PAGES MISSING



HOLY FAMILY

From a painting by Murillo, in the National Gallery, London

The Educational Review.

Devoted to Advanced Methods of Education and General Culture.

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THE EDUCATIONAL REVIEW.

St. John, N. B.

O most illustrious of the days of time! Day full of joy and benison to earth Where Thou wast born, sweet Babe of Bethlehem!

Which dazzling pomp descending angels sung Good will and peace to men, to God due praise, Who on the errand of salvation sent Thee, Son Beloved!

—Abraham Coles.

The public schools close for the Christmas vacation December 20 and re-open January 6.

The Review wishes all its readers a Happy Christmas and a Bright and Prosperous New Year.

We thank our subscribers for their support and the many expressions of good will that we have received from them during the past year. We hope to deserve the same for the coming year.

We hope the New Year may have for all many joys that come from honest and faithful work, and the appreciation that sooner or later rewards faithful workers.

The picture of the "Holy Family" which forms the Supplement for this month is from a painting by Murillo (pronounced Moo-reel-yo) born three hundred years ago at Seville, Spain. The painter's conception of the faces that form the group will repay careful study.

IMPERIAL CONFERENCE OF TEACHERS.

The report of the Imperial Conference of Teachers' Associations held in London, during July of this year, has been received. This is the first time that members of the teaching profession throughout the Empire have been brought together in consultation. From a somewhat superficial examination of the report it is seen that the Conference was a thoroughly representative one, embracing educational men and women from all parts of the Empire, and that the discussions covered a wide range of educational topics.

The Conference, which was convened by the League of the Empire, was held in Caxton Hall, Westminster, from July 13 to 17. The attendance of teachers from Canada was large with representatives from the colleges and leading schools of the Maritime Provinces.

The Duke of Argyll gave the address of welcome, regretting the fact that the Canadian delegates had been detained on the voyage and would not

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arrive until the second day. His Grace added that the Princess Louise was unable to be present at the opening meeting, but she hoped to meet those attending the Conference later. The large body of teachers visiting the homeland would, he hoped, be a good example to the home teachers to take journeys to other parts of the Empire.

The first subject discussed was the Rural Schools of the Empire, to which Superintendent Dr. A. H. MacKay, contributed a paper on "The Rural

Schools of Nova Scotia."

The desirability of having an Empire certificate for teachers was very fully discussed on a resolution introduced by Inspector Dr. Jas. L. Hughes of Toronto, but after several amendments little was left of the original resolution except to affirm that it was desirable.

An English teacher said they envied their Colonial friends the privilege of coming over to the Mother Country, and visiting its institutions. British teachers were too poor to reciprocate. An invitation was here extended from the government of Ontario, asking the League to hold the next Conference in Toronto. This was accepted by acclamation. Dr. Hughes said he would try to do two things — to secure reduced rates for the delegates across the Atlantic, and to secure reduced rates not only to Toronto, but right across the greatest country of the Empire. (Cheers.)

There are other interesting features of the report to which we have no space to refer in this number, except to the presentation of a gift to Mrs. Ord Marshall, the capable secretary of the League of the Empire, on behalf of the Overseas delegates and British teachers.

CHRISTMAS BOOKS.

The best Christmas gift is a book — something that will give a pleasure for the whole year; or a magazine whose monthly visits will recall pleasant remembrances of the donor and the Christmas season

A book that would be of use for every day in the year and that would be a benefit to a number of people, would be an ideal Christmas gift for a home or a school. Such a book is Webster's New International Dictionary. In nearly every community there is some public spirited citizen, who, if the matter were represented to him, might be induced to make such a present to the school, which for years to come would be a memorial of

his liberality and his desire for a broader culture. The Review hopes that when these lines come to the eye of that citizen he will begin to think and then act.

There are many books appropriate to the Christmas season that are within the means of all, the reading of which would prove a veritable delight to young people and rouse fresh thoughts and new visions of the day and what it brings to mind. What is more appropriate to young or old than a good book?

The writer still has in his possession his first Christmas gift of a book. Well thumbed it is now and bears traces of having gone through at least one fire, but it always recalls the joy of that early Christmas.

Here are a few books that the REVIEW ventures to suggest with the prices, to which a few cents should be added for postage. They may be obtained from Messrs. E. G. Nelson & Company, St. John, or probably from your own bookseller.

Little Match Girl, by Hans Christian Andersen, price 25 cents.

Two Bites of a Cherry, by T. B. Aldrich, price 25 cents.

Hans Brinker (Christmas in Holland) by M. N. Dodge, price 60 cents.

Snap Dragon, by J. H. Ewing, price 50 cents. Christmas Eve on Lonesome, by John Fox, Jr., price 60 cents.

Christmas Eve in a Palace (Traveller's story) by E. E. Hale, price 50 cents.

At Last (Christmas in the West Indies) by Charles Kingsley, price 50 cents.

Christmas Posy and Christmas Child, by Mrs. Molesworth, price 50 cents each.

Christmas Wreck and Other Stories, by F. R. Stockton, price 50 cents.

Christmas in Germany, by Bayard Taylor, price 50 cents.

Christmas Stories, by W. M. Thackeray, price 30 cents.

First Christmas Tree, Spirit of Christmas, Story of the Other Wise Man, all by Henry Van Dyke, price 50 cents each.

Christmas on the Nile, by Charles Dudley Warner, price 50 cents.

Polly of the Hospital staff, by Emma C. Dowd, price \$1.00, has no special reference to Christmas but has the spirit of Christmas all through; a good story.

CENTENNIAL ANNIVERSARIES OF WAR OF 1812.

J. VROOM.

VII.— DEFEAT AT SEA.

December 29.— When military operations ceased on the Niagara frontier, in the beginning of December, the Canadians had learned self-respect and self-reliance. They had learned that a soldier is not made by arms and ammunition, but by training and discipline; and that a few trained soldiers may hold in check an army composed of untrained officers and untrained men. The fortunes of war had been in their favour because they had good leaders and were well prepared.

But while the land forces of the United States, superior to their antagonists in numerical strength, had met with an unbroken series of humiliating defeats through lack of preparation and efficient leadership, the opposite was true at sea. No great battle had been fought by the fleets; but there had been three notable encounters between single ships, in each of which the United States vessel won; and to these the people of the United States still look with pride, forgetting the defeat of their armies in the renown of their navy.

The sea fights of the War of 1812, as distinquished from the battles on the lakes, do not belong to Canadian history; but as Britons we have at least as much interest in them as we have in the battles of the Peninsular War — perhaps more, inasmuch as we more often hear them mentioned.

Without exception, the most famous ship in the history of the United States navy is the "Constitution." She was one of the three larger vessels of the little navy, in 1812, which were rated as forty-four gun frigates, though they actually carried a larger number of guns. Very small vessels they were, compared with the mighty warships of to-day: and small in comparison with a first class British battleship of that time. So far as there was any difference between them, the "Constitution" was the best of the three; and two of the three victories of 1812 were won by her. In August, she encountered near the banks of Newfoundland a much smaller Birtish ship, the "Guerriere," which she captured and destroyed. In October, a similar action took place off the island of Madeira, between her sister ship, the "United States," and a still smaller British vessel,

the "Macedonian," in which the latter was defeated and taken as a prize. The third combat was off the coast of Brazil; where, on the twenty-ninth of December, the "Constitution" met the British ship "Java" on her way to India, having on board the newly appointed Governor of Bombay. In this case the vessels were more nearly equal in size, and the "Java" was the faster ship; but the crew of the "Java" were newly shipped for the voyage, and the crew of the "Constitution" were thoroughly trained. The commanders were equally intrepid and equally skilful. Victory went to the better crew. The "Java" was captured and destroyed; or was so completely destroyed before she surrendered that she was not worth saving.

These were not the only naval engagements during the year. There were similar duels between smaller ships, in some of which the British were victorious; but the loss of the "Java" was the only occurrence at sea that we can consider of much importance, and its importance was but sentimental. As an American writer says, "Very little was attempted and nothing done by the American navy that could materially affect the result of the war." This is the conclusion of Roosevelt, (now ex-President Roosevelt,) whose history of the war is regarded as the standard history of the naval conflict. Referring not to the events of 1812 only, but to the sea fights of the whole war, he continues: "The material results were not very great, at least in their effect on Great Britain, whose enormous navy did not feel in the slightest degree the loss of a few frigates and sloops. But morally the result was of inestimable value to the United States. The victories kept up the spirits of the people, cast down by the defeats on land." That they were not without a corresponding effect in England is evident from the published letters of the Duke of Wellington. If the conflict must go on, he saw the need of our controlling the lakes, so that we might continue to hold the west, and to repel the invasion of Upper Canada; but he believed that if we could only stop the depredations at sea, by taking one or two of the three large cruisers, that would end the war.

Canada's \$35,000,000 to provide three first class dreadnoughts for the British navy is some return for the protection we have enjoyed from the Mother Country since our birth. THIS SELECT BY MEANING IN THE THE THE SHOULD BE THE STREET,

SUMMER SCHOOLS AND HOLIDAY COURSES.

ELEANOR ROBINSON.

It will be sometime yet before the announcements and calendars of the Summer School sessions of 1913 will be in our hands, but for the benefit of those teachers who like to make plans for the summer during the Christmas vacation, we give some information on the subject that may be of use.

Our own Summer School of Science for the Maritime Provinces is too well and favourably known to our readers to need more than a mention here, as are also the courses offered at Truro by the educational authorities of Nova Scotia.

The Summer School of Queens' University, Kingston, was noticed in the August number of the REVIEW. McGill University has special courses in summer for students of French. The University of Chicago has continuous sessions during the summer months. The Summer School at Harvard University ought to be well known to Canadians, but in 1913, out of over 800 students there, only seven were from Canada, and but one of these from the Maritime Provinces. Last year, this school offered sixty-eight courses, covering twentythree different subjects. The session usually lasts for six weeks, and work is carried on every day but Saturday. There are lecture classes in the morning, and laboratory and library work in the afternoon. The ground covered is generally the same as in a corresponding number of lectures in the regular college course, but there are many special courses for teachers. Students are usually advised to attempt but one subject, at any rate in their first session. The fee for each course is \$20.00 to \$25.00, and a rough estimate of necessary expenses, including fees, books, board and travelling expenses is from \$65.00 to \$85.00 for the session, varying of course with the standard of living desired, and the distance of the journey.

Among the advantages of summer courses at one of the large Universities are: — the access to well equipped laboratories and large libraries, and the chance of meeting and exchanging ideas with people from widely distant parts.

Detailed information about the schools already mentioned can be had on application to the respective Universities.

But it is more especially of courses of study available in summer on the other side of the Atlantic that we want to speak in this paper.

Every year more and more of our teachers go abroad. And probably many who are planning such a trip will be glad to know what opportunities are offered in some of the places they are most likely to visit. Apart from the actual work of the course, it is a very desirable thing to be tied for a set time to some historic town, or famous district and to feel oneself a little more at home than one does as a mere tourist.

The famous old town of St. Andrews, in Scotland, has a Summer School under the direction of the Provincial Committee for the Training of Teachers. The classes are held in the rooms of the United College, and go on for four weeks. Last year the dates were July 17 to August 11. But students may attend for either the first or the last fortnight of the time. The courses are all for teachers, illustrating aims and methods of instruction, and include lectures on the teaching of history (ancient and modern), geography, English, applied mathematics, applied phonetics, voice production, nature study and other subjects. The fees are very low, fifteen shillings for a single fortnight, thirty shillings for the whole session, allowing attendance at three courses. No estimate of general expenses can be given here, but the trip ought to be done cheaply if passage is taken to Glasgow. Then a part of Scotland that is famous in story could be seen on the way to the "Ancient Kingdom of Fife" and the loyal burgh of St. Andrews. Particulars, including a list of rooms to let, will be sent to anyone applying to James Mallock, Esq., Director of Studies, 77 North Street, St. Andrews, Scotland.

Before we leave Scotland, mention must be made of the vacation courses in English at the University of Edinburgh, held in August. These are intended primarily for foreigners, but the secretary writes:-"Although our courses are attended by only a few regular students whose mother tongue is English, the lectures on literature are found by these stimulating and instructive, while the evening meetings, the excursions, and the opportunities for social intercourse with members of various nationalities from the continent provide many with a period of intellectual relaxation which they find both pleasant and profitable." These courses, like those at St. Andrews, extend over a month, but here also, fees may be paid for a single fortnight. (£2 for a month, £1 5s for a fortnight.) Here is an excellent opportunity to see Edinburgh and its surroundings. under good guidance. Excursions are taken to Melrose, Abbotsford, the Trossachs and other beautiful and interesting places. Information may be obtained from the Acting Secretary, J. J. Waugh, Esq., W. S., 43 George Street, Edinburgh.

Those who are specially interested in Nature Study or Educational Handwork, and who would enjoy a stay in one of the most beautiful country districts in England, will be glad to hear of the summer course at Ambleside, in the English lake district. In 1912, this course lasted from July 22 to August 31. Instruction is given in different branches of handwork, including Wood Carving, Sloyd, Metal Work and Art Needlework; in Nature Study, and other subjects. Certificates obtained for these courses are recognized, according to the prospectus, by the Boards of Education of the United Kingdom. Tuition in two subjects for one week costs about \$5.50; for the whole six weeks, about \$18.00. Board at the hostel is from \$7.00 to \$8.00 a week. Excursions are organized to all the well known points in the Lake District. The secretary, Rothay Holme, Ambleside, Westmorland, England, will supply all necesssary particulars.

The University Extension Summer Meetings are held in August, alternately at one of the great English University towns, with occasionally a divergence to some other historic place, such as Exeter. These attract a great many students from abroad, as well as from the United Kingdom and the Colonies. They offer an opportunity to hear many learned lecturers, and to see Oxford or Cambridge under pleasant conditions. The fees are about the same as those at Edinburgh. There are additional courses of lectures of a more specialized character under the same direction.

But teachers who wish to do some hard work under skilled guidance are recommended to consider the course offered by the Oxford University Delegacy for the Training of Secondary Teachers. This is intended for teachers who wish to qualify for the Oxford Diploma in Education, but is open to anyone. The work comprises "two discussion lessons given each morning to a class of boys, one or two lectures daily, reading under guidance, and essay writing." There are lectures on the Theory and History of Education, and on the following school subjects: Natural Science, Geography, Mathematics, History, Latin, French, English Literature, Grammar and Composition. Two groups of subjects are taken up each week.

The fee for one week is about \$12.00; for four weeks about \$36.50. For particulars, application should be made to secretary, Secondary Training Delagacy, Old Clarendon Building, Oxford.

For English-speaking people who wish to study French, German or Spanish, the Teachers'Guild of Great Briain and Ireland offers a programme of Modern Language Holiday Courses. This pamphlet, containing full particulars about studies, board, journeys, and expenses, may be had for sixpence from the office of the Guild, 74 Gower Street, London, W. C. The French course is given at Honfleur, a picturesque seaport of Normandy, within half-an-hour of Havre by steamer. There are delightful excursions to be made in the neighbourhood, and Caen, Lisieux, Rouen and Falaise may be visited from Honfleur. Arrangements are made for students to board in small parties with private families, so that they are obliged to speak French. The work consists of lectures, conversation classes, composition writing and reading under direction. There are elementary classes for those who have little knowledge of spoken French, and more advanced work for others. Classes open in the first week in August, and go on for three weeks. The whole expense of the course, including the journey to and from London is estimated at a little under £11 (about \$53.00). Canadians would find it convenient to sail direct to Havre. The classes in German and Spanish, held respectively at Lübeck and Santander, are conducted on the same principles as those at Honfleur.

Teachers who are going abroad, whether to attend lectures or not, are strongly advised to write to the Teachers' Guild for their handbook, containing lists of recommended lodging and boarding houses in different countries. It costs one shilling and is well worth the money.

Thank God every morning when you get up that you have something to do that day which must be done, whether you like it or not. Being forced to work, and forced to do your best, will breed in you temperance and self-control, diligence and strength of will, cheerfulness and content, and a hundred virtues which the idle never know.—Charles Kingsley.

Let your Christmas gift book be wholesome as well as interesting reading.

QUESTIONS ON "SNOW-BOUND."—GRADES IX AND X.

1. Give a brief sketch of the life of Whittier.

2. Whittier making slippers reminds us of Shakespeare ——; of Dickens——; of Goldsmith——; of Johnson and Garrick ——; of Thoreau ——, etc. Name two or more poets who never experienced poverty.

3. Which state in the United States is called the Quaker State? Name one famous Quaker. Tell some important facts about the manners, customs, beliefs and speech of the Quakers.

 Explain: "not in easy circumstances," "temperance journal," "abolition cause."

5. Who were Howard, Wilberforce and Clarkson? Why would Whittier rather "have their memory than the undying fame of a Byron?" Quote Wolfe's words.

6. Name several of Whittier's religious poems; also his poems on country life. Collect all the poems of Whittier in the various school readers an put them in one class or the other.

7. Who may be called the father of American poetry? Why? Name other American poets.

8. How long was Whittier writing "Snow-Bound?" Gray writing his "Elegy?" Scott writing his "Bride of Lammermoor?" and Johnson getting his Dictionary ready for publication?

9. Explain: herd's grass, portent, stanchion rows, querulous challenge. Name other cocks besides Whittier's In what modern play does a cock figure?

10. What were some of the signs of the coming storm? How long did the storm last? When did it begin? Name other famous storms in literature.

11. Read lines 43, 44, 45, 46 and illustrate by drawings.

12. Explain hoary meteor. How many kinds of meteors are there? Give examples of each kind.

13. "The old familiar sights of ours
Took marvellous shapes;"

Name some of them.

14. Find and explain: "Pisa's leaning miracle," "Aladdin's wondrous cave," "his lamp's supernal powers." What are buskins? What kind of a man is a prompt, decisive man? Who was this sort of man?

15. Name the prisoned brutes within the barn and tell how they greeted the boys. Quote

a companion picture to this from Goldsmith's "Deserted Village."

16. Why windless wind? What have other poets said about the wind?

17. What are knolls? Are there any near your home? Show by drawings the meaning of crane, pendent, trammels, andirons.

18. "Under the tree When fire outdoors burns merrily, The witches are making tea."

Why are these lines in italics? Why have they quotation marks around them? Explain the lines. In which of Shakespeare's plays do witches play an important part? How many are there in the play? How would you dress to represent a witch at a carnival? If you were told to put two or more witches in a picture, what would you have them doing? Why? What town in the United States once had a great deal to say about and to do with witches? Give the masculine form of witch.

19. Quote lines from "Snow-Bound" which tell how to build a fire in an old-fashioned fireplace.

20. Describe the country round Whittier's home, judging only from what you read in the poem.

21. What Canadian city is noted for its beautiful ravines?

22. Describe the group round the fireplace that winter evening: People, animals, etc. What refreshments were provided for the evening.?

23. Explain silhouette and couchant tiger. Other positions of the tiger allowed in heraldry? What colors were used in heraldry? Which of Scott's novels has quite a little to say about this sort of thing?

24. Read lines 159 and 160 and comment.

25. How many of the group were left when Whittier wrote this poem? How old was Whittier when he wrote "Snow-Bound?" What does he say about his age in the poem?

26. Why conscious floor?

27. Learn lines 200-205. Why? Collect other lines worth learning.

28. How did the Whittier family while away the time during a stormy winter evening? How do you? Account for the difference.

29. From what poem in their School Readers did the Whittier family recite? Quote. From what poem in your old School Readers would you quote if asked to entertain the family? Quote six or eight familiar lines.

30. Describe the father's varied experiences in your own words.

31. Read lines 230, 231. Quote from "Evan-

geline" a companion picture.

- 32. How does Whittier describe the marshes? Write a few lines on "tales of witchcraft," "gundalow."
- 33. How did the mother spend her evening? Compare with modern mothers. What were the mother's experiences? Compare with the father's.

34. Examples of the "common, unrhymed poetry of simple life and country ways."

35. Explain "Old hearths grew wide to give us room." How could they?

35. What book was beloved in every Quaker home? Why? Tell one of its interesting stories.

37. Read lines 305 and 306. Tell the story.

NATURE STUDY FOR DECEMBER.

L. A. DEWOLFE.

While the vegetable world is asleep, would not our school children enjoy a few lessons on geology? Do not call it geology, however, lest the word frighten them. Call it soil study, or rock study, or nature study, as you choose.

During winter, the action of frost on soils and rocks is everywhere evident. Have the children observe the crumbling soil in the roadside ditches during a thaw. Have them observe, also, large rocks breaking away from the face of a cliff and falling to its base. At what season is this most likely to happen? Notice these loosened stones breaking into smaller and smaller pieces until pebbles and, finally, sand or clay is the result.

Several short lessons could be devoted to this one phase of the subject —"Origin of Soils." The action of plant growth as well as that of frost can easily be observed in this work. What other

The next thing in logical order is the "Transportation of Soils." Some soils remain where they are formed. More, however, are carried elsewhere. What are the carrying agencies? Every child has observed muddy streams after a rain. Why are they muddy? Are they equally muddy near their source and far from it?

These provinces furnish abundant examples of brooks that start on high hills; flow, at first, through rocky gorges with a few large rocks at the bottom; then reach lower levels, where they

widen, flow more slowly, and have gravelly or muddy beds; and, finally, lose themselves in some larger stream which at last reaches the ocean.

A visit to such a stream furnishes topics for many useful lessons. We see the deep "trout holes." How did they get there? Are they at a curve or where the brook is straight? Are they on the convex or concave side of the curve? Is the brook still undermining the bank? What becomes of the soil thus carried away? Do farmers ever do anything to prevent this wearing?

Notice in the swiftest part of the stream only large stones. In a quiet pool at one side of the main current, one may see a bed of sand or mud. [One may observe that snow drifts from exposed places, and accumulates in sheltered places.]

From the foregoing, it is evident that water not only makes soil, but carries large quantities of it to lower levels, or into the ocean. This may seem wasteful. In some ways, it is. The law of compensation, however, works even here; for, though the hillsides may be left barren, valleys elsewhere are enriched. Even the mud carried into the ocean is not, necessarily, forever lost. The deltas at the mouths of rivers have become or will become cultivated land. Much of the soil, even, of our own Maritime Provinces was once under the sea. Land at present under the sea may at some future time be elevated and cultivated. What does Tennyson say about this in "In Memoriam"?

Alluvial soils of our river valleys are instructive. Compare the shape of the pebbles in such soil with those in the river-bed. After studying the disposition of gravel in a river-bed relative to the direction of the river, see if the children can determine the location and direction of an ancient river by the gravel in the soil. This, of course, cannot be observed everywhere; but is worth looking for. Gravelly pieces of land exist along the course of every brook. Study the pebbles in these. Students near the sea-shore or on a lake shore should examine the pebbles there to see how they differ in shape from those in a brook or river.

Where one has access to a "gravel pit," one should try to decide whether it was of river or shore origin. Look for lines of stratification also. That is, are the beds of gravel in layers or not? If so, how did they get there? Similar lines of stratification show in old snow drifts where the snow accumulates at different times. Would this

ed gradually? Just as currents of air build up snow-drifts, so currents of water may build up gravel or sand hills. At the time of building they were, of course, under water.

Of what kinds of rocks or minerals are the pebbles made? Every school should have a collection containing, at least, rocks of the neighbourhood, common building stones, and common minerals of economic value. Stones in the brook may not belong to any of these. Speculation relative to the geographical origin of such stoneswould be valuable. If the teacher does not know the names of rocks the children bring to school, or the story of their origin and history, she can call on some one who does know for assistance. Teachers who are ignorant of the common things in nature are wilfully so.

The story of the brook gravel calls for a know-ledge of the Glacial Theory. Children are capable of observing first-hand the results of the glacier movement. Glacial drift is everywhere. Glacial striae are prominent in many localities. They show best in the Cambrian rocks of the south-east slope of Nova Scotia. Gravel hills of glacial origin exist in many places. They are usually somewhat cone-shaped.

Every winter, we see glacial action on a small scale, which helps us understand the same on a large scale. Notice, when the ice breaks up in river or brook, how ice-cakes are often landed in the middle of a field. They carry with them stones and mud from the bank of the stream where they froze. When they melt, these stones and the mud are left in piles which might be considered miniature hills. One can often trace the path of the ice-cake over the field by the marks where the stones dragged in the mud.

Thus, much of the geological story the teacher will read in text-books is illustrated in every school section. Teachers will find it a pleasure to take up the study with the pupils, and enjoy learning from the brooks and hills when the weather is favourable during the winter.

There is not a coin small enough ever stamped by the hand of man to pay the salary of a poor teacher; there is not gold enough in the mines of the world to measure the value of a teacher who lifts the souls of children to the true dignity of life and living.—Theodore Parker.

NATURE STUDY OF DOMESTIC ANIMALS.

PROFESSOR H. G. PERRY,
Biological Department Acadia University.

Nature study of our domestic animals is, as a rule, much neglected. The animals seem so familiar alike to teacher and pupils that either a knowledge of them is presupposed, or they are passed by as commonplace and secondary. These suppositions are contrary to the spirit of Nature work. The pupil should be set to work. Let him investigate for himself and draw his own conclusions; all work, especially with the lower grades and in initial stages, being carefully directed and supervised by the teacher.

As an example of how such work with domestic animals may be taken up, let us first consider two household pets, the dog and the cat. These animals appeal strongly to every child; they are easily examined, and in the majority of homes both animals may be studied and compared.

The work can be followed under several heads, though, perhaps, two will be sufficient for clearness First, the characteristics of each; and second, stories about each, and an account of their domestication and probable progenitors.

First.—Examine the covering of the dog's body and compare it with that of the cat. Which is the cleaner, smoother, longer, softer, and warmer? Which animal has the longer whiskers, and what is their use? Lead pupils to infer that the cat needs long, sensitive whiskers in hunting her prey in dark holes and corners.

Which has the rougher tongue? Lead your pupils to see that the cat uses her rough tongue in combing her fur. Does the cat gnaw a bone like a dog, or how does it get the meat off? What is the position of the dog as he gnaws a bone? The bone is the dog's tooth brush. Watch him as he performs this part of his toilet. Compare their food, and methods of eating and drinking. Both these animals are often overfed, when they become fat, lazy and stupid.

Compare the fore and hind limbs of each, as to parts, joints, character of the feet, claws and number of toes on each, etc. Which has the the sharper claws, and why? How does pussy keep her claws sharp? Are these sharp claws suited for the habits of the cat, in catching its prey, in defense, and in escaping from its enemies? Compare their different habits in hunting, and note how the dog follows game, and how he

scents his master's steps; does the cat do the

Compare the eyes of each, first in daylight, and then after being for a time in a dark room. Show your pupils that there is a relation between the area of the pupil and the amount of light admitted. Notice the shape and small area of the pupil of the cat's eye as she basks in the sun. Can the cat see in the dark, and why?

Compare the ways in which these animals show pleasure, fright, anger, etc. Which is more

playful?

Lead the pupil to see that the dog's foreleg and foot are similar in structure to his own arm and hand. They are homologous parts. The pupil should learn the names of the parts, bones and joints of his arm, beginning at the shoulder, and let him give similar names to the parts and joints of the dog's foreleg. In like manner study the foreleg of the cat. He is now ready for the dissection of the wing of a bird. The wing of a roasted fowl answers very well. He will soon see it is homologous to the foreleg of the dog and cat, and his own arm. He is now prepared and should be encouraged to extend his observations further, and these should include the foreleg of the horse. After locating and naming the joints in the order of shoulder, elbow, and wrist, as in his own arm, he finds there is a considerable length left over, and he must eventually come to the conclusion that the horse is walking on his toes, as far as his forelegs are concerned; and further, the hoof is homologous to the nail of the dog's toeto which toe? Compare the hind legs of the cat and dog in a similar way, always naming and keeping distinctly separate the joints, in order, hip joint, knee and ankle joint. Make comparisons with the leg of a bird, and also with the hind leg of a horse for homologous parts. The comparison may be extended to include the cow, sheep, etc., with good results. The more difficult of these comparisons are only for the higher grades, and they develop a mental discipline quite as valuable and perhaps as useful as any other line of school work. Besides work of this nature presents a wide correlation of subjects. The pupil has gained a new outlook, especially for such subjects as physiology and anatomy. They become of greater interest for him. He is we depend so much, not only for our pleasure, is largely the study of the homologies in animals.

Second.—Encourage the telling and writing of stories about our domestic animals. It is easy to obtain good stories of St. Bernard and Newfoundland dogs. Jack London's "Call of the Wild" is a story for older pupils; it contains good descriptions of dog trains in the Klondike. Read to your class Wordsworth's "Fidelity," Scott's "Helvellen," Southey's "Llewellyn and His Dog," Mrs. Browning's "To Flush," and other poems and stories.

The dog was domesticated long before the dawn of history, and is supposed to be the first animal brought into the service of man, from its nature, evidently being first used in the chase. The exact origin is also unknown, but he has many wild relatives in all parts of the world, the nearest being the wolf and the jackal in their various forms, especially the wolf, since it is easily tamed and has been frequently domesticated.

The North American Indian had developed dogs from the coyote of the prairie, mixed with a strain of the tinker wolf, to give energy and ferocity. The dingo, or wild dog of Australia, closely resembles our domestic dog.

The cat was also domesticated very early, though perhaps, more for ornament than use. The domestic cat possesses a wide range of congeners the world over, beginning with the tiger and the lion, shading off through the jaguar, leopard and puma, to its nearer relatives, the widely scattered wild cats all over the world. Our domestic form has perhaps been developed from the wild species of Egypt (felis caffra). Professor Shaler says, "it is the only animal that has been tolerated, esteemed, and, at times, worshipped, without having a single distinctly valuable quality."

The uses of these animals may also be considered as a third topic, if time permits. But in no case should the subject be dropped without some consideration being given to the cat as an enemy to birds.

Cats readily return to a semi-wild life, when their depredations become more pronounced; one writer estimates that in the average a cat kills fifty song birds each year. Professor Davenport, of the University of Illinois, sums up the subject as follows:—"The sooner the cat becomes extinct the better for our song birds, on which approaching zoology in the proper way, fot it but for protection against the depredations of insects. The true nature of the cat should be more commonly understood in this respect, as as its proclivity to throat diseases common to children. We can afford to do without the cat."

Equally interesting comparisons can be made between the turkey, and hen, duck and goose.

The turkey is one of our most recently domesticated animals, and is a true American product.

When the Puritans reached New England "they found the woods alive with a strange wild bird, wary and fleet, both of foot and wing, but most excellent eating and easily tamed."

The American turkey exists wild in no less than three distinct species, and no similar species have been found save the related bush turkey of Australia and the adjacent islands.

Further notes on the origin and domestication of animals will be given in the next issue of the REVIEW.

GLOUCESTER COUNTY TEACHERS' INSTI-

The Gloucester County Institute was held in the Grammar School at Bathurst, on Thursday and Friday, October 24 and 25. In spite of the lateness of the season and rainy weather, teachers were present from the extreme ends of the County, as well as from more central portions, making one of the largest institutes ever held at Bathurst. Sympathy of number seemed to add to the general interest and the sessions were filled with lively discussions on all topics under consideration.

Owing to the presence of the most affable of chairmen each session took on a social as well as a business form, and consequently questions were freely asked, promptly answered, and thoroughly understood by all. Miss Foley read a very delightful paper on The Influence of Pleasant Surroundings. As one listened to the statements and reasons expressed in her paper as to why school grounds and rooms alike should be kept clean, neat and beautiful, the only regret was that no school boards were there to benefit by what she so clearly set forth. In fact, this lack is always more or less felt, and ratepayers in general should be encouraged to attend teachers' institutes, where they may learn their duty towards teacher, pupils and school.

Miss Allard, in her paper, Le Francais dans nos

Ecoles, seemed to have a fear of the French language being neglected in our schools.

In the reading and discussion of the papers on School Gardening by Miss Eddy and her pupils, facts were brought out with regard to the possibility of getting grounds suitable to this important branch of agricultural teaching in the public school. It was decided that unless good-sized, well-fenced grounds could be had, school gardening would not be a success. Highway cattle, poultry, dogs and rascals must be guarded against. Miss Eddy declared that it was only through Summer School and the teaching of such men as Dr. D. W. Hamilton that she was stimulated to undertake school gardening under the present system of small, unfenced and otherwise unsuitable grounds. Dr. Hamilton allowed a rental. Teachers and trustees may find it convenient to rent, from a nearby neighbour, a nicely situated piece of ground.

The public meeting on Friday night was largely attended by citizens as well as teachers, and the speakers included all the clergy of the place, members of parliament and officers of the institute. It was stated by one of the clergy that five or six acres ought to be devoted to school gardening. This, perhaps, would be possible only to a consolidated school, and not to the ordinary schools scattered throughout the county.

On Friday morning a lesson on how to teach the adjective phrase, was given to a class of pupils by Miss Frances Lardon. The lesson was excellent and her method worthy of adoption.

Le Patriotisme à l'école, by Mr. Edouard Degrace was instructive and well received.

The last session closed with a very excellent paper by Mr. Thaddeus Hebert. His paper, entitled, Imitation, Interest and Effort: Their Places in Education, so completely covered the ground that there was little room left for discussion or criticism.

The place of meeting chosen for next year was Caraquet.

On the last evening the stop over teachers and others were entertained in one of the nicely decorated rooms of the grammar school. Ice cream and cake were served and a programme of French and English songs and recitations was rendered in a most agreeable manner. The very pleasant and social evening closed with "Bon Soir Mes Amis" and "God Save the King."—Com.

School Gardening.

A paper read by one of Miss Eddy's pupils, contains such a good description of a school garden, its preparation, and some of the uses made of it, that many of the young readers of the Review will be interested in reading it. The following is the essay:

Our school garden was plowed last fall by two of the older pupils. Next May it was cross-plowed, harrowed, and afterwards well manured.

Then we had some hard work in picking up stones and breaking sods, but Lyman Simons, a young fellow of our district, broke up the sods and made it easier work for our rakes and hoes.

We squared the garden with straight edges, eight feet, six feet and ten feet lengths. Afterwards we were not all satisfied with the squaring, so we sent for the surveyor and he said it was correct. Then we began to help him to drive the stakes to mark off the paths and beds.

To do this we drove two iron bars, one at each end of the garden; then the surveyor stood at one bar and Lyman at the other to sight the line. According as they found the line straight we drove a stake at each of the four corners of our beds. Afterwards we had the pleasure of making our little drills to plant the seeds.

To make the trenches straight, we used the school cord. We also had to follow it to sow the seeds of carrots, parsnips, beets, onions, and flowers.

There was a mistake made in sowing the turnip seed because the line was not kept stretched along the drills while the seeds were being planted so the plants did not come up in straight rows; but in the weeding we made them pretty straight, so that no one could notice that they were sowed out of line.

We planted sweet peas and mignonette on the side borders; sun flowers and nasturtiums on the back ground; clovers and alfalfa on the front.

People came to see our garden and to get flowers for their sick friends and themselves; they found the bouquets very nice for they were so sweet smelling and pretty; they said they took a delight in the sweet smell they found at a distance and as they approached the garden.

When our vegetables were ripe we took a pleasure in going to the hospital, taking fruits and flowers to the sick. The matron and nurses thanked us and we were glad to be taken all through the principal parts of the hospital, We found this a beautiful brick building of three stories, with men's ward, women's wards and private rooms all well prepared for patients.

We were told that this fine building and beautiful grounds and gardens were donated by Mr. J. H. Dunn of Bathurst Village, who still supports the hospital by one thousand dollars yearly. Just before we had made our visit, he had given five thousand dollars to put water and other necessary things into the building.

Hospitals and gardens are both good things for our country. In our garden we had a digging day on the afternoon of October 3. Some of the pupils dug carrots, others beets, others, turnips, potatoes, and parsnips. Some of the younger pupils pulled the onions and cut tops off the vegetables. All we dug were good and of a reasonable size. Then we each took home a share of the different kinds of fruits. Some we had sold before this in order to buy a school cabinet.

We found some of the plants doing their life work in one year so we called them annuals. All the pulse family that we had in our garden belonged to this class, except the clovers

and alfalfa; they live on year after year, so we call them perennials.

We also had biennials in the school garden; these were the carrots, parsnips, turnips, beets, and cabbage.

Next spring we intend to set out our biennials and raise our own seeds.

This was all a great pleasure to us, from the time we prepared the ground, sowed the seeds and gathered in our harvest; and now our beds are having barnyard manure spread all over them to fertilize for the spring's sowing and this must be spaded over to lightly cover the manure and turn up any weeds that may be starting to grow.

-LEONARD CORMIER.

A LEGEND OF THE CHRISTMAS TREE.

Once the Christ-child was wandering in the forest. It was bitterly cold. The forest was dense and lonely, and night was coming on. By and by as he wandered he saw a tiny light glimmering through the pine trees. As he followed its beckoning ray it led him to the door of a poor forester's cottage. Although the forester was poor, he had a kind, loving heart and was always pitiful to those in distress.

The little Christ-child, in the guise of a beggar, knocked at the door and begged for shelter from the gathering storm, and the icy cold. The forester seeing only a humble beggar felt great pity for the poor wanderer and took him in, and gave him food and warm comfort. Suddenly the poor guest changed into a beautifully shining vision and the forester gazed in wonder and joy into the face of the Holy Christ-Child.

There was a sprig of green on the mantel, for it was Christmas time. The Christ-Child took the sprig in his hand and planted it beside the cottage door. Then he vanished from their sight.

The little twig grew to be a beautiful evergreen tree that very night, and ever after, every Christmas Day, it bore presents for all the family.

By a stroke of genius the editor of Webster's New International Dictionary, decided on a two-storied page, relegating to the lower part obsolete words (gubbertushed, nawyse), those defined only by cross reference (Lacy's knot), uncommon dialectic words (unco), rare scientific terms (lacturamic), abbreviations (U. S. A.), and all except the most common Scriptural names, names of fictitious persons, and foreign phrases. This leaves to the upper part of the page all that a person ordinarily will wish to know; everything else is in the bottom section. There is no mass of confusing appendixes to waste time over.

A CHRISTMAS TURKEY.

"Come turkeys! Come turkeys!" called a little boy who was standing in the shadow of a big red barn.

Gobble! Gobble! Gobble!

From the farm yard came the turkeys — Bender, While Lady, Black Wings, Brownie, Speckle, and many others.

They are fine turkeys every one of them. Tom is very proud of his flock. He stands waiting to feed the turkeys.

Long ago their bodies looked like little soft balls, and their legs very funny and awkward. That was last spring. Tom's father had said, "If you will care for these turkeys until the holidays you may have half the money that they bring. The hired man will make a pen for them. Be sure that you do not let them wander in the fields when the grass is wet."

Now you know that Tom's father is a farmer. Perhaps you do not know what a very pleasant farm it is, with its wide meadows and large barns, its horses and cows, its ducks, chickens, and turkeys.

Every morning all summer Betty, the cook, has had a large pan of curds ready for the turkeys' breakfast. Mother has helped, too, for in some wonderful way she always remembered the turkeys when the rainy days came and was ready to suggest some plan for their care

Now the turkeys are grown. It is almost Christmas time.

Father has said, "Get the turkeys into the barn to-night, Tom. In the morning we will make the crates and ship the turkeys to the city."

Tom hurries the turkeys into the barn, for isn't he going to have a ride now with Jack Fowler in a new dog cart? He slips the bolt and is off.

Next morning Tom is up early and out at the tool shed to see the crates made.

How fine the turkeys look! One, two, three, four — but where is Bender, the prize of the flock?

Tom rushes to the meadow calling, and then to the house.

"Oh, Mother, I can't find Bender!" Tom is almost crying.

"Perhaps that little boy standing by the gate can tell you something about Bender," said mother, quietly.

Tom looks up and sees John Noble. John Noble is the shoemaker's little son. His father has been

ill all summer. Tom knows that John can have no Christmas turkey.

"Hello, Tom, Bender is over at our house. He roosted on our shed last night. I fed him this morning and he don't want to go away. Mother said I had better tell you and ask your father to send the hired man over to get Bender."

"Bender heard me tell the hired man yesterday that we were going to have him for our Christmas dinner," replied Tom. "He looked very queer and kept saying, 'Quit, quit,' all the time I was talking. Bender is pretty smart."

"Oh," said John Noble. "Is that the reason?" And both boys laughed.

John walked on and Tom ran back to the house.

"Mother," said Tom, "John Noble can't have any turkey for Christmas, I know that." Tom sat very still, looking at the kitchen stove.

"Mother, do you think we could spare Bender? I think John would like awful well to have him for Christmas."

"That is a good thought, my boy. Of course, we can spare Bender. We have many turkeys to ship and plenty to keep. We shall never miss Bender, I'm sure."

"He was the one I wanted for papa's Christmas, but it's all right, mother. I'll let John keep him."

On the day before Christmas John Noble was a surprised and happy boy, but he was not half as happy as Tom Wilson.—School Education.

A DEVOTIONAL EXERCISE.

The following exercise always interest the little ones. It can be shortened or lengthened at any time without confusion to the children:

Teacher — What does the Great Teacher say to little children?

School — Little children, love one another.

Teacher — What else did He say?

School — Do unto others as you would have others do unto you.

Teacher — What is the value of a good name? School — A good name is rather to be chosen than great riches, and loving favor rather than

silver or gold.

Teacher — Can a little child have a good or bad name?

School — Even a child is known by his doings, whether his work be pure or whether it be right — American Primary Teacher.

A CHRISTMAS TELEGRAM.

To Santa Claus, wrote Benny; "I've all the things a boy can want -Books, toys, and pets too many. want some Christmas presents, but I cannot think of any!"

A telegram came back, which read, In big red print, "To Benny B., Try giving gifts this year instead, And help me out. (Signed) Santa C.

THE FIRST CHRISTMAS SONG

(Tune: "Auld Lang Syne.")

The twinkling stars shone clear and bright Above a little town,

And calmly through the quiet night The silver moon looked down.

The little lambs upon the hill Were sleeping safely there, While shepherds "seated on the ground" Watched over them with care.

Then suddenly the angels came On flashing wings of white; Their happy chorus echoed wide Across the silent night. Oh! sweet and clear the angels sang, The sweetest song we know, The story of a little child Within a manger low.

NOEL.

Le ciel est noir, la terre est blanche, Cloches, carillonnez gaiment! Jésus est né; la Vierge penche Sur lui son visage charmant.

Pas de courtines féstonnées Pour préserver l'enfant du froid; Rien que les toiles d'araignées Qui pendent des poutres du toit.

Il tremble sur la paille fraiche, Ce cher petit enfant Jésus, Et pour l'échauffer dans sa créche L'âne et le boeuf soufflent dessus.

La neige au chaume pend ses franges, Mais sur le toit s'ouvre le Ciel, Et, tout en blanc, le choeur des anges Chante aux bergers: 'Noel! Noel!'

- Theophile Gauthier.

Wherever through the ages rise The altars of self sacrifice, Where love its arm has opened wide Or man for man has calmly died I see the same white wings outspread That hovered o'er the Master's head. -Whittier. THE HUNTING AND COLLECTING INSTINCT.

Children have the hunting instinct. Boys have it earlier and later than girls, but all have it. "Hunt the slipper," "I spy," "magic music," and many other games are enjoyed because they exercise this instinct. It is not what they hunt, it is the hunting itself that gives pleasure.

It is not cruelty that causes children to take delight in robbing birds' nests,—it is the pleasure of seeking and finding. They enjoy hunting hens' eggs almost as well,— almost only, because in bird nesting there is another instinct gratified, the collecting instinct. We all like to collect something - post cards, stamps, coins, buttons, or birds' eggs. Now, if these two instincts of collecting and hunting can be both gratified in a way that will avoid cruelty and still give the child the exhilaration of outdoor freedom and an opportunity to show his ingenuity, we have solved the sling shot question for most boys.

Keeping accurate notes of birds seen in the migrations with the incidental rivalries it introduces often stimulates an interest in birds that later becomes a real desire for knowledge. If the child is rich enough to own a camera and patient enough to take pictures of living birds, he will soon outgrow the sling shot. Some boys who have a good ear and are adepts in whistling find pleasure in imitating the birds' notes and in luring them to answer.—School News.

EXAMINATION FOR GRADE VIII.

1. Bought land at \$75.00 an acre and sold some years, afterwards at \$800 a square chain, find gain %.

2. Find value of a triangular piece of land with a base of 800 yards, a height of 50 rods at \$60.00 an acre.

3. A room 20 ft. long, 18 ft. wide, 9 ft., 6 in. high is to have a carpet 27 in. wide at \$1.25 a yard. Allowing nothing for waste, find cost.

4. A commission merchant sells 600 bbls. of apples at \$2.50 a bbl. on 10% commission and invests proceeds at 3% in flour; find total commission.

5. A house which cost \$3500 is insured at six-sevenths its value at 11/4%. If it burns at once find loss.

6. Invested \$7000 in 6% stock at 175. Find income, also rate per cent. made on investment.

7. A note of \$800, dated October 5, at 90 days was discounted same day at 7%, find proceeds, also write note.

8. Tom has half as much again as Dick, Dick has half as much again as Joe. Tom has \$20.00, how much has Joe.

9. Find the square root of 39 to 6 decimal Pupils to be allowed to use arithmetics or other books as much as they wish. No question to have any value unless answer is correct.

Halifax.

-G. K. BUTLER.

WHAT CHRISTMAS IS AS WE GROW OLDER.

As we grow older, let us be more thankful that the circle of our Christmas associations and of the lessons that they bring expands! Let us welcome every one of them, and summon them to take their places by the Christmas hearth.

Welcome, old aspirations, glittering creatures of an ardent fancy, to your shelter underneath the holly! We know you and have not outlived you yet. Welcome, old projects and old loves, however fleeting, to your nooks among the steadier lights that burn around us! Welcome, all that was ever real to our hearts; and for this earnestness that made you real, thanks to Heaven!

Welcome, everything! Welcome, alike what has been, and what never was, and what we hope may be, to your shelter underneath the holly, to your places round the Christmas fire, where what is sits open-hearted! In yonder shadow, do we see obtruding furtively upon the blaze, an enemy's face? By Christmas Day we do forgive him! If the injury he has done us may admit of such companionship, let him come here and take his place. If, otherwise, unhappily, let him go hence, assured that we will never injure nor accuse him.

On this day we shut out nothing!

"Pause," says a low voice, "Nothing? Think!"

"On Christmas Day, we will shut out from our fireside, Nothing."

"Not the shadow of a vast City where the withered leaves are lying deep?" the voice replies. "Not the shadow that darkens the whole globe? Not the shadow of the City of the Dead?"

Not even that. Of all days in the year, we will turn our faces towards that City upon Christmas Day, and from its silent hosts bring those we loved, among us.

City of the Dead, in the blessed name wherein we are gathered together at this time, and in the Presence that is here among us according to the promise, we will receive, and not dismiss, thy people who are dear to us!

We had a friend who was our friend from early days, with whom we often pictured the changes that were to come upon our lives, and merrily imagined how we would speak, and walk, and think, and talk, when we came to be old. His destined habitation in the City of the Dead received him in his prime. Shall he be shut out from our Christmas remembrance? Would his love have so excluded us? Lost friend, lost child, lost parent, sister, brother, husband, wife, we will not so discard you! You shall hold your cherished places in our Christmas hearts and by our Christmas fires; and in the season of immortal hope, and on the birthday of immortal mercy, we will shut out Nothing!

The winter sun goes down over town and village; on the sea it makes a rosy path, as if the Sacred tread were fresh upon the water. A few more moments, and it sinks and the night comes on and lights begin to sparkle in the prospect. On the hill-side beyond the shapelessly-diffused town, and in the quiet keeping of the trees that gird the village steeple. remembrances are cut in stone, planted in common flowers, growing in grass, entwined with lowly brambles around many a mound of earth. In town and village, there are doors and windows closed against the weather, there are flaming logs heaped high, there are joyful faces, there is healthy music of voices. Be all ungentleness and harm excluded from the temples of the Household Gods, but be those remembrances admitted with tender encouragement. They are of the time and all its comforting and peaceful reassurances; and of the history that reunited even upon earth the living and the dead; and of the broad beneficence and goodness that too many men have tried to tear to narrow shreds. Charles Dickens.

CHRISTMAS EVE IN ENGLAND.

Somebody wonders at supper whether the true oval mince-pie is really meant to be in the form of a certain manger; and its contents to signify the gifts, various and rich, brought by the magi to that manger. And while the little ones are staring at this news, somebody else observes that it was a pretty idea of the old pagans, in our island. of dressing up their houses with evergreens, that there might be a warm retreat for the spirits of the woods in times of frost and bitter winter storms. Some child peeps timidly up at the biggest branch in the room, and fancies what it would be to see some sprite sitting under a leaf, or dancing along a spray. When supper is done, and the youngest are gone to bed, having been told not to be surprised if they should hear the stars singing in the night, the rest of the party turn to the fire and begin to roast their chestnuts in the shovel, and to heat the elder-wine in the old-fashioned saucepan, silvered inside. One absent boy, staring at the fire, starts when his father offers him a chestnut for his thoughts. He hesitates, but his curiosity is vivid, and he braves all the consequences of saying what he is thinking about. He wonders whether he might, just for once-just for this once—go to the stalls when midnight has struck, and see whether the oxen are kneeling. He has heard, and perhaps read, that the oxen kneeled on the first Christmas Day and kept the manger warm with their breath; and that all oxen still kneel in their stalls when Christmas Day comes in. Father and mother exchange a quick glance of agreement to take this seriously; and they explain that there is now so much uncertainty, since the new style of reckoning the days of the year was introduced, that the oxen cannot be depended on; and it is not worth while to be out of bed at midnight for the chance. Some say the oxen kneel punctually when Old Christmas comes in; and if so, they will not do it to-night.

This is not the quietest night of the year; even if nobody visits the oxen. Soon after all are settled to sleep, sounds arise which thrill through some who are half-awakened by them, and then, remembering something about the stars singing, the children rouse themselves, and lie with open eyes and ears, feeling that Christmas morning has come. They must soon, one would think, give up the star theory; for the music is only two fiddles, or a fiddle and clarionet; or, possibly, a fiddle and drum, with a voice or two, which can hardly be likened to that of the spheres. The voices

"While shepherds watch'd their flocks by night."

and then-marvellously enough-single out this family of all the families on the earth, to bless with the good wishes of the season. They certainly are wishing to master and mistress and all the young ladies and gentlemen "good morning," and "a Merry Christmas and a Happy New Year." Before this celestial mystery is solved, and before the distant twang of the fiddle is quite out of hearing, the celestial mystery of sleep enwraps the other and lays it to rest until the morrow. The boys—the elder ones—meant to keep awake; first for the Waits, and afterwards to determine for themselves whether the cock crows all night on Christmas Eve; to keep all hurtful things from walking the earth. When the Waits are gone they just remember t between this and Old Christmas will do for the cock, which is said to defy evil spirits in this manner for the whole of that season. Which the boys are very glad to remember; for they are excessively sleepy; so off they go into the land of dreams.

PICCOLA.

Poor, sweet Piccola! Did you hear What happened to Piccola, children dear? 'T is seldom Fortune such favor grants As fell to this little maid of France.

'T was Christmas-time, and her parents poor Could hardly drive the wolf from the door, Striving with poverty's patient pain Only to live till summer again.

No gifts for Piccola! Sad were they When dawned the morning of Christmas-day; Their little darling no joy might stir, St. Nicholas nothing would bring to her!

But Piccola never doubted at all That something beautiful must befall Every child upon Christmas-day, And so she slept till the dawn was gray

And full of faith, when at last she woke, She stole to her shoe as the morning broke; Such sounds of gladness filled all the air, 'T was plain St. Nicholas had been there!

In rushed Piccola sweet, half wild:
Never was seen such a joyful child.
"See what the good saint brought!" she cried,
And mother and father must peep inside.

Now such a story who ever heard? There was a little shivering bird! A sparrow, that in at the window flew, Had crept into Piccola's tiny shoe!

"How good poor Piccola must have been!"
She cried, as happy as any queen,
While the starving sparrow she fed and warmed,
And danced with rapture, she was so charmed.

Children, this story I tell to you, Of Piccola sweet and her bird, is true. In the far-off land of France, they say, Still do they live to this very day.

Calin Thantan

CURRENT EVENTS.

It is stated that Germany was to take possession of Christmas Island, in the middle of the Pacific ocean, on the fifth of this month, and establish a coaling station there. The report that there would also be a German coaling station established at Magellan Strait is denied.

The promoters of Ido, the new international language, are pursuing a different policy from that adopted in the case of Volapük and Esperanto. Instead of offering a complete language for acceptance, they are to develop one gradually; and to this end proposed new words and grammatical forms are discussed in their publications, and if approved are tentatively adopted for trial.

The Panama Canal tolls which are announced to go into effect as soon as the canal is opened are practically the same

as those that will take effect on the Suez Canal in January next. United States vessels engaged in the coastwise trade are to be exempted, unless in the meantime the new administration takes a favourable view of the British protest and decides to treat all alike. Even if the coasting vessels are required to pay the fees, it may be some years before the canal is self-supporting.

The Argentine government has employed a Japanese expert to promote the cultivation of rice, and is also taking measures

to encourage cotton growers.

Storms and earthquakes have been more destructive than the civil war in Mexico during the last month; but there are still roving bands of rebels, and there have been rumours of new revolutionary plots in that unhappy portion of America. Central and South America seem to be unusually quiet. The long standing boundary dispute between Peru and Chili is approaching a settlement. In Santo Domingo, a provisional government has been established, with Archbishop Nouel as president.

The cost of the proposed improvements on the Welland Canal is estimated at fifty million dollars. If undertaken, it is probable that the work will begin next summer, and that five years will be needed to complete it.

Elaborate plans are being formed, chiefly in the United States, for the celebration of a hundred years of peace between our neighbours and us, to take place two years hence.

The supposition that the government steamer "Minto" was ice bound in Hudson Bay proved to be incorrect. She passed through the straits without difficulty.

The steamer "Arctic" will probably not go north again. She is to be used as a light ship on the St. Lawrence.

Final arrangements have been made for the construction of a railway and harbour at Blacksod Bay, Ireland, from which a line of fast ocean steamers will run to Canada.

The New Brunswick section of the Transcontinental Railway, from Moncton to Edmundston, is now open for traffic.

The immense floating dry dock built in England for the harbour of Montreal has been safely brought across the Atlantic and placed in position. It can lift from the water a ship of twenty-five thousand tons.

Over two hundred thousand immigrants came to Canada in the last seven months through the ocean ports, and more than one hundred thousand from the United States.

The National Conservation Congress of the United States, estimates that the destruction of certain birds costs that country in food values upwards of four hundred million dollars' a year. Farmers and fruit-growers will be asked to consider the damage from insect pests that could be avoided by the protection of bird life.

By a new process now in use in Ontario, partially dried peat from the surface of a bog can be taken up as a powder by a suction fan collector, operating like a vacuum cleaner. The work can be done cheaply, and the peat dust promises to be a valuable fuel.

The power to operate fog signals and light in a new German light-house is controlled by electricity from the shore a mile and a quarter distant.

The wireless telegraph station at Neuen, in Germany, is said to be the most powerful in the world, its range being two thousand one hundred miles.

It is not improbable that France will soon begin the construction of a great railway across the Sahara to Lake Tchad, and thence to connect with the British line of railway to Cape Town. Scientists sent out to examine the route have brought back a favourable report.

The declaration of independence in Mongolia has led to a battle lasting two days, in which the Chinese were victorious. There is much excitement in China, where it is thought that the insurrection is encouraged by the Russians, with the ultimate purpose of annexing outer Mongolia to Russia. Russia, however, has declared that she has no intention of annexing Mongolia, only desiring that Mongolia should

have self government.

The rapid advances of the Balkan allies have been checked. While practically the whole of Macedonia is in the hands of the allies, the beleagured city of Adrianople still holds out, and the defences of Constantinople have been strengthened. The Bulgarians have agreed to an armistice, and are discussing with the Turks conditions of peace. The independence of Albania has been proclaimed by some local chieftain, the apparent object being to check the advance of the Servian armies in that direction. There are renewed fears of open hostilities between Austria and Servia, in which other European nations would be involved.

The Federated Malay States have offered to supply the British government with a first-class battleship, and the offer has been accepted. The Federated States are not British provinces, but self-governing states under British protection. It is said that the independent princes of India are preparing to give three such ships and nine armoured cruisers as their contribution to the defence of the British Empire. Canada's action is now being discussed in parliament, and Premier has proposed to offer three first-class dreadnoughts to the Motherland, costing \$35,000,000. Parliament will no doubt give its

assent to this.

Of the six million people who compose the inhabitants of what has hitherto been called Turkey-in-Europe, more than half are Christians of some one or other of the branches of the Eastern Church. Turkey-in-Asia contains as many more; but there they are largely outnumbered by the Mohammedan population.

SCHOOL AND COLLEGE.

Miss Marianne G. Otty, who received the degree of Master of Arts from the Chicago University last summer, is principal of the Queen's County Grammar School, Gagetown. Miss Marian Casswell is the teacher of the primary department.

Mr. James H. Munro, late school inspector for Yarmouth and Shelburne, N. S., died in Boston, November 8, after undergoing an operation. Mr. Munro was a native of Albion Mines, Pictou, was educated at New Glasgow Grammar School and Pictou Academy, and taught school in different parts of Nova Scotia, chiefly in Shelburne and Yarmouth, where he held several important positions until his appointment in 1886, to the office of school inspector of these counties. This office he held until 1907, when failing health obliged him to retire. During Mr. Munro's inspectorship, the schoolhouses were greatly improved and many new ones were built. He was a man of scholarly and quiet tastes and devotedly attached to literature. He had attained to the ripe age of eighty years.

A district Teachers' Institute for West Colchester was held at Great Village, N. S., on October 24 and 25, and another at Lower Stewiacke, on November 7 and 8, both under the supervision of Inspector Campbell. The institutes were largely attended, and model lessons were conducted in physical drill, nature work, drawing, primary reading and number, language work and other subjects, by competent teachers.

Mr. J. S. Gordon, a native of Prince Edward Island, recently inspector of the High Schools of British Columbia, has been appointed Superintendent of Schools for the city of Vancouver. Mr. Gordon is fitted for his responsible position by ability and experience, and his appointment will be a source of strength to the schools of that enterprising city.

Miss E. Iva Yerxa, one of the Canadian Contingent of teachers to South Africa from St. John, N. B., in 1903, has returned and accepted a temporary appointment in the St.

Mr. J. E. Barteaux, inspector of Evening Technical Schools in Nova Scotia, finds the schools in the mining districts of Cape Breton in a satisfactory condition, with good rooms, an excellent staff of instructors, and with the promise of a larger attendance than ever before.

The University of New Brunswick will elect a Rhodes Scholar to Oxford this year. Applications have been received from five candidates and the election must take place before January 1st.

Mr. Jos. F. Alexander, a student of the junior class of the University of New Brunswick, died of typhoid fever at the Victoria Hospital, Fredericton, November 27. The deceased was twenty-four years of age, a native of Fredericton Junction, and had taught school at Petitcodiac and Harvey. He was a brother of Principal Elmer J. Alexander of the Hartland, N. B., schools. Some time ago while on a hunting trip he is said to have drunk swamp water from which typhoid fever later developed.

A scholarship of the value of \$100 annually for five years has been donated to the University of New Brunswick, by Dr. A. Pierce Crocket, St. John, N. B., as a memorial to his father, Dr. William Crocket, formerly the Chief Superintendent of Education, now living in retirement at Fredericton. The scholarship will be competed for by members of the freshman class in the subjects Latin and Greek.

Dr. Everett W. Sawyer of Okanagan College, B. C., has, been visiting friends in the East.

The Nova Scotia Agricultural College re-opened on Tuesday November 5, with an attendance of 102, the largest enrolment in the history of this useful institution. Several students from New Brunswick are in attendance. The influence of this excellently conducted college is steadily increasing.

A fine new school building was opened at Tatamagouche, N. S., on Wednesday evening, November 20, and advantage was taken of the occasion to hold a large educational meeting which the teachers of Colchester County and parts of Cumberland County attended, prior to the holding of a teachers' Institute on the two days following. The building is two stories high with two large school rooms with subsidiary class and laboratory rooms. It is heated by hot air, has hardwood floors and is finished in a superior manner. It is located on an ample square of ground in a central com-

NEW BRUNSWICK SCHOOL CALENDAR

1912-1913

Dec. 17: Examinations for III Class

Dec. 20. Schools close for Christmas vacation.

Jan. 6. Schools open after Christmas vacation.

Mar. 20. Schools close for Easter Vacation.

Mar. 26. Schools open after Easter va-

cation.

May 18. Loyalist Day (Holiday in St. John City).

May 23. Empire Day.

May 24. Victoria Day.
May 27. Examinations for Teachers'
Licenses, III Class.

June 1. Last day on which Inspectors are authorized to receive applications for Departmental Examinations.

June 3. King's Birthday.
June 6. Normal School closing.

June 10. Final Examinations for License begin.

June 16. High School Entrance Examinations begin.

June 27. Schools close for year.

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NOVA SCOTIA SCHOOL CALENDAR

Dec. 21 First day of Chritsmas vacation.

1193

Jan. 6 Public Schools and Normal College re open.

Jan. 30 Class D. Normal College completes course.

Jan. 31 Last day of first half school year.

Feb. 3 Third Quarter begins.

Feb. 10 Class C. admitted to Normal College.

March 1 Preliminary intimation University Graduate Exam.

March 3 March Annual Meeting of School Sections.

March 5 Class A. [Reg VII (c)] admitted to Normal.

admitted to Normal.

March 21 Good Friday (holiday).

April 14 Fourth Quarter begins.

May 1 Applications for University
Graduate Exam. due.

May 2 Arbor Day.

May 23 Empire Day.

May 24 Victoria Day (holiday).

May 24 Applications for High School Examinations to be in.

June 3 King's Birthday (holiday).

June 23 Regular Annual Meeting of School Sections.

June 23 Normal College closes,

ne 24 High School and University Graduate Exams. begin.

June 26 County Academy Entrance Examinations begin.

June 30 Last teaching day of school year.

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J. & A. McMillan, St. John, N. B., are the agents of the Webster-Merriam New International Dictionary for the Maritime Provinces, manding position giving a magnificent view of one of the most beautiful of landscapes in Nova Scotia. Addresses were made at the opening by Superintendent of Education, Dr. A. H. MacKay, Warden Kennedy, M. P. P., of the County and others. The Inspector of the County, W. R. Campbell, the school board and ratepayers were warmly congratulated on the improvement made on the previous conditions.

The work of the institute held on the two following days was most satisfactory, being specially suited to the needs of the younger and untrained teachers. The presence of the two inspectors, W. R. Campbell and Inglis C. Craig, and some of the ablest teachers of the two imspectorates to assist in conducting the work made it one of the most useful institutes ever held in that part of Nova Scotia.

RECENT BOOKS.

In Lt. Col. W. H. Turton's book, entitled The Truth of Christianity, we have a valuable contribution upon the subject of Christian evidences. It is a concise and masterly summary of all the important arguments in support of the Christian religion. It is teeming with accurate knowledge gathered from the fields of science, history, philosophy and theology. The writer believes in evolution, but of a theistic type. He regards evolution not as a cause, but as a method of creation. In support of Christianity he cites the argument from miracles, from prophecy, from the character of Christ, and from history, all of which mutually support one another. The writer, who is a layman, displays remarkable facility of expression and his conclusions are drawn with admirable skill and logical precision. The whole is a beautiful harmonization of science and religion. It is a tonic to faith. (Cloth, pages 604. Wells Gardner, Darton & Co., Ltd. 3 Paternoster Buildings, London, E. C.)—F. S. P.

Another of that delightful series, "Peeps at Great Industries," has been published, entitled Tea, by Edith A. Browne. The volume gives an exceedingly interesting account of the growth and cultivation of tea, followed by a description of the picking and exportation. A number of instructive photographs are used as illustrations. The book is concisely written and cannot fail to be of interest to young people. (Cloth, pages 88, price 1s, 6d. Adam and Charles Black, Soho Square, London, W.)

Volume V. of the Historical and Other Papers and Documents, illustrative of the educational system of Ontario, 1842-1861, by that industrious compiler, Dr. J. Geo. Hodgins, contains a number of the Rev. Dr. Ryerson's annual reports, which are remarkable for their full and varied infor-

mation on the educational events of the times.

In The Fundamentals of Psychology, by Benjamin Dumville, M.A. (Lond.), F. C. P., we have a brief account of the nature and development of those mental processes which underlie education. It is conceded that some study of the mental processes of the child is necessary by all those who aspire to educate. The excellence of this book, especially for the young teacher, consists in its close touch with his school work and its clear exposition of the many different problems that arise in his everyday experience. The book, though concise, aims to be thorough, and the student who reads it carefully and reflects upon it, should have some real knowledge

of the minds and dispositions of children. (Cloth, pages 382, price 4s 6d. The University Tutorial Press, 25 High Street, London, W. C.)

Education: The Old and New. In this book is embraced the views and experience of a teacher whose portrait is given in the frontispiece at seventy-nine years of age, after the experience of half a century as "one not injured by school work. Reason - the suse of systematic physical culture work on the farm." The book is largely made up of personal experiences and methods which the author has found to work out well in his school life, with quotations from books, especially Page's "Theory and Practice of Teaching," which have been useful guides to him. (Cloth, pages 299, price, \$1.00. Published by the author, William P. Hastings, Battle Creek, Michigan.)

Egerton Ryerson and Education in Upper Canada. Education and school legislation in Ontario are so inseparably bound up with the name of Egerton Ryerson that to give the work of his active life is to give a record of educational development and progress in that province. This record has been very successfully accomplished by Mr. J. Harold Putnam, inspector of Public Schools, Ottawa, and is a work that will find many readers, especially those who would acquire a fuller knowledge of the educational institutions of Ontario. (Cloth, pages 270. Wm. Briggs, Toronto.)

There is so much beauty and vigor in the old English ballads and there are so many qualities in them that appeal to child nature, that they should be called more into use in our schools. In Long's English Ballads, selected and arranged for elementary schools, the historical setting has been given so that the child may read intelligently and enjoy these brave old stories in which heroic actions make their appeal to him. (Cloth, pages 146, D. C. Heath & Co., Boston.)

Visual Geography. This is a practical pictorial method of teaching geography to very young children. By means of simple pictures this little book, the price of which is only sixpence, brings before the child conceptions of sea and land, animals and plants, etc., to develop the child's "geographical imagination." This book will interest children and will cultivate the power of drawing and "thinking in shapes. (A. & C. Black, 4 Sobo Square, London, W.)

LATE MAGAZINES.

The first issue of the Normal College Gazette, (November), published by the Student's Institute in connection with the Normal College, Truro, N. S., presents a very creditable appearance. It has many original articles and notes which make up an interesting and readable college paper.

The Christmas number of the Canadian Magazine is filled with interesting reading matter and is beautiful in illustrations. The cover decoration is a charming bit of painting.

The Century for December in color designs, stories, literature on Christmas and general attractiveness makes a fine holiday number.

St. Nicholas in its Christmas number maintains its reputation as the best magazine for boys and girls. No more appropriate Christmas present could be thought of for them.

The Youth's Companion brings a pleasure every week to the family in which it enters. For clubbing terms see the November EDUCATIONAL REVIEW.