THE EDUCATIONAL REVIEW.
FOR THE ATLANTIC PROVINCES OF CANADA.

| Vol. XVI. | No. 7. | ST. JOHN, N. B., DECEMBER, 1902. |
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The Review wishes its readers a Merry Christmas and a Happy New Year.

The beautiful picture of "St. Cecilia," which is sent out with this number of the Review, as a supplement, should be framed and hung up in the school room. Every such work of art, seen from day to day and studied by thousands of children will exert a widespread refining influence.

Principal John A. MacCabe, of the Ottawa Normal School, died suddenly while attending church in that city on Sunday morning, November 30th. He was sixty years of age, an Irishman by birth, and was educated in the Roman Catholic university at Dublin. Before going to Ottawa he filled
the chair of mathematics and afterwards of English at the Truro Normal School, He was the author of several school texts on English grammar, was president of the Dominion Educational Association at its last session in Ottawa, and was a member of the Royal Society of Canada. He was of a genial and kindly nature, and had many friends in educational and literary circles throughout the Dominion.

Teachers, the Review would like to hear about your school. You are perhaps doing things different from some others, -have a skilful plan of presenting a lesson, or some device to avoid routine. Let us have it that the advantage may be shared in by the two thousand and more teachers who read the Review.

In the January number of the Canadian Magazine there will be begun a complete history of "The War of 1812," by Dr. James Hannay, author of "History of Acadia," etc. This account, which is the most scholarly and complete story of the war yet written by a Canadian, will run through twelve issues and be completed in December, 1903. Dr. Hannay's style is graceful and easy, and no better evidence of his quality as a historian can be given than that his "History of Acadia," written many years ago, is still read with eager interest.

A training course for teachers will begin on the $5^{\text {th }}$ of January next, at the MacDonald Manual Training School, Truro. This is open to all teachers of the Atlantic Provinces who wish to qualify as manual instructors. The course will last until the end of June. For circular giving information as to necessary qualifications, hours of study, the scope of the course, which will take in cardboard modelling, apply to T. B. Kidner, Director of Manual Training, Truro, N. S. The liberal grants offered by the governments of Nova Scotia and New Brunswick to school sections establishing departments in manual training should be a great incentive to teachers to qualify at once for such positions.

## Manual Training.

The interest in the manual training movement is spreading. St. John city is considering the advisability of opening several departments in the schools for manual training. Chief Superintendent Dr. Inch, of New Brunswick has gone to Nova Scotia to visit the schools of manual training and domestic cconomy, and hopes are entertained that his visit will lead to encouraging results. Prof. MacCready, Principal of the Fredericton MacDonald Manual Training School, has recently been holding meetings with the school boards of several centres in the province, and he has succeeded in arousing considerable interest, with the prospect of departments being established in some towns.
In Nova Scotia there are now fourteen manual training departments, with the prospect of one or two more being opened at the beginning of the year. Mr. Kidner informis us that at New Glasgow, where a fully equipped manual training room has been opened, the school board recently decided to give cardboard work in the grades below the age at which woodwork is taken.
In Prince Edward Island departments have been opened at Georgetown and other centres.
The outlook is therefore decidedly encouraging.

## NATURE STUDY.

## Christmas Trees and Evergreens.

The trees most used at Christmas are the fir, spruce, hemlock, the yew (in England), and occasionally the cedar and pine. The spruce and fir are the favorites, but the latter, owing to the balsam on the trunk and branches, is not so generally liked, although it is more symmetrical and its leaves are larger and more glossy than those of the spruce.
There are three kinds of spruce growing in these provinces-the black or red, the white, and the swamp spruce. The black or red spruce, regarded by some botanists as different species, grows in great profusion in New Brunswick. In high lands and pastures it forms sometimes dense and almost impenetrable thickets, and does not grow very large. In rich woods or low lands it grows to the height of from fifty to ninety feet, and forms a valuable timber tree, of fine shape and imposing appearance when at its greatest perfection. The bark is smooth or slightly roughened, the leaves thickly covering
the twigs, somewhat stout, straight or curved, short, dark-green. The cones are oval from one to two inches long, becoming reddish brown when mature. The cone-scales are either entire or have notched margins. The tree is very common in Nova Scotia and New Brunswick.

The white spruce differs in several respects from the one just named. The leaves are somewhat longer, less closely packed on the twigs, stiffer in texture, and sharp pointed, which renders travelling through a white spruce thicket a toilsome and irritating process. Both bark and leaves are lighter in color than the common spruce. The cones are long in proportion to their width, of a somewhat cylindrical form, greenish when young, becoming brown with age. The cone-scales are entire on their margins, not notched. The tree is very abundant along the low-lying shores of the Gulf of St. Lawrence, and though sometimes growing to a large size does not attain the proportions of the black spruce. It is also a valuable tree for timber. A small chunky variety of the white spruce sometimes has a strong and unpleasant odor. This obtains for it the local name of the "cat-spruce" or " skunk-spruce."
The swamp spruce is a tall slender tree when it grows in swamps; on mountains it is usually much deformed and shrub like. It does not attain a large size, and is usually jagged and uneven at the top.
The balsam fir is a slender tree, but often attains the height of sixty or seventy feet, with a trunk diameter of two feet, but is usually much smaller, especially toward the north. It has much smoother bark than the spruces, and the bark is further distinguished by the resin "blisters" which form smooth swellings on its surface. These contain the "Canada balsam," so useful in medicines, for varnishes, mounting microscopic slides, etc. The leaves become fragrant in drying, and are often used for making fir pillows, which are very grateful, and are said to induce sleep, which every camper-out believes. The leaves are flat, with a grooved line above, light green in color, and, when young, whitish beneath. The cones are cylindrical in shape, from two to four inches long, and one inch thick, violet or purplish when young, erect, and arranged in rows on the upper side of the branches. The wood is soft and somewhat light yellow in color; and the tree decays earlier than most other evergreens.
The hemlock is a very graceful tree, especially when small. It sometimes attains a very large
size on hill sides and ridges where there is a generous soil. The leaves are small, arranged very close together, dark green above, pale on the under side, with a minute petiole. Bark reddish when old, becoming flaky in scales and rough. Its cones are small and drooping, with roundish scales. The hemlock is rather irregular, unlike the spruce and fir, in its trunk and mode of branching. The wood is very coarse, and splinters easily. The bark is used for tanning. The leaves and bark are said to possess medicinal qualities. Hemlock leaves are used for teas, and "hemlock sweats" are recommended as cures for colds. Hemlock oil, an essence extracted from the leaves and bark, is used as a remedy for inflammatory rheumatism.

The American yew is never used as a Christmas tree. Our yew is a sort of straggling shrub; but in Europe the yew becomes a fine, handsome tree, with an erect trunk. The yew is not without its Christmas associations, for its trunk formed the " yewlog," so famous at Christmas time as to give that season the name of "yuletide."
The pines of these provinces have before been described in the Review. It is sufficient here to recall the differences in their leaves. The white pine has five slender needle-shaped leaves in a fascicle or bundle; the red pine has two long leaves, and the scrub or Labrador pine two short flat leaves in a bundle.

Of all the trees in the wood and field, There's none like the Christmas tree; Tho' rich and rare is the fruit he yields, The strangest of trees is he.

## CARDBOARD WORK.

## T. B. Kidner.

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The instructions for binding the edges of the mat given in last month's article were not quite clear, owing to the omissicn of a few words. After the sentence, "The third piece is fitted in a similar manner," it should have read, - but the fourth piece is more difficult as both ends are mitred."
Exercise 2. A Hexagonal Mat.
This is a useful exercise because of the lesson on angles, for which it affords an opportunity.

The drawing should be that of the finished model; and the hexagon may be constructed by any of the methods given in the elementary course. As in
the square mat, very careful measuring of the quarter inch border, which shows the binding, is necessary. In each case, the mitres can be readily

tested, as they are, of course, portions of diagonals of the figures.

The cutting out is not difficult, and the steps of the binding operations are similar to the previous exercise. It will be found, though, that the mitre on the second piece is formed by cutting off the first piece along the edge of the card, as shown in the diagram, and so on until the sixth and last mitre is reached. This will have to be marked and fitted in a similar way to the last piece of Ex. I.

Exercise 3. A Menu Card or Photo Easel.
The reason for the process should be seen by the pupils, and a blackboard sketch such as shown in the diagram, aided by a recapitulation of some of the earlier talks on angles, should make it clear.

This model introduces a little more difficult binding, and the drawins will also make nlore demands on the pupils' care and attention.
In the diagram, the leg, or support, is shown at the side
 of the model, and its position is indicated in the main drawing by dotted lines. Commence the drawing by making an oblong $5 \times 3^{1 / 2}$ inches, and mark off $3 / 4$ of an inch from the upper corners, as shown. Complete the outline and then draw the binding. Next, the support should be drawn at the side of the main drawing. Commence by erecting a vertical centre line, and across that make lines at right angles at the given heights. By measuring off half the given dimensions on either side of the centre the correct shape
is obtained. This is a practical application of fractions, and will be found useful. After cutting out the support, a strip of binding should be pasted across the two halves, as shown in the diagram, to form a hinge. In fixing the support to the front portion, a tiny drop of liquid glue, scraped carefully over the surface of the small half of the support, will be found more effective than paste. The cloth hinge should be underneath, next to the front portion.
As in the pasting in the elementary course, a wooden toothpick, or a strip of card, will be found to make the best " brush" for glueing.

Exercise 4. A Hanging Match-holder.


This makes an interesting model and brings in the "development" or unfolding of a portion of it in the drawing. Both drawings, as shown in the diagram, should be made by the pupils.

Commence by drawing an oblong $6 \times 3$ inches, and measure off the corners as shown. Draw the outline and binding lines, and then indicate the position of the small box by dotted lines as in diagram.

For the second portion of the drawing, the teacher should have a piece cut out, ready to fold up, and show the pupils how the box is formed. Of course, the finished model will already have been inspected by them. The drawing is not difficult, and the dimensions are simple ones. The little pieces marked ffff are known as flaps, and are always a quarter of an inch in width. It will be noted that the corners are cut off each flap at $45^{\circ}$. This is to allow of their turning up inside the model, as these little flaps are the means by which the model is held together, a thin film of glue being used upon them for that purpose.

The practical work on the back requires no explanation, being only slightly more difficult than
the previous models. The cutting out of the box, however, involves a new operation, viz., " half-cutting." The dotted lines in the development indicate that the cardboard is to be cut only halt way through to allow of its being bent neatly and evenly. It will be fould that some mistakes will be made at first-either of cutting too far through, or of not going deep enough. After making a half-cut line, the card must be bent away from the cut. Great accuracy is needed in the drawing on the cardboard, or the corners of the box will not meet when folded. After the development. is ready for folding, the flap at A should be lightly glued and brought into position behind the large piece at the other end. Hold it between the finger and thumb of either hand, the second finger being pressed inside the box. It will set in a minute or so, and then the three remaining flaps can be glued and the bottom pressed down in position on them. When quite set, the box is glued into position on the back and the model is complete.
The position of the hole in the back for hanging the model by is indicated by the small cross formed by producing the mitre lines until they intersect. As before, a ticket-punch is used for making the hole.

Exercise 5. A Small Wall Pocket for Post Cards, etc.


The drawing should be the development as shown in the diagram. As before, the teacher should have two models for teaching this exercise from; one finished, the other unfolded, showing the develop-
ment, and capable of being folded up in demonstration before the pupils.

For the drawing, it is best to construct first the oblong, which is to be folded to form the back, bottom and front. The side pieces, with their small glue flaps, should then be drawn. No binding is used on this model, so the drawing is simplified in that respect.

The practical work is not difficult, but the measuring must be exact, and the half cutting very even or ugly angles will result. Care must be taken in glueing the flaps to have the smallest possible amount of glue, or

## Ex.5, The finished moodel

 poor joints and "messy" work will result. Scrape it on with a slip of stiff : card, or a wooden toothpick, so that no superfluous liquid will be squeezed out when the flaps are pressed together.

During the early attempts at "halfcutting," the angles are often very uneven, when folded, from the cut being a trifle deeper. in some places than in others. The best remedy that the teacher can use is to recommend a st ady but lightly pressed stroke with the knife right alor.s the cut. Short, partial cuts are never $s \because$ ccessful, but with a firm, bold stroke and practice,, the halfcutting and subsequent folding is quite simple.

If it is possible, never hunder a child when it tries to work. A child naturally likes to do things, and a love for accomplishment can be early taught that will be of great help when life's burdens have to be taken up. A child kept from work till youth, has a distaste for it, and the feeling that labor is a burden. Some children have natural deftness with the fingers; all children have not, but all have an inclination toward certain kinds of work that can be encouraged and trained, until they acquire considerable skill, and can help themselves.-EducatorJournal.

## St. Cecilia.

The picture which is sent with this issue of the Review represents St. Cecilia at the organ. Her fingers rest on the keys, but her eyes are drawn to the two cherubs who shower roses from above her. A halo surrounds her head.
St. Cecilia has long been regarded as the patron saint of music, but why or when she first came to be so considered is not known. In a book called Legenda Aurea, written in the thirteenth century, we are told that she was a noble Roman maiden who lived in the reign of the Emperor Alexander Severus. She was a Christian, but her parents forced her to marry the heathen Valerian. She persuaded him and nis brother to become Christians, and the three devoted themselves to works of charity, especially among their persecuted brethren. Their good deeds made them known to the persecutors, and they suffered martyrdom.

The only reference to music in this story is that it says, " While the organs were sounding, she sang in her heart alone to God." It goes on to say that this maiden was under the constant and close protection of an angel, but the angel came not to listen to her playing, but to guard her, and because of her spotless innocence. The first great English poet Chaucer, takes the story of St. Cecilia for one of the "Canterbury Tales." He says that once Valerian going home found the angel guarding Cecilia, and holding two crowns of roses and lilies, one of which he gave to her and the other to her husband.

In the very early pictures of St. Cecilia there is no representation of musical instruments, nor any suggestion that she had anything to do with music: but in some way the tradition grew that she had a deep passion for and great skill in music, that she invented the organ (the grand instrument of church music), and that the beauty of her playing drew an angel down to listen to it.

The most famous painting of her is by Raphael in a church near Bologna, and represents her in a rapture of devotion, with a small "organ," as it was called, in her hand. We have spoken of Chaucer's poem, "The Life of St. Cecilia," and other English poets have written of her. Her festival, November 22nd, began to be celebrated in England by music lovers in 1683 ; and in 1687 John Dryden wrote the anniversary song for the celebration.

It was called "A Song for St. Cecilia's Day," and the last verse before the chorus runs thus:

Orpheus could lead the savage race,
And trees unrooted left their place, Sequacious of the lyre;
But bright Cecilia raised the wonder higher
When to her organ vocal breath is given.
An angel heard, and straight appeared, Mistaking earth for heaven.
A more famous poem, " Alexander's Feast, or the Power of Music," was written by the same poet, ten years later, for the celebration in 1697. Here, after telling how Timotheus, the musician of Alexadder the Great, was able to rouse different passons in the king's breast by the music of his lyre, he concludes:

Thus, long ago,
Ere heaving bellows learned to blow,
While organs yet were mute,
Timotheus, to his breathing flute
And sounding lyre,
Could swell the soul to rage, or kindle soft desire. At last divine Cecilia came,
Inventress of the vocal frame;
The sweet enthusiast, from her sacred store,
Enlarged the former narrow bounds,
And added length to solemn sounds,
With Nature's mother wit and arts unknown before.
Let old Timotheus yield the prize,
Or both divide the crown;
He raised a mortal to the skies;
size crew an angel down.
In 1708 Alexander Pope wrote an "Ode fo: Music on St. Cecilia's Day," in which he celebrates the saint thus:

Music the fiercest grief can charm,
And fate's severest rage disarm;
Music can soften pain to ease,
And make despair and madness please;
Our joys below it can improve,
And antedate the bliss above.
This the divine Cecilia found,
And to her Maker's praise confined the sound, When the full organ joins the tuneful choir, The immortal powers incline their ear, Borne on the swelling notes our souls aspire,
While solemn airs improve the sacred fire;
And angel's lean from heaven to hear. Of Orpheus now no more let poets tell, To bright Cecilia greater power is given ;
His numbers raised a shade from hell;
Hers, lift the soul to heaven.
Tennyson, in "The Palace of Art," when he is describing the pictures which adorn the walls, imagines one of Saint Cecilia:

Or, in a clear-walled city on the sea, Near gilded organ-pipe her hair Wound with white roses slept St. Cecily; An angel looked at her.
The thought that seems to underlie all the stories that connect St. Cecilia and music is that the heavenly gift of music may help us at this joyous Christmas season to lift our hearts to join in the worship of the angel choir; and that the angels rejoice to hear the praise that is offered to God by a pure heart and holy life.

Eleanor Robinson.

## Christmas Exercises.

Mottoes for the walls: " On earth peace, goodwill toward men;" "Merry Christmas;" "Joy to the world;" "Happy New Year;" "Ring out the false, ring in the true." These mottoes can be made of evergreens, red berries, grains, and cotton batting. To give the form, wire can be used. The wild rosebushes and thorns will furnish red berries, and there is a beautiful scarlet berry growing in litthe clusters close to the stem and twigs of the Ilex or Canadian Holly. The Ilex is a little shrub growing in thickets, and retains its berries long after the leaves have fallen-even up to January. Its berries are very effective in Christmas decoration. The shrub, which is from five to ten feet high, is quite abundant in Nova Soctia and New Brunswick, and can be easily found now on account of its bright red berries.
The Christmas exercises, if carried out in school, should be bright and interesting. Invite the parents and friends of the pupils. Send to them a carefully written invitation on a card or note paper, on which is inscribed the motto of the school, if it has one; if not, choose a motto from those given above, or others appropriate to the season. The invitation may be written in this form:


The true spirit of the Christmas season is sure to be missed if there is not some attempt at gift making; and nothing will please parents better than to get some little inexpensive gift during the afternoon from the children, showing their own work. If there has been some manual training in the school, the scholars can easily make up some appropriate gift, such as a work-box, paper cutter, etc.; or if the school has profited by the exercises in cardboard work given in the Review this year, they will be able to make such little gifts as book marks, wall pockets, candy baskets, photo frames, table mats, etc. No money gift will give the same pleasure to the parents as something showing their children's own work; and nothing will be of more pleasure to the children because they delight to $d o$ and to give. If it is nothing more than a simple drawing, a little story of their own composition, a few pages of exercises neatly written out, showing their progress in school work,-let them do this, make the pages up in the form of a neat booklet, properly inscribed, and present it. Parents will delight in such a gift and treasure it up for years; and their appreciation would be one of the greatest incentives to the pupils themselves.

The school exercises on "Parents'-day " may consist of an opening song or chorus, a scripture reading from Luke II, 8-20, with recitations, readings, songs. This and previous Christmas numbers of the Review will furnish abundant material. Have the walls decorated with pictures as well as mottoes, and make every effort to give the schoolroom a cheerful, homelike appearance.

## The Earth has Grown Old.

The earth has grown old with its burden of care, But at Christmas it always is young; The heart of the jewel grows lustrous and fair, And its soul full of music breaks forth in the air, When the song of the angel is sung.

It is coming, old earth, it is coming to-night ! On the snow flakes that cover thy sod;
The feet of the Christ-Child falls gentle and white, And the voice of the Christ-Child tells out with delight That mankind are the children of God.

The feet of the humblest may walk in its field Where the feet of the holiest have trod; This, this is the marvel of mortals revealed When the silvery trumpets of Christmas have pealed That mankind are the children of God. -Phillips Brooks,

## Reading:

## A Christmas Legend in Belgium.

The children of Belgium have a charining Christmas legend about Santa Claus' Pony. They always place their wooden sabots on the window-ledge, stuffed full of oats, hay and fodder for the "dear Christmas pony." In the early morning they run on tiptoe to look; and behold! the hay is all gone, and the shoes are brimming over with toys and sweetmeats! Then the children clap their hands with glee, and wish they could only have waked in time to see the pony munching his oats. That would have been such fun.-St. Nicholas.

Two essays by a boy and girl on the subject, "It is more blessed to give than to receive."

## Peace on Earth.

"What means this glory round our feet,"
The Magi mused, "more bright than morn?"
And voices chanted clear and sweet,
"To-day the Prince of Peace is born!"
"What means this star," the shepherds said,
"That brightens through the rocky glen?"
And angels answering overhead,
Sang, " Peace on earth, good-will to men!"
'Tis eighteen hundred years and more,
Since those sweet oracles were dumb;
We wait for Him like them of yore; Alas! He seems so slow to come!
But it was said, in words of gold,
No time or sorrow e'er shall dim,
That little children might be bold In perfect trust to come to Him .
All around about our feet shall shine
A light like that the wise men saw,
If we our loving wills incline
To that sweet Life which is the Law.
So shall we learn to understand
The simple faith of shepherds then,
And kindly clasping hand in hand,
Sing, " Pace on earth, good will to men!"
James Russell Lowech.
Reading:

## A Christmas Visitor.

Papa, Archie and May went to the woods to get a Christmas tree, and found just what they wanted-a little pine, bushy and straight.
"There is something I must cut off," said Archie. He pointed to a little gray bunch on one of the twigs, and pulled out his knife.
"No! no!" cried May, holding his hand; "let it stay. It is a poor caterpillar's house."
May was right. One Indian summer day a caterpillar, dressed in brown velvet, was taking a walk in the woods. At last he came to the little pine tree, and thought to himself, "What a nice place to spend the winter!"
So he made himself a little house. He made it very tight and close, of fine, soft thread, and fastened up the door. He did not leave himself even a window to look
out. If there had been one, how it would have surprised him to see that he and his house and the pine tree were riding in a sleigh with Papa and May and Archie.

He would have been still more surprised if he had seen the tree standing in the parlor, covered with toys and trinkets and little candles.
" It must be spring at last," he thought, for it was very warm in the parlor.
So he poked a hole in the wall of his house, and out he came. But what do you think? He was not a caterpillar at all!
"Oh, see the lovely butterfly!" cried May.
He flew to the tip-top bough; and the children said there was nothing else on the tree so pretty as the butterfly.
"He must have come down the chimney with Santa Claus!" said May. And she never guessed that he came out of the caterpillar's house-Youth's Companion.
Five-minute talks on "Christmas and New Year when I was at school," by several parents and other visitors.

## Recitation.-For a little girl :

If Santa Claus should stumble, As he climbs the chimney tall With all this ice upon it, I'm 'fraid he'd get a fall And smash himself to piecesTo say nothing of the toys! Dear me, what sorrow that would bring To all the girls and boys! So. I am going to write a note And pin it to the gate,I'll write it large, so he can see, No matter if it's late,And say, " Dear Santa Claus, don't try To climb the roof to-night, But walk right in, the door's unlocked, The nursery's on the right!"
Kecitation.-By a girl:
Santa Claus on the Train.
On a Christmas eve an emigrant train Sped on through the blackness of night, And cleft the pitchy dark in twain With the gleam of its fierce headlight.

In a crowded car, a noisome place, Sat a mother and her child,
The woman's face bore want's wan trace, But the little one only smiled,

And tugged and pulled at her mother's dress, And her voice had a merry ring
As she lisped, " Now, mamma, come and guess What Santa Claus will bring."

But sadly the mother shook her head,
"He never can catch us here," she said, As she thought of a happier past ;
"The train is going too fast,"

Oh, mamma, yes, he'll come, I say, So swift are his little deer,
They run all over the world to-day,I'll hang my stocking up here."
She pinned the stocking to the seat, And closed her tired eyes,
And soon she saw each longed-for sweet In dreamland's paradise.
On a seat behind the little maid A rough man sat apart,
But a soft light o'er his features played, And stole into his heart.

As the cars drew up at a busy town
The rough man left the train,
But scarce had from the steps jumped down Ere he was back again.

And a great big bundle of Christmas joys Bulged out from his pocket wide; He filled the stocking with sweets, and toys He laid by the dreamer's side.

At dawn the little one woke with a shout, "Twas sweet to hear her glee;
" I knowed that Santa would find me out; He caught the train, you see."
Though some from smiling may scarce refrain, The child was surely right,-
The good Saint Nicholas caught the train, And came aboard that night.
For the saint is fond of the masquerade And may fool the old and wise,
And so he came to the little maid In an emigrant's disguise.

And he dresses in many ways, because He wishes no one to know him,
For he never says, "I am Santa Claus," But his good deeds always show him. Henry C. Walsh.

## How Christmas Began.

I. The beginning of Christmas day is away back in the fourth century. It was Pope Julius who first thought of having a holiday on Christ's birthday. He asked St. Cyril to find out the real date of Christ's birth. And the result was that December 25 was fixed upon.
2. The season which we now celebrate was in the early time a heathen festival. It was many long years before it became a Christian holiday. It was Pope Gregory the Great who said, "The heathen festivals must gradually be changed into Christian ones, and the Christian festivals must imitate those of the time before Christ."
3. And this is just what has taken place. In Italy the old Saturnalia and Crumalia of the Romans have been turned into a celebration of Christ's birth. And in Germany, the old "Jul" (Yule) festival was the beginning of our Christmas.
4. The word Christmas means "Christ's mass," which was the way in which the holiday was first celebrated. The


Full music in leaflet form may be had by addressing Mrs. Crosby Adams, to Randolph St, Chicago, Ill.

Greeks call Christmas Feast of Lights, and the German word Weihnacht means Feast of Dedication.

## The Story of the Christmas Tree.

I. There are many different stories of who first thought of the Christmas tree. Nearly every country has a story of its own. The Scandinavians say the Christmas tree sprang from a "service tree," which grew from the bloodsoaked ground where two lovers met a violent death.
2. In a French romance of the thirteenth century, a great tree is described whose branches are covered with burning candles, and on whose top is a vision of a child with a halo around his curly head. The tree represents mankind; the child, Christ; and the candles (some of which were upside down), good and bad people.
3. The Germans give St. Winfred the honor of giving the Christmas tree to the world. He chopped down a big oak tree, and in its place a young fir tree appeared. On seeing this, St. Winfred said, "This little tree, a young child of the forest, shall be your holy tree to-night. It is the wood of peace, for your houses are built of the fir. It is the sign of an endless life, for its leaves are ever green. See how it points upward to heaven. Let this be called the tree of the Christ Child. Gather about it not in the wild wood, but in your own homes. There it will shelter no deeds of blood, but loving gifts and rites of kindness."
4. Many Germans, however, like to believe that the great reformer, Martin Lather, first thought of the Christmas tree. They say that one Christmas eve he went into his garden, and, cutting off a little fir tree, he brought it into the nursery. He put some candles on the branches ands lighted them. The first Christmas tree in Germany was at Strassburg in 1604.
5. Other people look to the Ancient Egyptians as those who first gave us the idea of the Christmas tree. They were in the habit of decorating their houses at the winter season with branches of the date palm, which they regarded not only as an emblem of eternal life but also of the heavens.
6. It is the German people who have introduced the pretty custom of the Christmas tree wherever they have gone. Every German has his Christmas tree, from the Emperor to the poorest working man. $-N$. E. Journal of Education.

Recitation - "Christmas Story," by Charles Dickens.

## CURRENT EVENTS.

Martial law has been repealed in South Africa, and throughout the new colonies civil law has taken the place of military rule.
London is to be fortified against a possible attack in case of war.
In the beginning of the year 1899, a British and a United States warship took part in a native dispute in Samoa, and landed men to support the recognized government of the islands, then under the joint protection of Great Britain, the United States and Germany. As a result of investigations which followed, Great Britain withdrew, and the islands were divided between Germany and the United States. A claim for damages caused by the landing party, and by the supply of arms and ammunition to one of the native contestants, was submitted to the King of Sweden as arbitrator. He has just given his decision, which holds Great Britain and the United States responsible for the damages.
Six hundred Austrians who emigrated to the United States in search of employment, have returned in a body to their native land.

The settlement of Welshmen from Patagonia in the Canadian northwest has been so successful that measures are now being taken by friends of the remaining Patagonian colonists to transport the whole colony to Canada.
Hundreds of families from Russian Poland, who were settled in Brazil about ten years ago at the expense of the Brazilian government, are dissatisfied with their present condition and prospects, and have determined, like the Welsh settlers in Patagonia, to seek new homes in Canada. Ten thousand of these Polish settlers will come, if they succeed in making suitable arrangements.
It has been suggested that there are many Canadians in the United States who are not prospering there as they anticipated, and would therefore be glad to return to their own land and settle in the fertile plains of the Northwest, if the government would advance funds for this purpose. The movement, in fact, has already commenced. A large district in the province of Quebec has been settled by repatriated Canadians; and proba-
bly a good part of the new settlers now coming into the Northwest territories in such large numbers from the United States are returning Canadians.

At the present rate of destraction, it is estimated, the forests of the United States will have disappeared in twenty years. Canadian forests are therefore becoming more and more valuable. If properly protected, we shall have in our possession practically the whole of the future wood supply of the continent, and the greater part of the wood-working industries dependent on that supply.

Statistics show that though there are many thousands in Ireland who speak the Irish language, comparatively few are teaching their children to speak it. There are nearly a hundred thousand Irish speakers in County Kerry, of whom less than two thousand five hundred are children.
The presence of the bubonic plague in San Francisco is causing alarm throughout the country.

The Colombian government has declined the offer of the United States government of $\$ 7,000,000$ for the privilege of buying out the interest of the French Panama Canal company and completing the work. It is thought that Colombia will offer the right to construct the canal to the highest bidder. The United States required exclusive control of a strip of Colombian territory through which the canal would run from ocean to ocean. If a new company should be formed to finish the work with private capital, the control of this strip would of course remain with the Colombians. In this case, the United States government would probably undertake the construction of another interoceanic canal, by the Nicaragua route.
Branches of the Navy League are being formed in the chief cities of the Dominion, with the approval of members of the Canadian government. Similar branches exist in England, and in other parts of the empire. The purpose is to strengthen the Imperial navy by forming a reserve of trained seamen ready for service in time of war.

The boundary dispute between Chile and Argentina, which was referred to Great Britain for arbitration, has been thus settled. The decision gives to Chile a little more than half of the disputed territory, but not the most valuable portion.

Under the auspices of the British Cotton Growers' Association, an expert is going to Northern Nigeria to introduce the cultivation of cotton. Efforts will also be made to establish the cotton plant in other parts of British West Africa.

The Marconi wireless telegraph station, now about completed, at Glace Bay, Cape Breton, consists of four towers, over two hundred feet in height, the tops of which are connected by four bridges, from each of which are suspended fifty copper cables, converging as they descend and meeting in the operating room of the station. A similar structure has been erected at Poldhu, Cornwall, and is now ready for use. Wireless
communication between Canada and England will probably be opened to the public before many days. A despatch from the Governor-General of Canada to the King is said to be held ready for transmission as soon as the apparatus is ready for use.

Discussing the proposed extension of the Grand Trunk Railway to the Pacific, Sir Sanford Fleming advocates making the Intercolonial a transcontinental line, by carrying it across the new bridge at Quebec and thence by the shortest possible route to Port Simpson. By this route the distance from European ports to Japan and China would be shorter than by the Canadian Pacific route, and very much shorter than by the route via New York and San Francisco.
Discoveries of remarkable interest have been made in the ruins of Upper Egypt by Professor Petrie. In a royal tomb seven thousand years old, he has found jewelry of delicate workmanship, in which beads of precious stones were strung upon human hair and threads of gold twined together, the gold having been beaten out to the thickness of the hair. Cloth as fine as the finest cambric of modern manufacture was found in the same tomb. In another grave he found pottery which, from its shape and material, he believes to be of foreign workmanship; showing that commerce existed at that early period, and that civilization on the shores of the Mediterranean is some three thousand years older than was heretofore believed. He also found inscriptions that show that an alphabet from which our own alphabet has been derived, through those of the Greeks and the Phoenicians, and which had no relation whatever to the Egyptian hieroglyphics, was used in Egypt long before hieroglyphics were introduced; so that we are now able to carry the origin of our alphabet back to prehistoric man.

It has been established beyond question that Galileo was the inventor of the thermometer. Certain writings of his also show that the idea of communicating with a distant person "by means of the sympathy of two magnetized bars" had been suggested in his time, though he seems not to have looked upon it as a practical possibility.

The ashes of Columbus, taken from Havana after the fall of the Spanish dominion in Cuba; have been deposited in a special mausoleum erected for them in the cathedral at Seville, Spain.

Lars Moellers, an Eskimo, who published the only newspaper in Greenland, is dead. He began his journal with pictures only, and distributed it himself in different settlements. In each settlement he taught some one or more of the Eskimos to read. These taught their neighbors, and the newspaper thus found readers. Its publication will be continued by another Eskimo.
The Grand Trunk Railway of Canada is to be extended to the Pacific coast. The projected line will run from some point near Toronto to the northern district of the province of Ontario, and thence across the continent, one hundred miles or more to the northward of the Canadian Paeific road; crossing the moun-
tains either by Peace River or by Pine River Pass, and reaching the ocean at Bute Inlet or Port Simpson, as may be decided later. The country along the route is well wooded, and in some sections even better adapted to corn than that along the Canadian Pacific. The distance is about 2,500 miles, and the work will require about five years for its completion. There is another new railway, the Canadian Northern, now in course of construction, lying between the route of the proposed new Grand Trunk line and that of the Canadian Pacific. A fourth is projected, to run through the north of Quebec province to James Bay, and thence to the North Saskatchewan. There is plenty of room for three or more roads in our great Northwest, and the rapid development of the country is already making their want severely felt.

The most northern railway in the world has just been opened to traffic. It lies within the Arctic circle, and runs from Ofoten, on the west coast of Norway, to Gellivara, in Sweden.
Mexico's great railway, the Mexican Central, is sending out branch lines, east and west, which will soon extend from sea to sea. The western terminus will be at Manzanilla, where harbor works are now being constructed by the government, and the eastern terminus at Tampico.
Wireless telegraph signals between two moving railway trains may be used to prevent collisions. The plan has been successfully tried in Germany.
Three important railways in England have given notice that they will apply for permission to use electric traction instead of locomotives.
A French Engineer predicts that in ten years petroleum and alcohol will be so generally used as fuel that coal mining will not pay. It is proposed in France to raise the Jerusalem artichoke as a source of supply for the manufacture of alcohol for fuel.
Since 1897, Russia has produced more petroleum than the United States. Baku, on the Caspian Sea, is the centre of the Russian oil fields; and two-thirds of its total production now finds a market as fuel oil.
The Turkish troops that were encroaching at Aden have been withdrawn at the demand of the British, and the matter is amicably settled.
Great Britain and Germany may unite in a naval demonstration against Venezuela, to obtain redress for the ill-treatment of British and German subjects.
The volcanic eruption in Guatemala proves to have been more destructive than was at first supposed. Later advices say that several small towns have been destroyed, and five thousand persons perished.
The insurgent forces in Venezuala are disorganized and the revolution apparently at an end for the present. A new insurrection is threatened in Hayti. In Colombia, just as the forturie of war seemed to be turning in favor of the goverriment a new dictator has put himself at the head of affatirs', if there is an ac-
knowledged head. The civil war, however, still continues.

The volcano on the island of St. Vincent continues artive. It is believed that Georgetown will have to be abandoned, and it is doubtful whether any part of the island is out of the range of danger.
A fresh eruption Stromboli, the island volcano near Naples, took place on the 18 th of last month; and the volcano Kilauea, in the Hawaiian Islands, is more active than it has been for twenty years.
An international conference on earthquakes is to be l:eld early in 1903, on the iniative of the German govermment.
Filestical vision is the latest marvellous invention to be recorded. By means of a small rapidly moving instrument at each end of an electric wire, it will be possible to see at a distance, just as we now hear by means of a telephone. The picture becomes visible upon a white screen placed before the receiving instrument. The inventor hopes ultimately to be able to throw the picture directly upon the retina of the eye.
The stories of the days of the Crusades, when men, women and children left their homes in hundreds, following some leader without knowing why or where, have found a parallel in the Canadian Northwest. A company of sixteen hundred of the Doukabors (or Christian Community of the Universal Brotherhood, as they call themselves), marched into Yorkton, Manitoba, on the evening of the 28th October, with no motive and no destination in view, except that they were looking for the light. Some weeks before they turned their horses and cattle loose upon the plains, believing it was wrong for them to hold beasts in captivity. They will not eat meat nor drink milk, nor will they wear clothing of wool or leather. The government soid their neglected animals to other settlers, realizing a large sum with which they are now caring for the women and children of the fanatics. These people complain that they are persecuted, because they are required to comply with the marriage laws and oth-r laws of the province, saying that their religion forbids them to recognize any laws. Three or four years ar, more than seven thousand of them were brought from Russia to Canada, under promise of religious freedom, which was said to be denied to them in Russia. Th $\because$ were very much pitied at the time; but, seeing what their religious freedom is held to mean, perhaps Russia was more to be pitied while they remained. The Doukabors have prospered since they came to Canada; and they are, therefore, not without means. Threcfourths of them are not as yet inclined to go on $\mathrm{r}^{\circ}$.. grimage; but seem contented to submit to our laws, and liay become contented and useful citizens.

Be ashamed of nothing on earth except poor work, which is a thing to be ashamed of. Select whatever you are best fitted for and train yourself to thoronghness in that line.-Ladies' Home Journal.

Rhyming Lesson on the Bones.
In my little face so plainly seen.
If you count the bones you'll find fourteen, And besides all these, somebody has said You will find eight more in my curly head; On both sides of my head is a little pink ear, With three bones in each to help me to hear; And locked together, a long white line, Are the twenty-six bones that make my spine. If you look at my shoulders you there will find A bone in front and a bone behind, While iny twenty-four ribs together combine To make this stout little chest of mine. The bones of my arms you see are but few, Here is one in my arm, in each forearm are two. The bones in my wrist are bound sung and tight, Eight in my left wrist, and eight in my right. There are five in each hand and five in each foot, And in fingers and toes twenty-eight are put; One bone in my hips, and it looks like a cup, The end of my thigh-bone will just fill it up; The bone in my thigh has a very queer nameFemur, or thigh-bone, it means the same. My knee-pan covers the joint at my knee, And from this to my ankle two bones you see. The seven short bones in my ankle found By strong white cords together are bound. If an apple or pear I wish to bite, I've thirty-two teeth so strong and white, And I'll always remember, in spite of my play, With water and brush to cleanse them each day. Since the way I sit my bones must affect, I'll try while I'm young to sit very erect. And when I grow older you'll every one see What a straight man or woman I then shall be. -Lizzic M. Hadlcy, Ośkaloosa, Iowa.

Advantages of Centralization.
I. The health of the children is better, the children being less exposed to stormy weather, and avoiding sitting in damp clothing.
2. Attendance is from fifty to 150 per cent greater, more regular, and of longer continuance, and there is neither tardiness nor truancy.
3. Fewer teachers are required, so better teachers may be secured and better wages paid. Teachers are brought together in a community where professional zeal is cultivated.
4. Pupils work in graded schools, and both teachers and pupils are under systematic and closer supervision.
5. Pupils are in better schoolhouses, where there is better heating, lighting and ventilating, and more appliances of all kinds.
6. Better opportunity is afforded for special work in music, drawing, etc.
7. Cost in nearly all cases is reduced. Under this is included cost and maintenance of school buildings, apparatus, furniture, and tuition.
8. School year is often much longer.
9. Pupils are benefited by a wide circle of acquaintance, and the culture resulting therefrom.
io. The whole community is drawn together.
ir. Public conveyances used for children in the day time may be used to transport their parents to public gatherings in the evenings, to lecture courses, etc.
12. Transportation makes possible the distribution of mail throughout the whole township daily.
13. Finally, by transportation the farm, again as of old, becomes the ideal place in which to bring up children. enabling them to secure the advantages of centres of population and spend their evenings and holiday time in the country in contact with nature and plenty of work instead of idly loafing about town.-School Board Journal.

School Manners.
" Some years ago I visited a public school in Hanover, Germany. I was surprised the day after my first visit to be respectfully greeted on the street by a number of boys. They were from the public school, and though I had not recognized them, they recognized me. There was nothing servile about the matter, but simply a manly and gentlemanly token of respect, an act of politeness.
"A few weeks ago I saw an American boy of nine and a girl of eight introduced to a lady. Neither of them showed the slightest knowledge of what to do, but simply stood awkwardly looking out of the corners of their eyes at the lady without a word of response. It was not timidity, for neither of them is afflicted in that way. It was simply ignorance of one of the simplest practices of etiquette. And their parents are people of culture, the father being a professional man of high standing. I felt very sure that children of the humblest parents in Germany, under like circumstances, would have stepped forward in a polite way, given the hand and said, 'How do you do.' Now we do not like comparisons disparaging to ourselves, but it is better that we look without prejudice at these facts, and as parents and teachers we shall be better able to train the children committed to our care."-L. Seely in Normal Instructor.

## Thought Questions.

1. What hour would be the exact middle of the week?
2. When is the exact middle of December?
3. When will the present century end?
4. What is the difference between six inches square and six square inches?
5. The difference between three times the number and seven times the same number is 72 ; what is the number?
6. From what must be $63-4$ be taken to leave 9 I-2?
7. By what must 7 be multiplied to give the product I-7?
8. By what must 7 be divided to give the quotient 1-7?
9. What number increased by I-6 of itself is equal to 84 ?
10. What is I-2 per cent of I-2?
iI. Find 33 I-3 per cent of 66 2-3 per cent.
11. A cat weighs IO I-2 pounds of its own weight; how heavy is the cat?
12. How many pints in 62 I-2 per cent of a bushel?
13. If the selling price is 2 I-2 times the gain, what is the gain per cent?
14. If the cost is 2 I-2 times the gain, what is the gain per cent?
15. If $4-5$ of the selling price equals the cost, what is the per cent of gain?
16. If I sell I-2 yard for the cost of 2-3 of a yard, what is the per cent of gain?
17. Forty yards of string is to be cut into yard lengths ; how many times must it be cut?

## SCHOOL AND COLLEGE.

The County Academy at Church Point, Digby County, is in charge of Rev. Augustine F. Amirault, Class A., as Principal. Efficient work is being done by the Principal and by the professors of Ste. Anne's College, who are assisting him in the work of the Academy. Twenty-six pupils are enrolled, nearly all of whom are French Acadians. Nine of these pupils are undertaking the work of Grade XII. The remainder are in Grades IX and X.

Mr. Albert H. Leake, the Ontario director for the MacDomald Fund, has been taken over by the Ontario govern. ment and appointed Inspector of Technical Education. His duties comprise the supervision of art and techrrical schools, and of the subjects of manual training and household $s$ :ience.

Miss Williston and Miss Smith, teachers at advocate Harbor, Cumberland Co., have raised the sum of $\$ 33.41$ by means of a pie social. The money will be expended in purchasing a library.

The teachers and pupils of the St. Martins, N. B., superior school, held a successful entertainment on Saturday evening, Nov. 22nd. The proceeds, which netted $\$ 55$, will be expended upon the school library.

The Dorchester, N. B., superior school, B. P. Steeves, B. A., principal, has recently added 150 books to its library.

Nine graduates of Acadia College are studying at Yale University this year.

The Robertson Point, N. B., school held a social on the $4^{\text {th }}$ November, from which they realized a sum of money which will be expended in purchasing a dictionary and other apparatus for the school.

A pie social was held recently at Maple Green school, Restigouche Co. The proceeds, \$29, were used to procure new desks which were badly needed.

The Mount Allison institutions at Sackville were never in a more flourishing condition than this year. The Ladies College has about 175 students in attendance, with prospects of a larger number after the Christmas holidays.

Of the five bursaries competed for in the Dalhousie matriculation examination, four were taken by graduates of the Halifax Academy, and Miss A. K. Pennington, one of the students, led in the examination. Principal Kennedy and his staff are to be congratulated on such excellent results as well as for the fine standing of the Academy students in the provincial examinations for the year.

Owing to the rapid growth of Glace Bay, C. B., considerably more school accommodation has been necessary. A six thousand dollar four department school building is now being erected at Dominion No. 2, and in a short time a large central building will be erected.-Hx. Chronicle.

Miss Longley, daughter of Hon, J. W. Longley, Attor-ney-General' of Nova Scotia, has gained a prize of $\epsilon_{9}$, the Intermediate Pass National Prize awarded by Trinity College, Londoin, to the youngest candidate who gains the highest mark in the theory and history of music. Miss Longley, who gained full marks for her paper, has been a pupil at Edgehill School, Windsor, for the past three years, and has been a pupil of Miss Katherine Manners, the accomplished music instructor of the school. In the same examination two other pupils of Edgehill distinguished themselves, Miss Dorothy Heneker, gaining 95, and Miss Catherine Palmer, 93 , out of a possible 100 marks.

Many schools are vacant in the island of Cape Breton Ten school houses are reported vacant in one territory,

## THE EDUCATIONAL REVIEW.

and the Port Hood Greetings, from which this information is obtained, concludes that this deplorable state of affairs "is principally due to the beggarly salaries offered in most instances to duly licensed teachers who spent much time and money to qualify for such positions. The average pay for teachers is not equal to the wages paid to miners and other laborers. How can we expect those who are entrusted to guide the mental development of the rising generation to have heart in their work if they are not sufficiently paid."

The preliminary announcement of Cornell's Summer Session for 1903 will be found in the advertising pages of this month's Review. We note with interest that among the ninety-eight courses offered, there are sixteen devoted to geography and its underlying science. As an index of the growing favor with which summer sessions of universities are viewed by teachers, we note from the new Cornell Register that the attendance of the summer session of 1902 increased nearly 30 per cent over that of the preceding year.

The University of New Brunswick has lately received several valuable donations to its engineering department. This, as well as other departments in the university, is in a high state of efficiency, the classes are large, and great interest is being manifested by students. More money is urgently needed to carry on with greater efficiency the important work that the university is doing as the head of the educational system in the province. Not only should the government increase the grant, but private citizens should show their appreciation by giving of their means to support the university.

Rev. Dr. Gordon, of the Halifax Presbyterian College, has accepted the principalship of Queens University. The salary is $\$ 4,000$ and house rent free. Dr. Gordon is fiftyseven years of age, is a man of influence and learning, and it is hoped will prove a worthy successor to the late Priticipal Grant.

Cornell University has just adopted a sort of pension system, under which her professors will be placed on the retired list on reaching the age of seventy. For five year; thereafter they will serve as occasional lecturers, and after that have nothing to do; and they will draw a salary of \$1,500 a year--Pathfinder.

The Teachers' Mutual Benefit Association of New York was the first to start the movement for pensioning teachers, so that a discussion of it may be useful to other cities At first the teachers paid one-half of one per cent of their salaries to support the organization, and this amount was further increased by various fairs. The amount thus raised proving insufficient, a bill was framed and passed through the legislature setting aside five per cent of the excise tax for the pension fund. This gives a fund of something like $\$ 250,000$ a year, which is placed in the hands of the comptroller and paid through him to the retired teachers. A teacher has to serve at least thirty years if a woman, and
thirty-five if a man, in order to be retired. The pensioner receives not less than half his actual salary nor more than $\$ 1,500$.

- Dr. Parkin, who has been at Oxford some time arranging for the admission to the university of the Cecil Rhodes' scholars, sailed for New York, November 22. He said that probably 200 students would have residence at Oxford in 1904 under Mr. Rhodes' bequest. He believed that all the provinces in Canada would eventually be included in the provisions of the bequest.


## RECENT BOOKS.

The Chignecto Isthmus and its First Settlers. By Howard Trueman. Cloth. Pages 268.
This book is almost an ideal one as a record of local history. Starting with the thought of writing the history of the Trueman family, the author tells us that interesting facts concerning other families came inevitably to light in his researches. Then with the instinct of the true historian he has given us an admirable setting in a brief though comprehensive outline of the history of the Isthmus. Mr. Trueman has given us many important facts. sifting evidence with much care, and has made us better acquainted with the history of an interesting portion of New Brunswick and of those families who have done so much for that and the surrounding country. Prof. W. F. Ganong furnishes an excellent introduction which closes with the hope that this may prove "the leader of a long series of such local histories which will not cease to appear until every portion of these interesting provinces has been adequately treated."

Masterpieces of Greek Literature, with Biographical Sketches and Notes. Edited by John Henry Wright, LL. D., Professor of Greek in Harvard University. Cloth. Pages 456. Houghton, Mifflin \& Co. Boston.
In these later days, when the usefulness of learning Greek is questioned, it is encouraging to know that there is a demand for translations of the world renowned literature of that country. In this book, attractive both in its appearance and contents, an attempt has been made, and apparently with success, to group together the best examples of Greek poetry and prose, with biographical sketches showing the author's place in literature. Prof. Wright's introduction is a fine piece of writing, a fitting prelude to the noble verse and stately prose which follow.

Qualitative Analysis. A Manual for the use of students of Chemistry in Schools and Colleges. By L. M. Dennis, Professor of Analytical and Inorganic Chemistry, Cornell University, and Theodore Whittelsey, Instructor in Analytical Chemistry, Cornell University, Cloth. 142 pages. Ginn \& Co., Boston.
The introduction discusses in considerable detail the principles and operations involved in Qualitative Analysis. The characteristic features of the remainder of the work are: first, definite and detailed directions for performing the operations that are used in the separation and
detection of the different elements and groups; second, a full discussion of the reasons underlying those operations, and of the precautions that must be observed to obtain the desired results; and third, occasional references to articles in chemical journals that deal with new methods or with those reactions which are still under discussion.

Macmillan's Shorter Geography of the World. By G. F. Bosworth, F.R.G.S. Cloth. Pages 197. Macmillan \& Co., London.
This is a very complete and convenient little handbook for teachers and students, with maps and the main geographical features of the world. It can be easily carried in the pocket.

Sir Walter Scott's Ivanhoe. Abridged for schools. Cloth. Pages $x v+273$. Macmillan \& Co., London.
Attractive, in large clear type, with illustrations, and notes containing explanations of difficult words.

Latin Elegiacs and Prosony Rhymes for Beginners. Hy C. H. St. L. Russell, M. A. Cloth. Pages 134. Macmillan \& Co., London.
This book contains copies of Latin lines for re-arrangement into elegiacs, with a literal translation upon opposite pages.

The Book of Nature Myths. By Florence Holbrook, Principal of Forestville School, Chicago. Cloth. Pages 215. Houghton, Mifflin \& Company, Boston.

This book of Nature Myths will prove interesting reading for children. The material has been culled from the folk-lore of primitive races, and the stories have been adapted to youthful minds with considerable skill. They appeal to the imagination, and are sure to arouse an interest for objects in nature and create a more sympathetic study of them in future years.

Elementary Studies in Insect Life. By Saml. J. Hunter, A. M., Associate Professor of Comparative Zoology and Entomology, University of Kansas. Cloth. Pages 369 , with 260 illustrations. Price $\$ 1.25$, postpaid.
A very attractive book. It presents the biologic phases of insect life on a new plan. It begins with the earliest stages of insect growth and development, and leads the student up to some of the more important phases of biology as presented by insects. The book assists and encourages the student to learn from independent personal observation such facts as he can in field and laboratory concerning insect life.

Select Translations from Old English Poetry. Edited by Albert S. Cook, Professor of the English Langiage and Literature in Yale University, and Chauncey B. Tinker, Foote Fellow in English of Yale University. Cloth. 195 pages. Ginn \& Co., Boston.
Teachers of general courses in English literature and of elementary courses in Old English have experienced considerable difficulty in presenting to their classes good speci-
mens of our earliest literature in adequate translations, and hence instruction covering that period has often been unsatisfactory. The present volume is a selection from the best poetry, in the best available translations (according to the judgment of the editors), with prefatory notes containing, among other useful matter, bibliographical references.
D. C. Heath \& Co., Boston, have published under the title "Right Reading for Children," the views of eminent literary and educational people on this important subject, with a list of suitable books.
Macmillan \& Co., London, have published a short introduction to Graphical Algebra, price 6d.
C. W. Bardeen, Syracuse, N. Y., publishes a small pamphlet which contains some excellent ideas on Business Education, by Supt. Edward L. Stevens, and the foundation that is laid for it in the training received in the public schools.

## DECEMBER MAGAZINES.

The chief features of the December Century are the color work; the beginning of a new serial story, a second paper on the Trusts, and Christmas material which includes an engraving of a Madonna and child, two Christmas stories and Christmas poems....In the wealth of Christmas story in the holiday issue of St. Nicholas, J. L. Harbour's Christmas on the Singing River, Ruth McEnery Stuart's LadyBaby, Marion Ames Taggart's Beth of Queerin Place, Alice Caldwell Hegan's The Watermelon Stockings, and Howard Pyle's The Story of King Arthur and His Knights, peculiar interest attaches to "Lu Sing," written by Louisa M. Alcott some years before her death and now published for the first time.....The Christmas number of The Delineator celebrates the thirtieth anniversary of that splendid magazine, and is the most complete, and at the same time the most beautiful magazine for women ever produced at the popular price-one dollar a year. It contains over 230 pages of interesting matter, including 34 full-page illustrations, of which 20 are in color....Woodrow Wilson, the new president of Princeton university, opens the December Atlantic with an able and stimulating article on The Ideals of America. P. T. MeGrath, editor of the St. John's Herald, Newfoundland, discusses the Atlantic Fisheries from his home standpoint. Francis H. Nichols contributes Chinese dislike of Christianity, showing how the well-intended errors of missionaries and others hamper the spread of Christian influence and provoke antagonism. C. H. Henderson gives some noteworthy Impressions of Porto Rico and Porto Rican Schools; and A. P. Winston continues his studies of the labor question. There are literary articles, poetry and stories, making up an excellent number....A real service is done for readers, in these days of publishing in floods, when a journal selects and describes the really important works in the several branches literature. This very thing is what is attempted in The Outlook's fourteenth annual Book Number in its group articles treating fiction, biography, art, and so on. There are also many portraits, attractive illustrated articles, and (as always and fifty-two times a year) comment on and interpretation of the current history of the world.

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I. Sćhool Year, 1902-3-Number of Teaching Days.

For Term ending December, 1902, the number of Teaching Days in ordinary Districts is 92 ; for Districts authorized to take an eight weeks' vacation the number of Teaching Davs is 82. For Term ending June, 1903. the number of Teaching Days will be 123 in all Districts, except Day of the present Term is December the 19th, 122. The last Teaching Day of the next Term is January rth, 1903 .

## II. Departmental Examinations.

a. Closing Examinations for License.-The closing Examinations for License, and for Advance of Class, will ba held at the Normal School, Fredericton, and at the Grammar School Buildings, in St. John and Chat-

The beginning on Tuesday, the 9th day of June. 1903.
peare's "Merchant of Venice" and selections from candidates is Shakes Byron as found in Select Poems, used in High Schools.
aminations aminations for Advance of Class.-These examinations will be held at the usual stations throughout the Province, beginning on Tuesday, July

The requirements for the several classes will be found on pages 115 nd 116 of the School Manual

Candidates are required to give notice to the Inspector within whose inspectoral district they wish to be examined not later than the 24th day of May. A fee of one dollar must be sent to the Inspector with the application.
c. Leaving Examinations.-Held at the same time and stations as the Entrance Examinations.

These examinations are based on the requirements of the Course of Study for Grammar and High Schools as given in the Syllabus for Grades IX, X and XI.

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d. Matriculation Examinations.-Held at the same time and stations as the Entrance Examinations, The Matriculation Examinations are also based on the requirements of the Course of Study for Grammar and High Schools as given in the Syllabus for Grades IX, X XI.

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All candidates for the Matriculation and Leaving Examinations must send in their applications to the Inspector within whose inspectorfee of two dollars must accompany each than the 24th day of May. A cation may be obtained from the Inspectors or from the Education Office.

The English Literature Subjects for the Matriculation and Leaving Examinations will be the same as for the First Class Candidates at the Closing Examinations.

Examinations for Superior School License will be held both at the June and Julv examinations.

The First Book of Cæsar's Gallic War will be required in both cases. The Mathematical Paper will be baced on Wentworth's Trigonometry and F. H. Stevens' Mensuration for Beginners.
be held High School Entrance Examinationa.-These examinations will Mondar at the several Grammar and other Hieh Schools. beginning on Mondar, June 22nd, at 9 o'clock a. m. Under the provisions of Regulation 46. question papers will be provided bv the department. The principals of the Grammar and High Schools are requested to notify the Chief Superintendent not later than June 1st, as to the probable number of candidates.

For further details in regard to the Departmental Examinations see School Manual, Regulations 31, 32, 45 and 46.
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Thin Bristol Board in assorfed colors; Stout Bristol Board, white: Fancy Paper; Binding trips; Paste; Ticket Punch; Set Squares; and Cardboard Knife. The above sent post free to any address for $\$ 2.25$


