of very small microscopic ant-hills. These are the anthredia, and at maturity they set free many small motile cells, called sperms. A drop of water under a prothallium forms a little sea in which the sperms swim about, and, attracted by substances from the archegonia dissolved in the water, they
make their way down the open neck and one of them unites with the egg cell. This is fertilization, and the cell formed by the union of these two the egg and the sperm - grows at once into a new plant, like the one that produced the fruit dots.
The eggs and sperms are collectively known as gametes, they are also called reproductive cells,


Figure 2. A fern (Aspidium marginale).
A, section of the creeping roodstock, showing the arrangement of the living leaves around the tip, and the dead stems of last year's leaves farther back. B, a leaflet of the leaf viewed from below to show the position of the sori. C, details of the sori and veining on a portion of a leaflet. $D$. section of a sorus: $i$, indusium; s, sporangia. E, a spore-case or sporangium, showing the opening from which the spores (sp) have been discharged; r, ring or annulus.
but they are obviously not of the same nature as the spores, for neither can make any further development by itself - there must be a union of the egg and the sperm before a new plant can beproduced.

All this wonderful process takes place in two or
three weeks. Watoh the yow- whtur- ..'n! som will soon see a litthe haf palinz ap in the time
 day by day and wom chand into a frome. It the same time a litth stem is formol with a time hom
 into the soil: but there is wet another patt, the foot, be means of which it retains connction with the parent prothallium and through whith the baby plantlet is nourished matil it has grown its root and formed its green tissue. and is ahle wh build up food for itself, and thus finalls thecome an independent plant. When this stage in the life of the fern is reached the prothallium uswalls dwindles away, as its lifework has been accomplished.

In the life cycle of the ferns we find two phases or generations of plant life alternating with one another: One, with which we are familiar, with leaf, roots, and stem, that bears spores,- the spore bearer or sporophyte; the other, the small flat heart-shaped body that produces the gametes, the eggs and sperms, - the gamete bearer or gametophyte. This is what is meant by the alternation of generations in Botany.
The life cycle and the alternation of generations in the ferns may be illustrated by a diagram. Make a circle on the board about two feet in diameter and make breaks in the circle at the north, south, east and west. In the break at the north place the sporophyte, the fern; in the east place what it produces, the spores; in the south, what develops from the spores, the gametophyte; and in the west the gametes, the eggs and sperms.
In these few condensed paragraphs we have tried to make interesting a phase of winter and spring plant study that we fear is sometimes much neglected, and incidentally we have introduced the reader to some of the most sublime facts of biological science.
The alternation of generations takes its rise among the lower forms of plant life, the algae, but does not become a fixed characteristic till we reach the liverworts, mosses, ferns and all the higher plants. When it is first found as a fixed plan of development, the gametophyte is the more important generation, while the sporophyte, never becoming independent, lives as a parasite upon its tissues. When we reach the fern, however, we find the sporophyte independent. Is it ever parasitic in the fern at any period of its life?

It in . 1 wo a most interesting fact that among the higher phats, where the alternation is less evident 1.ut. Wh. 1 s : prewemt, it is the gametophyte that is paraitic upon the sporophyte.
Wher wergreen ferns that may be substituted for the Polspelium are Aspidium marginale, the (hrivtmas forn Polstichum acrostichoides) and It times aspidium spimulosum, though the fronds of the latter are usually much broken by the snow of winter.

Aspidium marginale loves the rocky hill sides and grows in clumps with several fronds close together. The frond is larger than that of Polypredium and is bipinnatifid or bipinnate, the fruit dots are marginal and covered with a shield-shaped tissue, called an indusium, The Christmas fern also grows in clumps with very upright fronds and is once pinnate. The pinnules have finely serrate margins and are arranged alternately on the midrib. Each has a triangular car on the upper side at the base.
(Illustrations copied from Principles of Botany - Bergen and Davis, by the kind permission of the publishers, Messers. Ginn \& Co., Buston, Mass.)

## THE CURRENT HISTORY CLASS.

(The answers to the following questions will be given in the April issue of the Review.)

1. What great plot has been revealed during the past month?
2. Who was granted a passport from United States to Copenhagen?
3. What important town, in the east, have the British captured recently?
4. What is the name of the Act which is said to have taken place between United States and Cermany?
5. What large Cunard liner has been sunk last month?

## Answer to Last Month's Questions.

1. The British Nation.
2. Between Azores Islands and the South American Coast.

## 3. Admiral Dewey.

4. Off the Belgian and Dutch Coast, near Ynuiden.
5. The Victoria Cross, Legion of Honor and Cross of St. George.


Prof. Stephen Leacock, humorist and professor of political economy at McGill University, told the Montreal Housewives' League that the world faces a food famine "such as it has never before seen." Canada, he declared, was fortunately placed because of her great cultivable area He urged that individual support be given the efforts of the National Service Commission and the Dominion Department of Agriculture, "who are wide awake to the situation."

## BETTER AND BRIGHTER.

|A paper written by Rev. Frank Baird. M. A., which was to have been read at a proposed meeting of the Teachers' Institute, Woodstock, which was, however, postponed.]

## [Concluded from last month.]

I pass to my second thought, namely, Brighter. To do better is not enough. You must not only cast out the demons of ignorance; you must expel from your own lives, and the lives of your pupils, the last vestiges of pessimism, gloom, and despair. We read of Moses, that his face shone. The saints. and prophets appear in art with halos of light about their heads. Now we must ever look to our teachers as the prophets and purveyors of the things of the mind and spirit. Their wares are not found in the market-place; to many of us, their treasures are hid treasures. How they communicate to us of their riches? They must come to us, with all their weight of learning, robed in
light, haloed with brightness. To knowledge they must add beauty. Like the daughters of Zion they must put on their beautiful garments. If the solidity, and the benefits of learning do not appeal to us, they must seduce us toward learning by showing us its beauty. To character, as repressented by Better, they must add, Brightness.
How often does an otherwise well-equipped teacher fail in a community, and in a school, by not knowing how to smile! Lincoln never would have got through the civil war if he had not had a fund of brief, bright, laughter-provoking anecdotes. Contrary to a generally accepted theory, childhood is melancholy, and needs constant brightening. The schoolroom is often a gray, sombre place. In spite of the work and zeal of Mr. Steeves, and the various inspectors, most of the school grounds are yet pretty ugly - except
when covered with snow. In mast schonle neli ness is the rale, and lemun the excention Xime if to this you add a somberemed, and wome still a somberespirited tacher, when whow a frewn sits enthroned from nime in the morning till font in the afternoen, well, do mot be surptimet if the attendance at that sthoul falls ofte. In all wour attempts at peromal, and sthond and distict betterment, do mot, I implore wou, forget personal school, and district brightening. It frown bou must, frown on the way to sthent, or on the was home. Plant a few shrubs on the shoul grounds Have a few humorous ancototes. dwas at hand Make your calls in the homes to be like rass of sunshine in cloudy weather, like hirds singing in the rain, like shadows of a great rock in a wears land. No sombre commercial man is found on the road. Why should sombre schoolteachers be found in our schools?

For a moment view these two phases of a teacher's work from a different angle. As representing, say, the character side, - the deeper side. the solid side of learning, if you will,- take the Hebrew nation. It may be represented by the Temple, by what in Scripture is termed Zion's Hill, on which the temple was built. To the devout Jew all things gathered around this sacred elevation. From Zion went forth the Law. It stood for religion, character, and the central things of the life of the Hebrew nation. It gave cast and color to the Jewish life. It was vital and essential to the Jew, even as are the solid and substantial things of learning vital and essential to us. It stood for Better - it represented toil, it called for the expenditure of energy, for the laying of large gifts upon the altar; it insisted that the way to life led by the altar. It did not look on life as a trifling and superficial thing. It was good and great. We will suffer infinite and irreparable loss if, at any time, we permit the central things of character and solid learning to suffer eclipse. We must be, and do,-Better.

But over against this Hill of Zion we may properly set another. As students, as citizens of the kingdom of learning, we have heard of Greece, the national contemporary, and to a degree, in some respects the rival of Hebraism. In Greece, as in Palestine, the spirit of the nation gathers around a hill,-Mar's Hill. This, we may say stood for culture and brightness. From Zion's Hill men lifted up their voices to God, and thought
of character and redemption; from Mar's Hill men ant their cyes over the green earth and said how knal, how beantiful it is! The Hebrew ever said, Let us worship heaven; the Greek, Let us ehjoy the carth. The dominant note to the Jew was hetterment, the dominant note to the Greek was Brightness. To the Jew, perfectness of heart, to the lireck, perfectness of face, of form, was the supreme good. Put differently, the Jew crowned the life of the spirit and of the mind; the Greek was more interested in externals. The Jew took no account of the shape of a man's face, or of his stature, so long as his heart was right. The Greek thought much more of a properly and athletically formed bexly than of a properly and religiously informed mind.
From troth of these ancient conceptions we may learn. To both of the historic hills of the past we may go. I would have you combine them, and blend them into one. The Greek conception, standing alone, was doomed to failure. It is here Germany has failed. The Germans beautified their cities, but allowed their minds to be corrupted. You cannot polish sand, but you can polish marble. In setting much store by the mind, in emphasizing character, stern morality, truth in the inward parts, God, and heaven, the Hebrew was laying a foundation. You can add to the Better of the Hebrew, the Brightness of the Greek, but you cannot begin at the other end. Therefore, I give you, first, Better, then Brighter.

As with the Jews, much of your work must be foundation work. In this is the glory and the appeal of the teaching profession. There is much hard work to be done in all foundation laying. There is a good deal of humdrum in the routine of the school day. But it is worth while. Let there be no faltering, no shrinking, no shamming, no lying stones in the lower courses of the walls you lay. And in the doing of the solid work throw in as much of the Greek spirit of blitheness and beauty as possible. Brighten the corner where you are. Turn the dark cloud inside out, and go on doing it, and doing your best, even if the increase in salary does not come, and the well merited call from the remote country district to the town or city staff is long delayed.

As to rewards for this dual fidelity, touching the betterment and the brightening of your lives and spheres, do not be over-anxious. Emerson, with whom I started, is a bit too material, I think. As

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## MILITARY HOSPITALS LANTERN SLIDES.

An Ontario minister the other day borrowed from the Military Hospitals Commission a set of lantern slides. These slides show what goes on at the hospitals and sanatoriums. That is, they show something of how our injured soldiers are being restored to health and to power for self-support, however serious their injuries may be. The minister exhibited the slides at three country churches under his charge. In returning the set he writes:
"My recording steward, who is also the postmaster and chairman of the local recruiting league, says they should be shown in every community. They meet the unrest in many families who have feared that the maimed who return will be forced to sell lead pencils or such like.
'What I should have done was to ask for them for a longer period and put them in one very available church in this district. A man with a well prepared lecture and a few local slides could render a valuable service to the country, both in allaying the unrest above referred to and in removing the prejudice in some families from which recruits might be secured."

## annual session of D. E. A. AND O. T. A.

Wake of Wetonshire. eulogises work of Dominion Issociations and shows great interest in movement. I)r. II. S. Corter clected President.

The members of the Dominion Education Amociation, and Othwa Teachers Association, was held in the Colleginte Institute Hall, Ottawa, on Fehruary 2 , on which occasion an excellent address was delivered ing His Fxcellency the Wuke of Devonshire He referred in eulogistic terms th the work accomplished by the association, and expressed the pheasure that it gave him and Her Racellency to take part in the deliterations. Referring to the war as the one tremendous issue which just now set aside other considerations, he declared there was however mother pathway to service.
The hope be stated, (according to the "Ottawa ("itizen") should be uppermost that all could give the highest service during the war. Teachers could do much to mould opinion. They could set the children on the pathway of patriotism, inculcate principles which would serve them in good stead in life, and make them loyal and progressive citizens. Service of this kind would bring the reflection that they had not lived in vain, and had done their share.

The occasion was a notable one from an educational standpoint. His Excellency, who is chancellor of Leeds University, England, showed the heartiest sympathy with the work of the association, and endorsed the efforts being made to heighten the standard.

## Socializing the Schools.

Professor John Dewey was again heard on a vital and interesting topic the question of "Socializing the Schools." Schools, he maintained, should teach more than expected. They should give pupils an adequate knowledge of how to conduct themselves in life, and in affairs away from school. It was time he stated to shatter many of the shibboleths that have been persistently clung to in the past. Old stereotyped methods in vogue for years would have to be swept away, and new and more modern methods adapted. He instanced the study of physics as an example of what could be accomplished. Knowledge of motors, electricity, and scientific subjects could be taught by application
of the uses of motors, telephones, and other practical illustrations rather than by hard and fast theoretical axioms.

## Leaders in Work.

Dr. Alex. Robinson, superintendent of education for British Columbia was introduced, and in a brief resume told what had been accomplished in that province during the past few years. Dr. W. S. Carter, newly-elected president of the Dominion of Canada Educational Association, spoke on behalf of New Brunswick and Dr. John Waugh gave assurance of Ontario's loyalty. Dr. A. H. MacKay, superintendent of education for Nova Scotia, declared he would not be outdone in "the boasting competition" and recital of educational accomplishment and presented a good case for his native province.

Mr. T. E. Clarke, B. A., acted as chairman. The Apollo male quartet rendered several songs in a highly capable manner.

## Round-Table Conference.

Unity and co-operation have marked the joint meetings of the Dominion Educational Association, and the Ottawa Teachers Association. Both associations have benefitted largely by the fact that the conventions are being held in conjunction. The round table conferences of the Dominion Education Association has been productive of much discussion, and the advancement of proposals having for their object the advancement of provincial education.

## Officers Elected.

Previous to the election of their officers yesterday afternoon the joint conferences attended the address given by Dr. John Dewey, professor of philosophy of Columbia University, New York City, on "Observation and Thinking." The Dominion Association then adjourned and elected their officers. Dr. W. S. Carter, superintendent of New Brunswick schools, was elected president to succeed Dr. J. W. Robertson, C. M. G., who was elected to the board of directors.

The following officers were nominated and elected to the other positions on the directorate. Honorary presidents, the superintendents and deputy ministers of the various provinces; vicepresident, Hon. Cyril Delage; superintendent of education in Quebec; second vice-president,

Inspector R. H. Cowley, Toronto; secretary treasurer, Dr. J. H. Putman; directors, Dr. J. W. Robertson, C. M. G.; J. Silver, superintendent Protestant schools, Montreal; Prof. J. A. Dale, Dr. D. Soloan, superintendent Normal School, Truro, N. S.; Dr. John Waugh, Inspector of public and separate schools, Saskatoon; D. Mackenzie, Winnipeg; D. P. McColl, Winnipeg; H. H. Smith, superintendent of schools, Saskatoon; D. Mackenzie, deputy minister of education, Alberta; Dr. Arthur Scott, superintendent of Calgary schools; Dean Coleman, Queens University, and Dr. Alex. Robinson, superintendent of education, British Columbia.
Dr. Robertson, the retiring president, paid tribute to the work accomplished by Dr. J. H. Putman as secretary of the association. The latter wished to relinquish this position, but was prevailed upon to accept another term.


THE LATE MISS ELEANOR ROBINSON
Editor of the Educational Review, 1913-1916.

## 30 THE CHILDREN'S HOUR 30

Dear Boys and (ilits:
You certainly gave me a tremendous amount of work when you entered the handwriting contest during the past two months. From all parts of Eastern Canada entries flowed in. In some cases individual kiddies did their best to win the prize, whilst from some coumery schoses every pupil appears to have endeavored to capture the award.

I am pleased to amounce, that, after carefulls considering age and work. Miss Helen Libtey, age thirteen. St. Stephen, has been granted the prize of $\$ 1.00$, whilst the free subscription to the Educational Review for one year, has been allotted to Miss Gertrude C. Caughlin, who is the prize winner's teacher, at Mark Street School.

This month I am letting you have a drawing contest, particulars of which are given elsewhere on this page.

As I am planning several new features for you, in the near future I hope you will watch "The Children's Hour" closely.

The Editor (Children's Hour), Educational Review,

St. John, N. B.

## Competition for Kiddies. Prizes for Teacher and Pupil.

To the boy or girl, who sends in the best drawing, in pencil, of his or her own left hand, the Educational Review will award a splendid camera complete with one film, valued at $\$ 6.00$.

All entries must reach this office not later than Saturday, March 31st, Accompanied by One New Subscription to the Educational Review, for One Year. (A year's subscription to the Review is $\$ 1.00$ ).
At the bottom of the paper write clearly your name, address, age, teacher's name, and that of your school.
Address envelopes to,
The Editor (Children's Hour),
Educational Review, St. John, N. B
Whose decision must be considered as final.

## Being Good to Snip. <br> markl. S. Merrll.

"Snip hasn't ampondy to be good to him "xopt は,." sighed Ruth, cuddling the little black kitten under her chin.
"Mre. Pell doesn't have time to be good to kittens, she takes so many boarders," explained Harry. "She solys if we didn't have a kitten apicte already she would let us keep Snip, but We'se got Snowliake and Hannah May, so unless we can tind someloaly to give Snip to he will have to be carried off and made way with."

Harry whispered the last words and Ruth cuddled the kitten closer.
"We can't give him away here in the village, but if we had ten cents apiece to pay our fare over to Dane's Mills where more people live we could find somebody to take him," she said.
'One of the boarders wants lots of tips of fir boughs to put in a pillow,", said Harry. "Maybe she'd pay us as much as ten cents apiece if we brought her a big bag full. Let's go up on the hill and try.

They took Snip with them to make sure that nothing should happen to him while they were gone. Snowflake and Hannah May would be safe with Mother in the room where she was sewing, but there was no one to be good to Snip in the busy boarding-house kitchen where he lived.

I'p on the side of the big hill beyond the village they filled their bag with fir tips cut from the green boughs. It was hard and slow work and they were so tired when it was done that they thought they would find a good place to rest before they started for home.
At the foot of the hill was the trolley track reaching off to Dane's Mills and beyond, and on a side track stood an old freight car which had not been used for months.
"We'll climb up on it and find a warm place in among the empty boxes and things," Harry said. "Course there's no danger of their coming to take it away."
They found such a nice place to rest on the old car that before they knew what was


LINER LACONIA TORPEDOED AND AMERICANS KILLED.
The Cunard steamer Laconia, a sister ship of the Franconia, was on the Boston-Liverpool route before the war. She was of $\mathbf{1 8 , 1 5 0}$ tons, 625 feet long. 72 feet beam and was splendidly equipped for second cabin traffic. Two American women perished in an open boat after the submarine's attack.
happening they had gone fast asleep with their heads on the bag of fir and the kitten between them. They slept so soundly that they did not hear the voices of the railroad men outside, nor feel the jar when another car backed down upon the side track and took their car in tow. The men did not discover the sleeping children, either, and so when Harry and Ruth and the kitten woke up they had gone through the village of Dane's Mills and were coming into another town that looked like a large city to their frightened eyes.
"It will cost us ever so much to pay our fare home and we haven't any money at all," cried Ruth in dismay.
The motorman came to see about it when they called to him just as the car stopped.
"That's funny," he said. "My little girl asks me every night when I get home if I've found a kitten for her. If you'll let me have Snip I'll ask the superintendent to let you ride home in the parlor car." The parlor car was a beautiful new one only used for excursion parties. It happened to be going back towards their home this morning. Ruth and Harry opened their eyes wide at the idea of going home on that fine car.
"But we meant to pay our fare," said Harry. "We were picking the fir to earn ten cents apiece."
"Ten cents!" said the motorman. "Why, I know a store where you can sell it for fifty. I'll take it over there while you wait for the car."

Sure enough, when he came back he brought them a shining half dollar and told them that they would not have to pay any fare home because the road had carried them off by mistake and ought to take them home without charge. Then he put the half dollar into Harry's pocket and stood on the platform to wave his hand to them as they went off on board the parlor car.
"You've been real good to us," Ruth called back to him.
"Oh, well," he answered, "I liked it, you see, just as you liked being good to Snip."-Primary Education.

## THE QUESTION BOX.

A large number of questions have been received this month, but as the answers in every case were of great length it was impossible to give space. They are therefore being sent direct.

FOR THE MONTH

BIBLE READINGS FOR OPENING EXERCISES


```
    Heh. xi s-10. Z W,ut vi, 5l.5 luhe ai
2. (ien. xiii: M./tt., \
3. Gen. xv: wii, 1-s. S. M,ut vi, 19.34. Pxalm
4. Gen. wiii, 1-10, 11:3,%
5. (en wii, 11!; James & Mat1 , 11, 13-20
    ii, 2l资. S. Matt, i; Cor vii, :3.31
1. Gen. wr, 2?.34; wuii,
    1-40.
&. (ien. xxviii, 1-12: mw.
    9-15.
3. Gen. xxxvii.
4. (ien. sli, 39-5!: P'salm xci.
5. Gen. xlo
```


## Shamrock Wishes

A little pot of shamrock green
A window-sill adornin',
Cried to the sun, just getting up,
"I wish you the top of the mornin'!
Then to the merry morning,
Tying her bonnet blue,
The shamrock turned and smiled and said,
"May the suriever shine on you!"- A.E.A.

## To March on March 17.

Shamrock a-growing
Jolly and bold,
Green harps a-glowing,
Green flags and gold;
Top of the mornin',
To thee, March - thou art
The month that keeps always
Green in your heart!"- A. E. A

## A Whisper.

O dear little waiting children,
I've the sweetest whisper for you I saw a robin this morning -

It seems too good to be true!-A. E. A

## A Rainy-Day Game.

By K. G. Buffum.
A little soap and water And a little pipe of clay
Will make the time go faster On a rainy day.
Bubbles in the bowl of water, Bubbles in the air,
Bubbles on the mantelpiece, Floating everywhere.
Molly had a clay pipe, Dicky had another;
Nothing could be better for A sister and a brother.-St. Nicholas.

## So Busy.

P'erhaps March hasn't time lireat holidays to bring.
He is mo busy every day
l'topuring for the spring! - A. E. A.

## An Acrostic.

For nine little folks with letters)
Merfy white snowlakes
All dationg be:
Rollicking sumbeams
Caught as they tly
$H_{i p}$ and Hurrah, what's the fun all about?
Woo and weooo!
I haven't a doube
Now is the time
Dashing March Wind comes out!
All
To sweep back the clouds
From skics all aglow.
To wake up the wild-flowers
Inder the snow,
To set the frogs peeping.
And bring out the crow -
The March Wind is busy
This scason, you know.-A. E. A.

## The Wood Pewee.

By Charles Barltrop.
With ashy breast and olive wing,
In leafy maze and lonely tree,
Upon a dry branch balancing,
Sat little wailing wood pewee.
To wind lament in stately pose, Like those in selfish sorrow blind,
And din the woods with minor woes -
Such seemed the bent of pewee mind.
But when this percher made a dart, He snapped his beak with lightning vim,
And evers moth he caught apart,
He made a sacrifice of him.
A habit of complaint had he;
But for my life I could not tell,
How, day by day, this wood pewee
Could ail so much and eat so well
Pewee, pewee his trebles flow;
If sadness he were called to bear,
What living thing would wish to know
The grief that waked his trivial air?
He soothes me, does this wood pewee,
I scarcely know the reason why;
But life would be less dear to me
Without his little wailing cry.
-From "The Canadian Magazine" for March.

## SUPPLEMENTARY ARITHMETIC.

Fourth Year Problems.
Drill on reading and writing numbers, Roman Notation and Canadian money.
Drill tables every day until it is impossible for any child to make a mistake in figures.
Once a weèk number down with girls on one side and boys on the other. Keep track of winning side and see which scores most in the term, says Kate O'Neill in "Popular Educator." In a mixed school give this weekly work to all grades together, above the second.

Give same kinds oral problems as in the third grade, only make them longer and work more rapidly.

## Problems.

If you have a dollar and spend 48 cents, how much change will you receive? A dollar and spend 63 cents? A half dollar and spend 32 cents? Three-quarters dollar and spend 49 cents? A quarter and spend 12 cents?

If you have a dime, a quarter and 4 cents, how much have you? Two half dollars, 3 quarters, 4 dimes and 2 nickels?

## Written.

Give one long example in addition and one in subtraction in every day's lesson.

Have a list of commodities and prices where children can see it. Study the quotations in the papers or get prices from merchants and change your list when necessary.

Be sure children know their fractions before giving any seat work.

## Monday.

1. What change will you receive from a $\$ 20$ bill if you buy 10 lbs . of sugar, 2 lbs . coffee, 5 lbs. butter, 2 lbs . rice, 1 lb . tea, 1 lb . cheese, 3 lbs. beefsteak at market prices?

Make out bill and receipt it.
2. $6958 \div 87$.
3. Divide $\$ 25769$ among 9 boys.
4. A man had $\$ 75000$. He gave each of his 3 sons $\$ 15,000$. How much had he left?
5. Addition.
6. Subtraction.

## Tuesday.

1. Write 3 of each kind: proper fractions, improper, mixed number, integer.
2. Divide 468 by 9,784 by 8,6363 by 6 ,


900 by 5,504 by 7 ; add the answers and multiply by 78 .
3. Go to a school supply store and buy 10 articles. Do not pay more than a quarter for any one. Make out bill showing how much you spent.
4. 64 children are in school Monday, 72 Tuesday, 70 Wednesday, 69 Thursday, 71 Friday. Find the average attendance.

## Wednesday.

1. Write 10 fractions and after each write what kind.
2. Write 3 large numbers. Write the same in words.
3. Write 10 numbers both in Arabic and Roman Notation.
4. If you open your bank and find 97 cents, 16 nickels, 25 dimes, 18 quarters, 5 half dollars, 3 silver dollars and a five-dollar gold piece, how much money have you?

## Thursday.

## Give long example in

1. Short Division.
2. Long Division.
3. Subtraction.
4. Multiplication.

Prove each.

## Friday.

1. Give 10 proper fractions to reduce to lowest terms.
2. 10 improper to reduce to mixed numbers.
3. 10 mixed numbers to reduce to improper fractions.
4. If a boy has $\mathbf{6 0}$ hens and half of them lay an egg a day for the month of June, how many dozen eggs will there be?
5, 6. Always addition and subtraction.

HELPS AND HINTS FOR THE RURAL TEACHER

In these columns will be found month by month a collection of sugeestions. and new ideas. coneri buted and gathered from sarious sources, which it is hoped will be of math ralue to the rural sshoel teacher. and the calitor insites readers of the Educational Rericte, to send in any little helpfad methods of a similar nature, which have been tried and found to bring results.

## "Dos" for Teacher.

"Do" be prompt.
"Do" vour best, the results will then not worry you.
"Do" keep your pupils happily employed, order will follow as sequence.
"Do" not punish often, and when obliged to, do so in a way not easily forgotten.
"Do" examine pupil's work, don't trust to it being correct.
"Do" associate with your pupils at intermission, obedience at work will follow.

## For the Story Hour.

I have read a story to the children and then got them to write it in their own words, telling as many of the facts as they could remember. Then I have them look over their own work, and correct mistakes. I look over their work, calling attention to mis-spelt words, errors in punctuation, capitals, etc.
The children then read the stories. This takes some time if you have a large school, but it is well worth the time if the children do their work well.

Some days I read stories, and have the children tell them. Again I will let one pupil read, and the others tell the story after he has finished the reading. Never let a story be too long. Use one from their readers or some good book. The children will thus learn to express themselves in writing as well as speaking.

## Spelling Lesson in Ungraded School.

The second and third reader class, may be united in one spelling class. The first month
give twenty words for a lesson to be recited wrally. Drill on sound and punctuation. The second month give ten words to be written as you pronounce them. After they are written have the pupils change papers. Then require cach pupil to rise, and spell and pronounce all the words on his paper.
The next month give them ten words to write and mark diacritically. By thus alternating the work, the pupil becomes thoroughly acquainted with the sound, pronounciation, and the written form of the word.

## Physiology for Grade Three.

In the course of physiology for Grade Three as given by the state Board of Education, a talk on table manners is stuggested as one topic.
To make it more interesting to the boys and girls, I had each child cut a plate, knife, fork, spoon and napkin freehand from paper. I then said, "We will give a party and some one will set the table." Having done that, we played we had just come to the table and were ready to be served. Suggestions as to correct use of knives, forks, spoons and napkins were made by the various pupils. After eating our makebelieve luncheon, another child cleared the table.
The children enjoyed the party game and still derived a benefit from it.

## Short Stories from History, for Retelling.

 I.-A Brave Little King.Long, long ago there was a time when the French people had kings and queens to reign over their country, just as we have. As you know, now they have no king, but a President instead. Well, once upon a time there was a King of France called Pepin, and as he was a very small man, he was usually called Pepin the Little. Though he was very small, he was very brave. His tall soldiers, however, were apt to despise him because he was so little, so he determined to win their respect and admiration by a display of his bravery. In those days the people were very fond of watching bull-fights, and had a holiday when one took place so that they might enjoy the sight. Nowadays we think a bull-fight cruel and disgusting, but in those
days people had different ideas and tastes. On this occasion the bull was fighting with a lion, and King Pepin turned to his soldiers and asked who would go into the arena and stop the fight. All were too much afraid. So Little King Pepin, seeing his chance, shouted, "I will go myself," and taking his sword jumped down and killed both the bull and the lion. Then he turned to his tall soldiers and said, "David was a little man, yet he killed Goliath. I am small, yet I have killed both the bull and the lion. Am I worthy to be your king.?" The people and the soldiers, delighted at this display of bravery, shouted and cheered. From that day King Pepin no longer had any doubt that his people respected and loved him.

## II.-A Wonderful Clock.

This is a story of olden times, when a great king ruled over France. His name was Charles the Great, or, as the people called him, Charlemagne. This king was very brave, and a great soldier. His armies went into many countries, and were never beaten. Now, in these days there were no clocks, and Charles used to measure the day by burning candles. This was not always satisfactory for the candles did not always burn at the same rate, so he was delighted when one day he received, as a present from one of his subjects, a machine for measuring time. This was worked by water. The face or dial of this clock had twelve little doors. At each door stood a little toy soldier on horseback. When an hour struck the soldier opened and shut his door. The striking of the hours was made by little balls falling on a brass drum. At twelve o'clock all the little soldiers marched round the dial one after the other.
This delightful clock charmed Charles, and enabled him to keep an accurate record of time, of which he never wasted a minute.

The value of the home garden for the child is unquestioned, and one of the sharpest manifestations of the movement is to link up the home with the school. Any teaching of gardening that would not result in a very wide extension of home gardening would not be worthy the name. Better home gardening for the children is the ultimate result of all school gardens.

## THE VALUE OF STORY-TELLING.

## By Mary Inch Jennison.

An Attempt to show to a Nova Scotia Teacher's Institute the value of Story Telling as a regular part of the School Curriculum.

Foreward: I shall begin my talk by telling a story - an Old English Folk Tale - either to a class of children or the teachers themselves, and then getting it back from them, following as closely as I possibly can the Rote or Recreative Method.

I shall then discuss the subject of Story Telling as used in our schools - under the following heads:

1. Why tell?
2. What to tell?
3. When to tell?
4. How to tell?
5. Where to get material?

Why tell? I know you are saying in your minds: "Oh! yes, this is all very well to show off at the public examination or when the inspector comes to call; but we have our course of study, we have too many grades; we are too tired after school to prepare stories even supposing we wanted to use them. Granted, all these; but we can't expect to get the course of study changed until we can show something better to take the place of what we now have. Of course, we have too many grades, but we always will have until we get into the position where we may demand better salaries and we can't get into that position by following the same old, worn out routine year after year! Indeed, we are too tired after school many times, to do anything but sleep, and too tired for that sometimes; but what if this new thing that I am trying to show you is an antidote for that "tired feeling?' What about it then? Would it be worth the trial? Try, try honestly, with the very best that is in you, and see!

First let us see what good reasons we have for taking seriously this matter of Story Telling. We all realize, I'm sure, the absolute necessity of growth for the child - not the lengthening out physical process alone - but mental, moral and spiritual growth under proper direction as well. How can we help direct this "interior growth?" In many ways, of course, but leading educationists seem to be fairly agreed on this point, at least, that by Story Telling, we arouse and quicken the child's powers of imagination, bring him in touch


With life in its henade-t meaming ond thetw in him a pleseme which is tichle his and of what
 whamed this jos. the motmal ihild "rhow th -h.me it, and by thi "thought shatime proces" thrat
 sturdy outhen upen the womb and whain that wonderful gift, the gift of orlf expresion; in whe words, we help the child te live mere fulls than he has done before, and life is gromth. Hace we the right to deny our boys and girls anthing whith will help their mental, moral and shiritual grow th any more than their parents hase the right wh deprive them of the foad and dothing whin regulate their physical grow th? And set wo. .te doing it, every one of us, crery dids, and no one says a word. What do you think alout it? Iit not a serious change? Can we plead ignorame as an excuse? Ignorance is not recognized in the civil courts, will it pass in the Divine
What to tell? I am supposing, for the time being, that you are converted to my view paint: and if so, the next question will naturally be: we are to tell stories, what shall we tell?" Of the great mass of literature which lies behind us, what shall we choose?" Miss Latham, Profesoor of Speech at Teacher's College, New York, is wery emphatic on this point. "Begin," she says, "with the Old English Folk Tales. Give the child what was told and sung in the childhood of the race. It sounds reasonable, does it not? For if those tales were the natural outcome of the lives of the people when the race was young, and if in his life a man lives over again the history of his race, there must be something in the Old Folk Tale vitally necessary for the child in that stage of his development. If we do take for our beginning in the Art of Story Telling, those old tales, let us seek carefully what versions we shall follow. The Folk Tales grew up slowly, passed on from generation to generation in the years that are gone; they are filled with the "local color" of their time, the crude, war-like, vulgar ideas of the people are present in them. If these things offend our taste let us not use them, let us go to some other source for our tales; but if we realize that it is just this crudity, vulgarity even brutality, maybe, that the child craves, let us give it to him clear, not watered by some well-meaning maiden lady who thinks it 'such a pity that poor dear little Red Riding Hood was eaten by the nasty wolf," and straightway
 Eine him a the the "lise literature" and a whole hamted wrainn for dime novels and moving miature melalt.um...
Ot वuras. I fory tor a moment wish to insinu"te that gemi then com only be found in the Folk lale. I Arall tee wh the glad to give any of you "ha. whit it the numin of a number of good books ${ }^{3}$ I) - whin commembel is the students of the Gummer hian .a Columbin I'niversity this past - 1 momer

When totell Jux anoften as you can. But.and here is a c.inoring thought, it need not
 Hiln't sum Ahe.N- like the old stories that your pramimether whl wim hest of all? I did. I liked the one ahmut a little girl that the gypsies stole, f.ar awas the beat: and I listened to it over and "Wer again. Whike my grandmother did my curls. coric: wre a great antidate for having your hair curled. and mam ills besides.
But quaking practically, besides having a story hour. for which 1 do hope some of you at least will iry tor find rom on your crowded time tables, I think you will find that Story Telling can be correlated with almost every subject in the school course. Just think of the possibilities for its us in the literature, history, geography, nature, drawing, music and foreign language lessons! Perhaps anme of you can suggest how it might be introduced int, the mathematics period - I don't see how set I hope to some day!

I would suggest that the story hour be held during the first fifteen minutes of the session. I wish you would try that and see if that bug-bear of usall, tardiness, will not, to some extent at least, be overcome. If that first fifteen minutes be given up to the pure enjoyment of telling and hearing a story, I don't believe there will be many who forgot to get up in time!
In literature, history and geography, of course, the prosilitities in story telling are practically unlimited. In nature work many of the beautiful old nature myths may be told, such as the story of the Red-Headed Woodpecker, the story of Varcissus, and many more, too numerous to mention. In drawing and music, much can be done to familiarize the children with the great masters of those arts by telling incidents in their lives, particularly stories of when they were children.

## THE TEACHER'S RELATION TO THE COMMUNITY.

James H. Risley, superintendent of schools, Owensboro, Kentucky, in his 1915-16 report gives concrete evidence of the value of community work by teachers. He says:
"The broadening scope of the work of the public schools is placing greater responsibility upon the teachers, and consequently adding alike to the burden of the teacher and her opportunity for service. No longer does the teacher feel that her duty has been done when she has directed the class

* in the recitation of their lessons for a few hours each day. By reference to the statistical report we find that teachers made 3,242 visits to the homes of the parents of their pupils during the year. This is an average of forty-two visits for each teacher and more than one visit for each child enrolled in all the schools. With such a professional attitude on the part of the teachers we may expect to find thriving parent-teachers' associations and a general co-operation of home and school in the interest of the children of the community.
"Other evidences of the closer relation of the school and the community appear in the efforts for civic improvement put forth by members of the teaching staff. As an illustration of the tendency to utilize the expert service of the high school faculty for community improvement, I wish to make special mention of the work of Mr. Barnes, teacher of chemistry and biology in the high school. Early in the year, certain members of the Woman's Club invited Mr. Barnes to teach a nature study class, made up of members of that organization. The class opened January 1st with an enrollment of twelve and closed its work in June with an enrollment of sixty-two. The membership of the class was divided into groups and assigned the following topics of community interest to work up:
(a) Care and Protection of Birds.
(b) City Improvement, School and Community Gardens.
(c) Lawns and Flowers.
(d) The Caterpillar Nuisance.
(e) The General Health Conditions of the City.
"The value of such a movement is best expressed by a summary of its achievement in practical civic improvement. The committee on the protection
of birds was instrumental in raising cash prizes to interest school children in making and placing bird boxes in various parts of the city. Four hundred and thirty-seven boys and girls took part in the contest and eight hundred and five bird boxes were placed. The school and community garden committee raised funds to promote the school garden movement and a great impetus was given to this important school and home enterprise by the committee. Another important work achieved was that of inducing the city to purchase a sprayer to rid the city of the pest of caterpillars that have been destroying so many of the fine shade trees of the city. The health conditions of the city were also studied by the committee in charge of that work, and a movement started which should result in better sanitary conditions for the entire city. With the milk tester, which is in use at the high school, the class in agriculture examined a number of samples from the city's milk supply, and a report was made by Mr. J. O. Lewis, who has charge of that work at the high school.
Contributed by Institute for Public Service, 51 Chambers Street, New York, N. Y.


## AIMS OF LANGUAGE TEACHING.

Superintendent H. B. Wilson, Topeka, Kansas, in his recently published course of study in English says of the aims of language teaching in elementary schools:
"Unquestionably the establishment of right habits in English expression is the chief work of the elementary schools. In this state of development, children improve in power by doing rather than by merely understanding or knowing what it is correct to do.
"In the light of the above, the statement of aims for the elementary schools appears mainly in terms of habits or ability to do rather than in terms of facts and principles which the children should be expected to learn and talk about. Teachers need always to distinguish between a certain facility in discussing proper English standards and ability to employ them successfully in talking and writing."

A good assignment in civics-Find out how much income tax you will have to pay when you have a $\$ 20,000$ job. If married? If single?

## The world War

The way is gradually being prepared for the big offensive which is preticted to take place in the spring, by the steady nibhling of the (ierman lines to the Ullied trumes particularly the British armies ami during the past month several miles of Hun trenches have been wicupied
Beginning on February 11th, a "strong system," north of beammont-Hamel, was stormed, followed by a prosition south east of Grandcourt a few days later, whilst the French made gains east of Rheims but their lines were pierced by the Crown Prince forces, midway between Verdun and Rheims, the next das

On February 18th, British and French troops achieved notable victories northeast of Grandcourt and in the Bois $L$ e Petre, and the Russians who have been carefully making preparations whilst King Winter held sway over the battle-fields of the east, took the offensive near Kochava and after repelling German attacks gained considerable ground.
The village of Petit Meraumont fell into the hands of the British, after a brilliant advance on February 24th, which resulted in their making further important gains along the Ancre River capturing several villages between Guedecourt and Commecourt. Then the village of Ligny was wrenched from the Hun grasp in the succeeding days and later Gommecourt was occupied.
Whilst this steady progress was being made on the western front, the British Ex. peditionary Force in Egypt were striking hard, and after fierce fighting kut-elAmara was re-captured from the retreating Turks and several thousand prisoners, and large quantity of stores were taken The vanquished foe continued their retreat up stream from Bojhailah but several gunboats dashed ahead of the retreating army and succeeded in not only sinking steamers, floating bridges, etc., but inflicted frightful losses among the Turkish ranks. Meanwhile the Russian forces in Persia were driving hard and on March 3rd, Hamadan, a town of 40,000 people was captured and it is thought that this is the beginning of an advance into Mesopotamia to aid the British advance towards Bagdad.
ZGerman submarine warfare continues but not with such drastic results as might have been anticipated, due to the combating measures taken by the Allies, although several

hard presed tiorkeys strategic rallways in asia.
Distances in the Asiatic theatres of war where Turkey is shufling her troopa are
and with this map in hathd theatres of war where Turkey is shumfling her troops are very great
from Europe, despite irom Europe. despite German entreatice. Taking the Sucz Canal as a base line 700 miles in
a straight line to the northeast arre is Alexandretta on the Matlitertanean. 250 miles torces in the Diarbekr region, whose objective north, is the Anglo Indinn army Dosecsing Kut-el-Amathwest; 800 miles east, and a little Persian frontiet Bagdad, 110 miles up stram, beyond whicha on the Tigris, with its forces the Tigris. is a rapidly with communication alrcady cstablished with the Ange distance, on the the northern army of the new kinusussan army; 200 miles southeast on the Red force on -is operating on the Damascus. Medina of Arabia - the work of the Grand Shereef of Mecca the Suez Canal and the positions indicated runs the Rasdad rail this vast territory lying between and Jibbara. 150 milecs north of Baadad. and constantly threatened witheted between Mozul naval aeroplanes let fy from the ships of Tarsas. opposite Cyprus. tn the rupture from allied damaged.
large vessels have been sunk, such as The Cunard Liner Laconia," and two transports alleged to have been filled with troops, in the Mediterranean.

There have been few developments with regard to America and (iermany severing diplomatic relationships in spite of the fact that several American citizens have either lost their lives or been in danger of same through the sinking of their vessels.

President Wilson is anxious to arm all merchant ships, and things may take a turn at any moment.

Bernstorff, the German Ambassador, recalled from the States, was detained at Halifax a considerable time before proceeding to Berlin.
A serious plot, having as its object that of uniting Mexico and Japan against the States, was brought to light recently, as also were plans discovered as to a suggested invading of India by way of China, Von Igel being at the back of it. He returned on the steamer Frederick VIII with Von Bernstorff.
Serious riots took place in New York, over the high cost of living.
Latest reports show that relationship between Germany and China may be broken.

According to latest reports, Bagdad has been captured by the British, and now the Turks are being harrassed in their retreat, and considerable booty taken.

At the moment of going to press word is received that the British are making a big drive on Bapaume, the German stronghold, and already several villages near, have fallen into their hands.

## General News.

Ex-premier Clark died at his home in St. Stephen, on February 26th.

A Provincial Election took place on February 24th, which resulted in the Government getting twenty-one seats to the Opposition twenty-seven.

Civil war broke out in Abyssinia and a battle took place outside the capital, which resulted in 15,000 rebels being killed whilst the troops of the Empress Zanditu lost $\mathbf{1 0 , 0 0 0}$ killed, out of 60,000 engaged.

The Patriotic Fund has reached $\$ 33,000,000$ it is understood.
Lloyd George stated in the House of Commons on March 7th, that any part of Ireland wanting Home Rule could have it, but the Ulsterites opposed the plan and up to the moment of going to press there is little hope of settlement.

## INSPECTORS AND TEACHERS PLEASE NOTE INCREASED FOOD PRODUCTION.

In order to assist in meeting the shortage of foodstuffs, due to war conditions and the unfavourable season of 1916, those teachers who are now giving instruction in agriculture and horticulture in the Provincial schools should arrange as far as practicable to grow plants of food value in school gardens and to reduce correspondingly the space hitherto devoted to flowers and decorative shrubs. With the same object in view, the home garden projects should be enlarged and modified and extensive use made of vacant lots and other unoccupied areas. In this way advantage might be taken of the potential labour of boys and girls from eight to fifteen or sixteen, much of which in the ordinary course of events is not utilized.

Inspectors might also take advantage of

## IMPERIAL THEATRE, ${ }^{\text {sTin. } \mathrm{D} \text {. }}$.

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"EDUCATIONAL REVIEW," St. Johg, II. B.
present conditions to enlarge the scope of agricultural education in Ontario and to demonstrate more fully the important bearing which agriculture has upon the welfare of the people, by using their influence to induce School Boards which have not yet established classes in agriculture to undertake this work and to utilize the school garden or home garden as recommended above.

If, indeed, the urban municipalities in Ontario having a population of from 1,000 to 9,000 would double the present production of their gardens and poultry yards, and use, as recommended above, the vacant lots and other unoccupied areas, it would increase the food products of Ontario by $\$ 10,000,000$ at a very conservative calculation.

Boys and girls cannot be expected to fight, but by assisting in increasing the supply of foodstuffs, they also can be of service.

> R. A. PYNE,
> Minister of Education

Department of Education, Toronto.
January 15th, 1917.

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## SCHOOL AND COLLEGE.

Dr. B. C. Crowell, Professor of Pathology and Bacteriology, University of the Phillippines, has recently been appointed Director of the Graduate School of Tropical Medicine and Public Health of the University of the Phillippines. He has also been elected President of the Phillippine Islands Medical Association for the present year.

The St. Martins Superior School and the Fair View School, which have been closed on account of measles, have reopenedMessrs. Frank S. Kierstead and G. Wilfred Fletcher, their respective teachers, spent their holidays at their homes, Sussex and Upham, respectively.

The Hardwood Hill School, under the management of Miss Annie Parsons, is making good progress.
The teachers of Acadia St. School, and a few from Spring St. and the West Highlands were visitors in Sackville recently, where they all very much enjoyed seeing that great picture "The Birth of a Nation."
School Work.- The semi-annual examination of Cape Wolfe School was celebrated on the 26th of January. The affair being well attended by the parents and friends of the children who were delighted at the progress they had made. The teacher, Miss Mary E. McIntyre, was presented with a purse and an address congratulating her on her success. During the event a number of recitations and songs were delivered. The singing of the National Anthem brought the proceedings to a close.

In School Circles.- Mr. Moise Gallant of Rustico, has now charge of the primary department of St. Chrysotom School, replacing Miss Margurette Gallant of Mt. Carmel, who was compelled to resign owing to sickness. Mr. Gallant has always held the high reputation of being a very successful teacher and the rate payers of St. Chrysotom, while regretting their former teacher, have been very fortunate in securing the services of Mr. Gallant.
School Work.- The semi-annual examination of Mill Vale School took place on Thursday, January 25th, and was attended by a large number and friends of the pupils, several of whom assisted the teacher in the examination. A programme of recitations, choruses and dialogues followed, after which the teacher presented prizes to the children and treated all present to candy. After complimentary remarks by the ratepayers, on the manner in which the school was conducted the scholars presented their teacher with a very appropriate gift and the following address: Miss Agnes O'Connor - Dear Teacher - We, your pupils, cannot allow this evening to pass without expressing to you our good wishes and warm appreciation to you as our teacher. Just one half year has glided by since you came amongst us and you have by your excellent qualities endeared yourself to each and every one of us. As we look back over the past we have given you much trouble in our daily tasks, yet we have always found you cheerful, patient and ever ready to assist us and teach us' day by day that which will attain to our welfare. Now dear teacher, we ask you to please accept this little gift, not for its value but as a token of respect and obedience from us to show we do not forget all you have done for us and assure you we shall all strive to do better in the future. The teacher though taken by surprise, expressed
her appreciation for the kindness shown her, the examination closed with the singing of the National Anthem.
Provincial Appointments.- To be School Commissioners for the towns named respectively for the term ending the 1st day of February, A. D. 1920:
Amherst.-Francis E. Boudreau, M. D.
Oxford.- Walter H. Hewson.
Parrsboro.- Burpee L. Tucker.
Springhill.- Maurice R. Anderson.
Kensington High School Examination.- The regular Christmas examination of Kensington High School, which was postponed on account of the illness of the principal, Miss Dora Squarebriggs, was held a short time ago in the C. M. B. A. Hall. It was an innovation in examinations of Kensington High School. On account of the large number of pupils, and the limited space in the class rooms of the school, it was suggested by the principal and her assistants, viz., Miss Hughes, Miss Graham and Miss Smith, that the examination be held in the C. M. B. A. Hall, which was almost filled by pupils and parents. The examination was conducted, according to program, and the toute ensemble of the whole affair reflected the skill and executive ability of the teaching staff of the school. The pupils marched to and from class recitals to piano music played by Miss Ella McMahon. The predominance of the military spirit was evidenced by flag drills and patriotic recitations. The pupils were examined by Mayor Jardine, James F. Profitt, James Pendergast and James A. Ready, B. A. Trustees and parents expressed themselves well pleased with the recitals of the different classes and grades. Special mention was made of the discipline and general deportment. The management of the "Strand" Theatre merit the thanks of the school district for their donation of the use of the Hall for the event. The singing of "God Save the King" ended a pleasant afternoon for parents, pupils and teachers.

Mrs. Olive Allen of Bayswater, is now in charge of the, school at Upper Cape, which opened on February 15th.
Many friends throughout Fredericton and Province will be pleased to learn that the McCauley School of Edmonton, Alberta, has not allowed the heroic death of Lieut. Locksley McKnight to pass unnoticed. Lieut. McKnight was a son of Mr. and Mrs. John McKnight of Fredericton, and enlisted at Edmonton and was killed in action in September, at the Battle of the Somme.

When addressing the gathering on the occasion of the unveiling the Hon. J. R. Boyle spoke of the large number of enlistments, which had taken place in the teaching profession throughout the Province, as great as in any walk of life, and said that the attitude of sacrifice and observance of duty taken by the teachers was symbolic of the teaching given in the schools.
Mr. Armand LeBlanc has been reappointed a School Commissioner for the town of Wedgeport for the term ending February 1st, 1920.

Winston-Salem, N. C:, high school girls mend their torn garments and darn their hose as a part of their sewing course.

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## RECENT BOOKS.

How a Man Makes Markets, by William B. Werthner, price 40c., Macmillans in Canada, Toronto. This splendidly illustrated little book is a continuation of Macmillans Every Child's Series and therefore needs little additional commendation to those having the welfare of children at heart.

The Foundation and Growth of the British Empire, by J. A. Williamson, price 75 c ., The Macmillans in Canada, Toronto. A valuable text book which gives a short account of the foundation and progress of the British Empire and intended primarily for use as an introductory course in the study of the subject. One of its many features is the inclusion of maps to illustrate special subjects.
How we Pay Each Other, by S. T. Wood, price 50c., Macmillans in Canada, Toronto. This is an elementary reader in the simple economics of daily life and whilst treating this subject from a broad view point it is invirtually a condensation and is intended to extend in thought that which but touched upon or briefly outlined. It has our recommendation.
The Continents and Their People by Chamberlain, price 55 c ., The Macmillans in Canada, Toronto. A further geographical reader in this well known series has just been published on Oceania and in same an attempt has been made to show in a most interesting manner the relationships between human life and its environing conditions and to adapt the material to the ability of the pupil. As a supplementary work it has few competitors and the cuts, care and well printing are an added attraction of value.

The King's College Record. We have been pleased to receive the Christmas and January number and should like to extend a hearty congratulation to the editors as not only
is the general makeup most creditable but the articles well written and chosen.
Among other books which we have received from the Macmillans in Canada, Toronto, and which have our recommendation to our readers, for use among their pupils, are Jim and Peggy at Meadowbrook, Farm Selection from American Poetry and The Home and the Family.
Books received - Water Powers of Manitoba, SaskatcheBulletin Report of Proceedings of, New York State Museum of The Report of Proceedings of the Tenth Annual Meeting of The Association of Life Insurance Presidents, Sixteenth Annual Report of The Canadian Association for the Prevention of Tuberculosis, and Report of the Superintendent of Public Instruction of the Province of Quebec.
Practical Drawing, by Harry.W. Temple, Crane Technical High School, Chicago, cloth, 141 pages, \$1.50, D. C. Heath \& Co., Boston, New York, Chicago. This book is certainly practical in every sense of the word and it gives definite instruction, correct use of instruments and proportion of blue prints, the interpretation of blue prints. The construction of articles in inrod and cane, and definite models for the various wood-turning projects together with those for wood pattern projects and several pages of advanced cabinet projects. Included are also sections devoted to stenciling and concrete work. Illustrations are of a particularly high class nature and are in themselves almost worth the value therein.
Physical Culture (a British system by a British officer), published by The Macmillans Co., Ltd., Toronto, price 60c. Not a Swedish system by a Swede, nor a Danish system by a Dane, nor a German system by a German.

The author, Lieut. C. F. Upton, R. A. M. C., winner of the open light weight wrestling championship of the world, 1915, has designed a system adapted for all classes, schools and training corps. He has had world-wide experience in physical culture under Japanese and Indian professors as well as the most prominent European experts, and has concentrated into this book all that is most essential for a knowledge of modern physical culture. A British system by a British officer, and a welcome rival to the countless foreign systems flooding the market.

Now is the time when the schools, the great centres of factory and commercial industry, and the great offices under both government and private control, can take serious steps to procure means of physical improvement on a systematic basis, for it must now be recognized that sound physique carries with it increased energy both mental and physical, which must produce a higher standard of work. In schools particularly, where, one may say, the teachers have in their hands the physical and mental formation of the rising generation, this question of physical training is a very important matter.
Canadian business men, and those in other countries doing business, or prepared to do business in Canada, have felt the need of a concise and accurate source of information concerning Canadian industry, commerce and finance. Such a volume has just been prepared, and published by the Industrial and Educational Press, Ltd., 45 St. Alexander Street, Montreal.
The opening chapters of the book are devoted to a discussion of modern business methods as applied to Canada, in which the author deals with the three divisions-industry, commerce and finance - in a lucid and authoritative manner. The aim is to present the information in such a way as to make it easily comprehensible. The volume is of particular value to the young business man and to foreigners doing business with Canadian merchants. The information is especially useful to Canadian merchants at the present time when so many firms are beginning to do an export trade, to which a considerable portion of the book is devoted.
Percival Chubb, author of Festivals and Plays was one of the speakers at a meeting in New York of The Drama League of America. In the preparation of Festivals and Plays, which is designed for the use of schools and all those engaged in festival undertakings, Mr. Chubb was assisted by his associates at the Ethical Culture School in New York, in which he was then Director of Festivals.
A volume of poems by Alan Seeger, just published by Mr. S. B. Gundy, Toronto, reminds us that one of the greatest tragedies of this war is the heavy toll it is taking from the ranks of those whose lives gave promise of rich fulfillment those "rich dead" whose hearts, as Rupert Brooke, one of their number, sang: "Were woven of human joys and cares washed marvelously with sorrow, swift to mirth," and "dying, have made us rarer gifts than gold."
Of this company of immortals is Alan Seeger, the young American doet, who died gloriously for France, on the field of Belloy-en Santerre. As we read his poems and the story of his lije we are reminded of Rupert Brooke. Both died at the age of $t$ wenty-eight, martyrs to the great cause of humanity; both were passionate devotees of the goddess of beauty; both typified the ideal radiance of youth and poetry; and both gave promise of immortal achievement,'

The Most Interesting American - the phrase quoted by Colonel Harvey in the current North Amsrican Review, is Matthew Apnold's, and referred to the late Wayne MacVeagh, who is the subject of a striking tribute by Colonel Harvey in the Review. An article by Major-General Carter, U. S. A., on Our Defective Military System, one by Lieut.-Commander L. A. Cotten, U, S. A., on Our Naval Problem, and a paper on How to Raise Armies, by Sydney Brooks, in which the distinguished British publicist applies to America's needs the lessons learned through hard experience by England - there are the chief contributions of the March North Amegican Review to the momentous discussions of the hour.

The public will welcome the new issue for 1917 of 5,000 Facts About Canada, the popular and valuable cyclopedia of Canadian dates, compiled by Frank Yeigh of Toronto, the well-known writer and lecturer on the Dominion. No up-to-date and intelligent Canadian can afford to be without this "hardy annual," which is a revelation in concrete form of the wonderful growth of our country in a single year, despite war conditions; indeed, it circulates all over the world, and as such is a splendid advertisement. The chapter of War Facts is by the way, both timely and illuminating. Fifty other chapters are devoted alphabetically to every phase of our national life, from Agriculture to the Yukon, while several sketch maps are of high value. Copies may be had from newsdealers or by sending 25 c . to the Canadian Facts Pub. Co., 588 Huron Street, Toronto, Canada.

Birds in the War Zone is the title of an interesting article contributed by Major Allan'Brooks, of the Canadian Contingent to Bird-Lore for February. It describes the effects of shell-fire, trench warfare, and aeroplaning on bird-life in Flanders, and incidentally throws illuminating side-lights on the bird student as well as the bird.
Frank M. Chapman contributes to this number an amazing story of a hunter whom he recently met in the Andes, and who acknowledged that he has sent the wing and tail-quills of no less than sixteen thousand Condors to millinery houses in Paris.
Reports from over two hundred observers from Bird-Lore's nineteenth Christmas Bird Census give a clear idea of the character of the winter bird-life of the United States.

## N. B. Official Notice.

Order of the Board of Education, February 6th, 1917. Reg. 32, 3 .
Thipd, Second, First, and the next higher class of Normal Trained teachers of Nova Scotia, certified by an Inspector as competent and by the Superintendent in Nova Scotia as in good standing, and holding Dominion Physical Training Certificates of Grade B., may be admitted promptly for the corresponding classes of license by the Chief Superintendent in New Brunswick, for one year, on condition that such teacher or teachers engage to pass the examination in School Law and Civics required for the class for which application is made. If a candidate makes not less than fifty per cent on this examination, a permanent license of the appropriate class will be issued accordingly, to take effect at the beginning of the next schgol year,
W. 5. Cartrim,

Chief Superintendent of Education.

[^0]OFFICIAL NOTICE.
New Brunswick School Calendar.
1917. Second Term

April 5-Schools close for Easter Vacation.
April 11 - Schools re-open، after Easter Vacation.
May 18 - Loyalist Day (Holiday for St. John City only).
May 22 - Exams. for Class III License begin.
May 23 - Empire Day.
May 24 - Victoria Day (Public Holi. day).
May 24 - Last Day on which Inspectors are authorized to receive Applications for Departmental Exams., Reg. 38-6.
June 3 - King's Birthday observed (Public Holiday).
June 8 - Normal School Closing.
June 12 - Final Exams. for License begin.
June 18 - High School Entrance Exams. begin.
June 29 - Public Schools close for Term.

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