

# THE EDUCATIONAL REVIEW.

FOR THE ATLANTIC PROVINCES OF CANADA.

VOL. XVI. No. 8.

ST. JOHN, N. B., JANUARY, 1903.

WHOLE NUMBER, 188.

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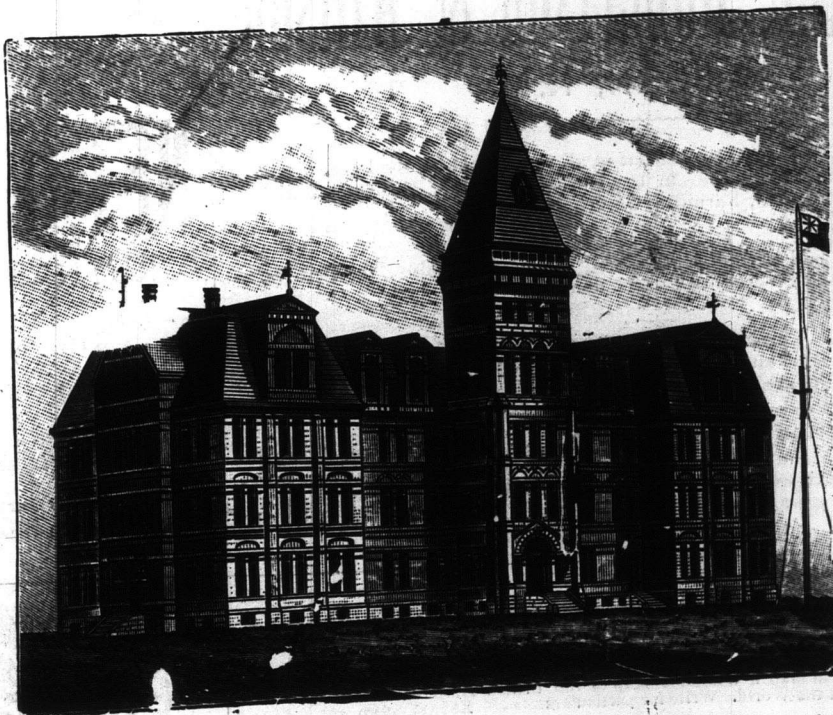
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### Always Read this Notice.

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**EDUCATIONAL REVIEW,**  
St. John, N. B.

We wish our many readers a pleasant and prosperous year, and hope that the work of 1903, upon which they have entered, will prove satisfactory to themselves and excellent in its results to the schools. The ambitious teacher will strive to make this year tell in his aim to become one of the best teachers in the country, and we hope this praiseworthy ambition will animate many. The REVIEW will try to do its share in helping teachers and schools towards a higher and better ideal. The many warm and substantial expressions of esteem that it has daily received during the past few weeks show that its efforts are appreciated.

EFFORTS are being made to establish a school of forestry in Ontario. The Halifax Chronicle, which

has lately been devoting attention to our forests, favors a similar school for the Atlantic Provinces. Under wise, skilful and intelligent management the great natural wealth of our forests should be preserved and increased; unproductive woodlands, adjacent to clearings, made as much a source of revenue as other portions of the farm; old pasture lands and fields planted with spruce, pine, and other trees suited to their soils; and the danger from forest fires be subjected to a rigid control. All this and much more can be done by intelligent methods, skilful government supervision, and a process of education under specialists in forestry.

AN article on Place-Nomenclature, written for this number of the REVIEW by Prof. W. F. Ganong, is unavoidably held over until February.

THE Superintendents of Education for New Brunswick and Nova Scotia, Dr. Inch and Dr. McKay, have recently held conferences with the inspectors under their jurisdiction, reviewing the work of the past year and observing the educational outlook for the current year.

THE Religious Intelligencer has passed the first half century of its existence. We congratulate its esteemed editor, Rev. Dr. McLeod, on the many evidences of the paper's prosperity, and the goodwill it enjoys of the denomination which it so ably represents.

THE enrolment in the Indian schools of the United States was 3,578 pupils in 1877; in 1902, it was 28,610. Other encouraging features are given in the report of Estelle Reel, superintendent of these schools, such as improvement in the nature of the practical training given, the better condition of homes, cultivation of farms, the raising of stock, and the gradual disappearance of the "blanket Indian," and his nearer approach to becoming an independent, self-supporting citizen.

THE visit to Canada of twenty-five curlers of the Royal Caledonian Club of Scotland is an event of almost national importance, as the visit is made not mainly to try conclusions with Canadian curlers at that noble and ancient game, but to promote good fellowship between one portion of our empire and another. From the time of their landing in Halifax, more than ten days ago, the visitors have been received with the greatest enthusiasm, and there can be no doubt but that the visit of so many Scottish gentlemen, some of them occupying in their own country positions of dignity and importance, will result in advantage to Canada as well as to the distinguished club they represent.

In a recent examination for a teachers' license the following answers were given to the question: How do you propose to deal with unprepared lessons, restlessness and inattention, misconduct on the way to and from school.

*Answers:* "I would keep the pupil in after school and require him to learn the lesson, also give him a low mark for the lesson."

"I would give each one that I saw inattentive, an exercise after school to do; also give them a lecture on the matter."

"I would cause them to lose their recess and also keep them in after school, and if this would not stop them I would give them a 'whipping.'"

It is regrettable to see a teacher entering on his work with no higher idea of discipline than this. Is there no better way? Even if the teacher while a student had been subjected to such a wooden method of discipline, one would think that such a process would only have the effect of devising some better way of securing the happiness and well being of pupils. It may occasionally be necessary to resort to senseless and well nigh obsolete methods, but one expects a higher ideal to guide the coming teacher.

ALL progressive teachers must see the great value of the cardboard work that is being done by Mr. Kidner in the REVIEW. The materials are not expensive, and the genuine, practical interest that may be aroused in this subject by a careful study, from the beginning, of Mr. Kidner's drawings and directions, should encourage the introduction of this form of manual training in every school.

The natural slant writing books published by W. J. Gage & Company, Toronto, have the simple round hand that characterizes vertical writing without the stiff upright which has the tendency to the "back hand" movement.

### Some Hints on the Building Up of a Canadian Nationality.

This is the title of a pamphlet of twenty-eight pages from the pen of Mr. G. W. T. Irving, of the Education Office, Halifax. Whether considered as to the importance of the subject, the ability shown in its treatment, or the possible results of its publication, this brochure deserves the careful consideration of every well-wisher of his country.

For many years Mr. Irving has made a special study of all that relates to ethnography, penology, and kindred subjects, and is therefore better qualified than any other man in these provinces for the task which he has so modestly undertaken. His style is so clear, his arguments so well arranged and illustrated, and his purpose so sincere that he cannot fail to convince every reader of the soundness of his conclusions and of the necessity for immediate action.

First we have a brief but comprehensive glance at the resources of the dominion. The possibilities of Nova Scotia are shown to be as great as those of Denmark or Scotland, with six times the population. It is stated that the dominion is capable of supporting fifty millions of inhabitants. One hundred millions would not have been too great a number.

He points out that in the dominion uniformity of climate and products tends to homogeneity of national life, and therefore to the stability of our institutions. Our climate is moderately cold—sufficiently mild to allow us to beat the world in the production of wheat and cattle, and sufficiently stimulating to produce the most vigorous type of man. In the not distant future a great population will fill this land so favored in soil and climate. What should we do to determine the character of this population?

If a wise farmer were called upon to stock a large farm, he would use every effort to secure the best specimens of the best types of animals having clear records for some generations past. He would prevent the introduction of all inferior types. Surely the same scientific principles should guide us in the selection and encouragement of only the best classes of immigrants and the discouragement or prevention of degenerate populations.

Mr. Irving shows by unanswerable figures that our policy in this respect has been gradually deteriorating—that the number of fair-haired, vigorous Tuetons from the North is declining, while we are receiving increasing numbers from southern

Europe—Slavs and Doukabors, ignorant, unprogressive and fanatical. He vividly portrays "the danger, if not the criminality, of allowing such people to come into the country." "There is a duty which we owe to those coming after us, to transmit to them a heritage free from the contaminating influence of an alien race, with whom we have nothing in common, and which may neither amalgamate nor die out." "Instead of expending our strength to secure quantity, we should look very carefully after the quality of those coming to us."

Another important element in the building up of a Canadian nationality is the reformation of degenerates and the proper care of incorrigibles. The excellent work done by our present charitable institutions is acknowledged, but very much more remains to be done. Almost no provision is made for the feeble minded, though they are considerable in numbers, and their condition is often most pitiable. Many of them might be made self-supporting, as in Massachusetts. Poverty, ignorance and intemperance produce a class of criminals dangerous to society and a serious burden upon its resources. The history of the "Jukes" family is a most striking illustration. Our laws dealing with criminals are still a disgrace to civilization. "We have one cure for all sorts and conditions of crime" and criminals, "so many months or years of imprisonment, according to the crime committed, without any consideration of the effect upon the individual. What we need is an institution to which young persons with criminal tendencies can be sent, and where they will receive a careful physical, mental and moral training, and a sufficient insight into some handicraft by which they may be able to earn a living, and where they shall remain "until experts say they are fit to take their places in society again." "Crime is a disease and should be treated as such." "Incurables should be carefully guarded and never allowed at large." In the admirable prison at Elmira it has been proved conclusively that a large proportion of criminals can be permanently cured. Such curative measures should be adopted in this country before the proportion of criminals increases and becomes a serious burden to the state, as the conditions of life become more stringent.

"In this young country we have no classes among our people, nor vested rights of great antiquity to clog the wheels of progress as in older lands." With the introduction of only desirable immigrants and the turning of incipient criminals into useful citizens we may hope to take rank among the foremost nations of the world.

## CARDBOARD WORK.

T. B. KIDNER.

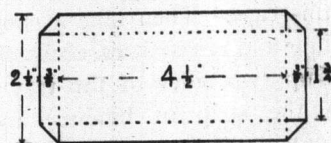
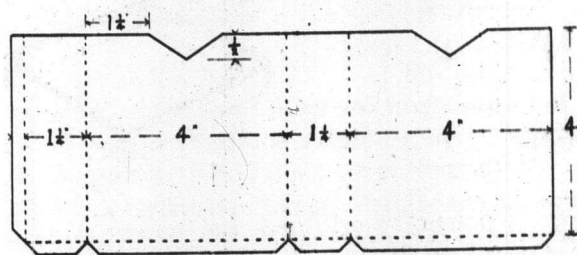
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### EXERCISE 6. An Envelope Case.

This model is in two parts, and the development of each should be drawn.

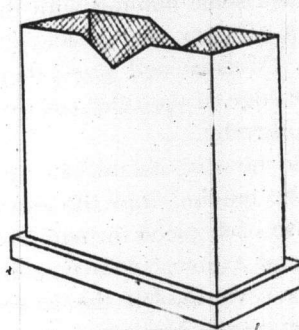
In the practical work the upper portion calls for no particular mention, as it is similar in principle to the previous exercises. Some care will be needed

Ex 6. An Envelope Case



in cutting out the triangular pieces, and the pupils must be warned against cutting too far. The best way is to press the point of the knife firmly into the cardboard at the inner angle and then to cut outwards to the edge of the cardboard.

The base illustrates another method of joining angles, the glue flaps being triangular pieces. In making the base, first cut out an oblong  $5\frac{1}{4}$  by  $2\frac{1}{2}$  inches. Then mark off the side pieces and carefully "half-cut" right along each line. The corners can then be cut off and the triangular pieces severed along one edge, so that they may be turned up underneath and glued to support the sides.



Ex 6. Perspective view.

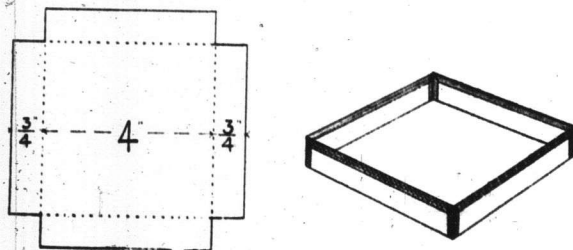
Glue the base up first, and while that is setting the upper portion can be folded and glued on the long edge *a*. When this joint is set, glue the four remaining flaps and press into position on the base.

Sometimes an agreeable effect is obtained by making the base of different colored card from the upper portion.

**EXERCISE 7. A Square Pin Tray.**

This is similar in some respects to the square tray of the elementary series, but instead of the angles being tied with cord or ribbon, they are bound with a strip of gummed cloth.

The drawing will be the development as shown.

Ex. 7. A Square Tray.

For the practical work, mark and cut out as in the base of the previous exercise, but cut the corner bits right out in this case. Then take a short piece of prepared binding and crease it carefully through the centre. Fold up two sides of the tray until they meet, moisten the strip of binding and press it firmly on the outside of the angle. Great care must be taken to get the binding quite even; that is one of the things which make or mar this model. The tendency is to get it a little out of centre, or, slightly askew, thus spoiling the lines of the article.

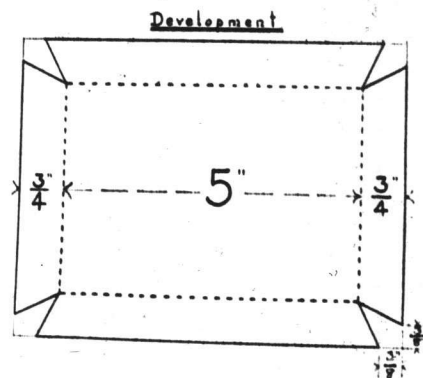
Cut the binding off about 1-16 of an inch above the top edge of the tray and press it down over the edge into the angle. Finish the rest of the corners in this way, and then crease some binding with the gummed side out, and cut off four short pieces for the inside of the angles. Moisten and press them well into position with the edge of the ruler, making the tray strong and neat thereby.

The upper edges should now be bound, and the simplest way is to cut the binding into the exact lengths of the sides, crease each piece through the middle, and bind one edge at a time. It is possible to keep the binding in one length, but the writer has always obtained better results by cutting it up, as each corner can then be neatly mitred. Stout cardboard, at least 8-ply in thickness, should be used for this and the succeeding model.

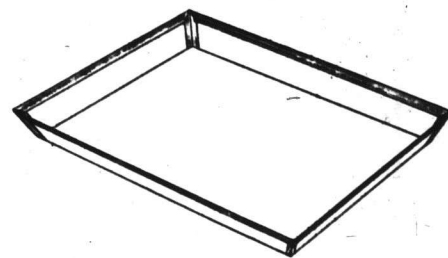
**EXERCISE 8. A Trinket Tray.**

The general principles of this model are similar to those of Ex. 7, but the sides are sloping instead of upright.

Proceed exactly as in Ex. 7 in drawing and cutting out the cardboard; also in the order of the binding operations. The difficulties in this model arise from the fact that the ends of the binding are

Ex. 8. A Trinket Tray.

not square, but have to be carefully fitted in each corner. The half-cutting has also to be stopped when it reaches the right angle.

Perspective view

Cardboard tinted on one side looks well in these trays. Draw and half-cut on the plain face and thus bring the tinted face inside the tray.

If brush or crayon drawing are taken in the school, plain cardboard may be used, and the inside of the tray decorated with some simple design.

**EXERCISE 9. A Money Box.**

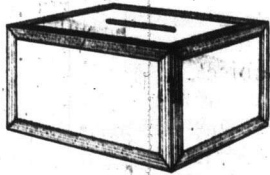
Another exercise in development, and a model usually found to be very attractive to the pupils.

After showing the children the finished model, and eliciting the number, shape, etc., of the surfaces, the development of the four long faces should be drawn. On one of these the slit for the coins must be shown.

For the practical work, little explanation is required. Draw and cut out, as shown in development, taking care to get the half-cutting of even



depth. The slit for the coins is formed by punching holes at either end of it, and cutting from hole to hole with the point of the knife. This portion may be then glued at *a* and left to set while the ends are being prepared. Cut out two pieces exactly square, glue the flaps of the long portion and press the ends into position on them.

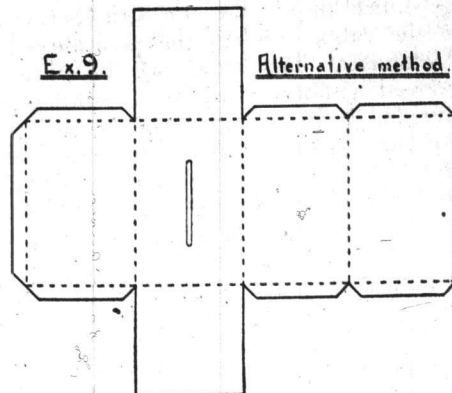
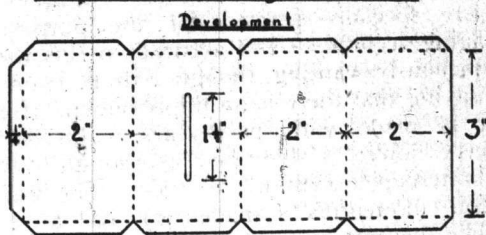


Ex. 9. Perspective view

Binding the angles of this model considerably improves its appearance, but may be omitted if desired.

An alternative method of making is shown in the diagram. It is a better way, but as it involves con-

Ex. 9. A Money Box.



siderable waste of material, is not recommended where expense is a consideration.

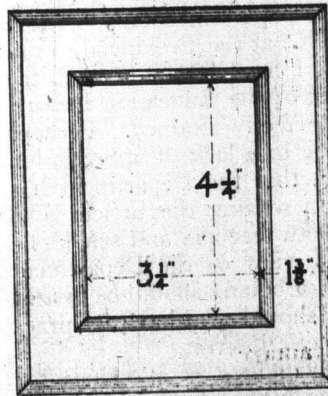
EXERCISE 10. A Cabinet Photo Frame.

Draw, as shown in diagram. If it is desired that the frame be made to stand on a table, a leg must be formed similar to the support of the menu card, and this will, of course, require to be drawn.

In cutting out, a new operation is involved in forming the opening for the picture. Each cut must commence right in the angle. Particular attention must be paid to this and good clean corners demanded,

In binding the outside edges, nothing new is introduced. The edges of the opening will, however,

Ex. 10. A Photo Frame.



demand very careful work. There is no overlapping, and each piece must be mitred exactly to meet the next one.

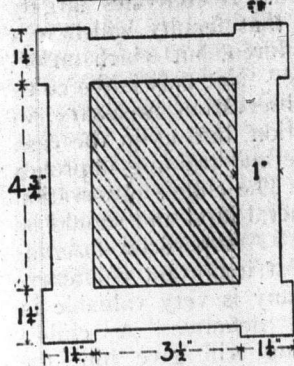
After the front portion is complete, glue a plain piece of card along three of its edges and press it into position on the back.

If the frame is to hang, punch a couple of holes and insert some fancy card, or narrow ribbon, to suspend it by.

EXERCISE 11. An Oxford Photo Frame.

This is a variation of the last design, and is somewhat more difficult to cut out, owing to the number of internal angles in it.

Ex. 11. An Oxford Frame.



The drawing is fairly simple, and the practical work needs no explanation.

Owing to the great number of mitres necessary, this frame takes a somewhat long time to make. It is not absolutely necessary to bind it, however, as it looks very well without it.

As in Ex. 10, it can be made to stand or hang up, and either of the frames can, of course, be used for an upright or lengthwise picture.

Dr. John Kerr, an inspector of schools in Scotland, tells the following story: "An inspector in the examination of a class in easy arithmetic observed that one boy had not answered a single question correctly. Wishing to discover, if the boy was hopelessly stupid, he intentionally 'set a-going a good laugh' against himself by one of his questions. The school was in a fishing village, and the question was on a subject with which he presumed the boy was familiar. 'Suppose,' the inspector said, 'there was a salmon that weighed ten pounds, and it was to be sold at twopence per pound, what would the salmon be worth?' To this the boy at once replied, 'It wadna be worth eating.'"—*Tid Bits*.

### Suggestions to Teachers and Pupils on the Study of Botany.

BY JOHN WADDELL.

When looking over the papers in botany, written by examinees in Grade IX., at the Provincial examinations of Nova Scotia, I have been forced to the conclusion that the object of the Education Department is being only imperfectly attained. Perhaps this is at least in part due to a lack of appreciation by teachers of the object that the Department has in view, and my desire in writing this article is to give some assistance to both teachers and scholars.

I think I represent the view of the Department when I say that the study of botany should be first of all educative, but that it should also have its practical bearing and its æsthetic interest.

Botany has several advantages as a science for the younger pupils of the high schools or for the older pupils of the common schools. The material costs nothing, elaborate apparatus is not required, and though a pocket lens, costing a dollar or less, is of great advantage, much work can be done without it. Moreover, botany is one of the simplest sciences and does not call for a mature mind. It appeals to the senses, it does not require the apprehension of abstract ideas, and is therefore a science that should be early studied. It cultivates largely the faculty of observation, that faculty which is a notable characteristic of children, but which unfortunately they may easily lose. Not only is the cultivation of the faculty of observation necessary, in order to avoid its deterioration, but, as in the case of all our faculties, exercise and training improves upon the natural capacity. The child's observation is liable to be of a very general kind and should be directed along proper paths. A superficial observation does not get at the most important characteristics, and a training in botany is very valuable in making observation more definite. A child's observation of the buttercup will give him the knowledge that the flower is yellow, but this is one of the less essential, though doubtless one of the more conspicuous characteristics.

The practical value of the study of botany is probably most apparent in the case of the farmer; and many of those in our schools who take up the subject do not look forward to being farmers, but on the æsthetic side everyone is interested. A walk through field or wood is made doubly attractive by even a slight knowledge of botany. A knowledge of the peculiarities of plants adds a charm to those whose beauty appeals to even the ignorant and gives an interest to others that are conspicuous or unattractive to the ordinary observer.

It is impossible that in the time allotted to botany in school anything like the whole of the subject should be gone over, but the papers set in the Provincial examinations give a larger choice of questions, and if thorough work has been done by the candidate it is almost impossible for him not to find enough that is familiar.

If he has made a study of trees he is liable to find some question where his knowledge will stand him in good stead; if he collects ordinary small plants, especially when they flower, he will have no difficulty, and if he has made a specialty of non-flowering plants he will have an opportunity of showing his knowledge. Such, at least, was the case in the examination in 1902, and I think there is rarely a paper set that would not give a careful student a fair opportunity for showing the examiner that he has devoted attention to the subject. After all, that is what an examiner wishes to find out. An examination is not a fiendish device on the part of the examiner to puzzle the examinee; its object is as far as possible to discover whether the student has done conscientious work along the right lines, and whether his mental capacity is suited to the work that he has undertaken.

Accuracy is essential. Since one of the main uses of the study is a training in exact observation and in observation of important characters, answers that show only a superficial examination of the thing described, cannot get high marks. The questions asked are specially framed for the purpose of encouraging accuracy. But accuracy of knowledge is conspicuously wanting, though I think I am correct in saying that there is an improvement, if comparison is made with past years. But still a strawberry flower is described as though it were like a buttercup, except in its color. The Canada Cinquefoil (*Potentilla Canadensis*) has a yellow flower like the buttercup, but in essential characteristics it is much more like the strawberry; for instance in the calyx, also in the position of the petals and stamens. The sepals of the buttercup may be removed without disturbing the other parts of the flower, but if an attempt be made to remove the sepals of the strawberry or of the cinquefoil, it will be found that the rest of the flower will be torn.

It should be borne in mind by the examinee in botany that most children six years old know that the strawberry is good to eat, and that the statement of this fact, even if enlarged by the recommendation of sugar and cream, can hardly be expected to impress the examiner with the idea that the pupil has made strenuous efforts to acquire botanical training. I remember once reading a very interesting book descriptive of what the writer saw in his walks near his home on a New England hillside. Much botanical information was given in a very pleasing manner. One chapter began with the remark, said to be a quotation, "Doubtless the Almighty might have made a more luscious fruit than the strawberry, but doubtless He never did." Such a remark was admirable in this little book. It drew the attention of the reader and fitted in with the surroundings. But such a remark would be entirely out of place in an examination paper. The examiner has no desire to have his attention drawn to irrelevant matters. It merely gives him that much more to read. He wishes to find out how much the candidate knows of the subject. It is hard work for an examiner to look over paper after paper, and

if the candidate puts a lot of rubbish into his paper he runs the risk that his knowledge will be hidden. To the examinee I would say, "Pray don't write a great deal of commonplace in hopes that it will hide your ignorance; it only makes it more apparent and may hide what knowledge you have." There is a matter of great interest from the botanical point of view about the fruit of the strawberry. It is that the fruit of the strawberry is what is called accessory. The meaning of this term will be evident from the following considerations: In the case of the pea the fruit is the matured pistil, which forms a pod containing a number of seeds. In the buttercup there are many fruits for each flower, each carpel maturing and containing a single seed which fills the interior. The fruit when ripe falls off from the receptacle which has changed little, if any, during the process of ripening. Fruit like that of the buttercup is called an achene. What we ordinarily call the seeds of the strawberry are achenes, which, however, remain fixed to the receptacle instead of falling off as in the buttercup. In the strawberry the receptacle grows large and juicy and red, and is what we eat with so much relish. Since this edible part is not the matured pistil the fruit is said to be *accessory*. Apples and pears are accessory fruits of another kind, as will be learned rapidly by looking up a book on botany, or more slowly by examining carefully the changes that take place in an apple as the flower gradually changes to fruit.

A question that has frequently been asked at the examinations is "Give a list of plants with the time of flowering and some peculiarity of the plant." The object of this question is to afford an opportunity to any pupil who has been studying plants, but has not found that the particular things asked in the other questions have given him a chance to show to the full extent his knowledge of the subject. It may be that some of the plants asked about in the other questions are not ones specially studied by the candidate, but here is a question that should elicit an answer. Unfortunately, however, the answers reveal either a misapprehension of the question or a lack of knowledge of the subject-matter. Too often the characteristics given are either incorrect or are indefinite. An example of what I mean by indefinite is "root fibrous." I have seen a list of ten or twelve plants opposite each of which were the words "roots fibrous." Now the roots of plants may be broadly divided into fibrous and tap roots, and no doubt there are a good many more fibrous roots than tap roots, and it is more than likely that when a candidate gives a long list of plants and makes no statement other than "roots fibrous," he knows nothing about the matter, even though he should chance to be right in every case; and the examiner would not be justified in giving many marks. If the list contained fifteen or twenty plants, of which a moderate number scattered through the list have tap roots, and if each plant marked "tap root" in reality has a tap root, and each one marked "fibrous" has a fibrous root, the probability is that the candidate really has made a special study of roots and knows something about

them. I will venture to say, however, that not one in a thousand actually does write an answer similar to the case supposed. It is hardly worth while for the junior student to specialize so minutely, though it is an interesting fact that the roots of the dandelion and sow-thistle are tap. I think most children, not to say grown up people, would, off-hand, give the root of the dandelion as fibrous, notwithstanding they may have many times attempted to weed dandelions out of a grass plot; and the root of the sow-thistle is interesting because it is solid and hard, while the stem is for the most part hollow and less firm in texture.

In a list of plants where some characteristic is asked for, some distinct and definite feature should be given, as for example, that the part of the potato that we eat is a tuber or a portion of the underground stem enlarged. This might of course be shortened in the examination paper to "underground stem tuberos."

The square stem of mint or the self-heal is characteristic of the order and is an important feature; the character of the stamens in the lilac is also peculiar; the absence of the corolla and the colored calyx of the hepatica; the shape of the petals in monkshood or in the Dutchman's breeches; the cluster of radical leaves in the shepherd's purse, or still more the shape of the fruit capsule in the same plant, are very noticeable. The statement of facts like these shows that the candidate has been studying to advantage, and wins the approval of the examiner.

I trust that what I have written in this paper may be suggestive and helpful and do something to advance the study of botany in our schools. The points that I have desired chiefly to emphasize are that a training in observation should be given by the study of the science, and that the observation should be *accurate* and directed to the consideration of the features *most important* for the object in view.

#### Tentative Course of Nature Study.

(The following course was prepared by D. W. Hamilton, Principal of the Consolidated School to be established at Kingston, N. B., and approved of, with amendments, by the Canadian teachers at the Chicago University).

Progression and co-ordination of subjects should be secured and confusion and unnecessary repetition avoided. The school garden work should become not only a vital part of the child's education, but the great centre of vitalizing interests and influences radiating into nature in every direction. Let each pupil have a plot. The element of individual ownership is of prime importance. To promote an unselfish spirit there should be a common plot for each grade, in addition, where experiments by the grade as a whole may be carried on.

The field lesson, rather than the laboratory, is the most important factor in elementary nature study. In advanced work a laboratory becomes essential. There is scarcely a lesson in this subject within the range of primary and advanced grades that cannot better be given outdoors than indoors, if one can have access to appropriate conditions. The field lesson should be a source of infinite suggestion and an uplift to the whole nature of both pupil and teacher.

Place the child in appreciative, loving contact with nature, and thus break down the artificial barriers between it and the child. Cultivate a familiarity with all created things as they exist under normal conditions. Do not proceed under the theory that the wonderful things in nature are the most conspicuous. Every region has natural features of interest. Those things should be studied first which are nearest and readily accessible. The nature study should fit the season.

The rigid school-room decorum is out of place in field work. "Keep order" by inspiring the pupils with a desire to learn something and this will result in the necessary self-control. Ignore no object or question that the pupil brings. Try to form in the child the habit of investigation. Let each child examine his own specimen or make his own observations, and express in his own words what he has discovered by his senses.

Each pupil should have something definite to show as the result of his observations. After the lesson or the field work, have the pupils make a record of the work which they have done. Let this exercise depend upon the subject of the lesson. Sand or clay-modelling, blackboard sketches, drawings, water-color paintings, written and oral compositions, may be called for as the material studied may seem to demand. In this way connect arithmetic, mensuration, modelling, drawing, painting, writing, and language work with the nature study lessons. The work in each class will be determined by the ability and knowledge of the teacher, and by the ability of the pupils to intelligently observe and interpret their observations. The work in each grade should be a connecting link between the work of the preceding grade and that of the succeeding one. The chain will thus be gradually lengthened and at the same time strengthened in all links.

"Nature study is learning those things in nature that are best worth knowing, to the end of doing those things that make life most worth living." (Hodge).

GRADE I.—Planting and caring for a small garden plot, and watching the growth of the plants. Note

the seasonal changes in the landscape, and in plants and animals. Habits of common animals observed. Obvious effects of rain on soils, and on plant and animal life. Field trips and excursions.

GRADE II.—Care and observation of a small garden plot. Observations of plant and animal life in meadows, woods, swamps, etc. The colors of leaves, flowers, etc., learned and imitated in crayon or water-colors. Noting changing colors in landscape and corresponding changes in climate. Estimation of weight, distances, measures, etc. Direction from the school-house of conspicuous objects, learned by reference to the cardinal points of the compass. Field trips and excursions continued.

GRADE III.—School-garden work. Each child will have a separate plot. Interrelation of plant and animal life observed in woods, swamps, ponds, meadows, and streams. Some simple experiments to answer questions arising from observations or occupations of the children. General aspect of the landscape and some of the causes of change. Work of running water in wearing away and building up the land. Physical differences in soils. Structure, covering, habits and uses of a few common animals. Field trips and excursions.

GRADE IV.—School-garden work. Observations and comparisons at different seasons of the living forms, animal and vegetable, inhabiting different geographical areas. Explanation in a general way of the differences observed. Easy lessons on heat and steam. Examination of soils for water, gravel, sand and clay. Colors, habits, and songs, of a few common birds. Transformations and habits of some common insects. A more detailed study of domestic animals. Apparent motion of the sun and moon, and the phases of the latter. Field work continued.

GRADE V.—School-garden and natural history excursions. Study earth worms, insects, birds and other animals. Study of common shrubs and trees. Distribution of seeds by wind, animals, etc. Examinations of soils for amount of water, gravel, sand, clay, and humus; and experiments to show the relations of those constituents to plant growth. Varying length of days and nights. Position of sun at noon at different dates. Simple experiments suggested by studies in field and garden.

GRADE VI.—School-garden and field work. Study of animal life continued and extended. Plant life in relation to heat, light, and moisture. The plant societies of different areas, and evident relation to environment. Analysis of food-plants and foods, for water, dry matter, carbon, ash, etc. Easy studies on common rocks and minerals, and their

identification in the soil. Use of thermometer, barometer, and rain-gauge. Distribution of sunshine at different seasons, and its effect on temperature, and on plant and animal life. The landscape as an organism throughout the year.

GRADE VII.—Garden and field work. Studies in animal life, especially of birds and insects in their relation to agriculture. Gross analysis of a few plants. Recognition of plants of the buttercup, rose and lily families, by their family features. Simple studies in chemistry and physics growing out of previous work. Composition of common minerals and rocks. Records of weather changes. Apparent relative motion of the heavenly bodies. Positions and names of a few of the constellations.

GRADE VIII.—School-garden work extended. Fuller interpretation of natural phenomena. Previous studies in animal life reviewed and extended. Study of individual plants, particularly weeds and cultivated plants, with special reference to their adaptations in form, structure, etc., to their surroundings. Simple studies in the lower forms of plant life. Lessons on the food and growth of plants and simple physical and chemical experiments necessary to their explanation. Lessons on the composition of the air and water and their relations to plant and animal life. Aspect of the heavens at different seasons.

### Just Outside the Garden of Eden.

[The following interesting sketch, so suggestive of the true lover of nature, was written by Miss Maria Cavanagh, who died on the 14th of November last. She had taught for over twenty years in New Glasgow, N. S., her native place. She was an accomplished teacher, well versed in ancient and modern literature, an excellent French scholar, and an enthusiastic and intelligent lover of plants. The "Garden of Eden" is a section in Pictou County near the headwaters of the St. Mary's River.]

I know a spot where one can spend a pleasant summer among the brooks, hills, rocks and groves of a natural wild garden. It is not Eden, but it is near the Garden of Eden!

I took my daily walks along the ridges of the central watershed, among the sources of the rivers flowing north and south. The brook running through one farm among my haunts flowed northward to join the French River, while that on the next farm found its way to the lovely Garden of Eden Lake, thence to flow with the St. Mary's River to the south shore.

That is a place of rest for the weary. Simply to live, move, and have one's being is joy enough in that fresh, pure air blowing free from upland to upland, seldom touching ground in its flight across the peninsula from the ocean.

In the morning, at evening, at all times of the day, the hills make their influence felt; and give fresh meaning the old, well-remembered, ever-recurring lines:—"To the hills will lift mine eyes, from whence doth come my aid?" or "Drink deep the quiet spirit of the hills," "To drink the wine of mountain air beside the Bearcamp Water."

One can walk miles without weariness, and sleep like a baby a month old. You gain a great appetite too, but you need it all: if you call at any house in your rambles you are expected to eat a meal before leaving.

But we spent little time in the houses, kind as the people were. We roamed through the woods, and along the brooks, finding flowers we had never seen before, as well as nearly all our old favorites. We were often puzzled by curious leaves and berries which might have revealed their names to us in May, if we had seen their shy blossoming. (It is of little use to ask any one in their neighborhood the name of a berry that is not good to eat; you are always warned that it is a "snake berry.")

In the small groves scattered through the "clearings," we found masses of twisted-stalk of both varieties, the larger (*Streptopus amplexifolius*), having the characteristic abrupt twist in the slender stalk of each berry. Of course, both varieties are called "snake berries," and the name is shared by the red and white baneberries, too.

We saw the leaves and fruits of Trilliums and *Clintonia borealis* whose flowers have such a fascination in early summer.

The brooks were full of the fairylike Meadow Rue (*Thalictrum Cornuti*) in the full perfection of bloom. On Sunday we saw it in masses in the church, but it does not lend its beauty to purpose of indoor decoration. It keeps it to gladden its native haunts. As well try to bring the brook in.

We found Herb Robert, Touch-me-not, Nettles, Water Speedwell, Pyrola, and a variety of St. John's-wort.

And orchids! Does the sight of an orchid send your heart into your mouth? We always looked eagerly about brooks and wet spots, but seldom were we favored with the vision of those fairies. We found Ladies' Tresses in a meadow; and a swamp yielded a splendid specimen of *Habenaria orbicu-*

*lata*. In a marshy spot, pretty high up among rocky hills we found small orchids whose name we could not tell. The outline was like that of a small *Habenaria lacera*, but the flowers were pale yellow with no sign of fringe.

Do you know a soft, trailing plant called Musk, often grown in pots in the window-garden, the scent of its yellow flowers agreeing exactly with its name? Florists' catalogues name it *Minulus moschatus*. We always thought it was something to be tenderly nurtured and protected from frost; but there we found it in a brook, trailing in profusion over the stones, its familiar perfume guiding us to its unlooked-for abodes. It had been observed there for some years, so it is not tender.

It is a good place to see ferns. We observed some varieties which neither of us remembered seeing before, but I will give the names of the acquaintances we meet there:—*Aspidium cristatum* and *A. spinulosum*, Cinnamon fern, *Onoclea sensibilis* and the Ostrich feather variety, two Beech ferns (*Phegopteris polypodioides* and *P. Dryopteris*), and bracken (*Pteris aquilina*).

Beside the most beautiful little brook of that beautiful land of brooks we gathered a large plant that might be *Smilacina racemosa*. Its flowering season was past and it had a raceme of manifestly unripe berries of a greenish color mottled with dark dots, at the end of a single, tall, leafy stalk. We asked the man who owns the farm to tell us the color of the flower, hoping he would say white. He remembered the plant at once, but hesitated over the color of its flowers. "Yes,—they came out early—sort of a pink bunch—no, not white—kind of bluish, may be, but not white at all!" Also he maintained that the berries were blue when ripe. Poisonous,—of course! We are still trying to find that plant in Gray's Botany.

We have often noticed how little these treasures of the fields and woods are observed by those who have been brought up among them. Three summers ago, in this same region, I first saw the weird white waxen plants called Indian Pipe, in a grove of beech and birch trees. I carried a handful of them to the house in which I was staying, expecting at once to hear a name for them; for certainly those strange looking things must have attracted attention. Most of the family had never before seen them, to their knowledge; others knew them, but had never heard a name for them. I kept them in a glass of water, and showed them to the many visitors in vain. Even a college graduate, brought up in a similar and neighboring locality, added little to our knowledge

of the plant. "O yes, I know them! Name? O they have no name! They are just things that come up out of the moss after rain. You found them in moss, didn't you?" At last I picked up a Botany and soon found them.

But do not think that the people are all like these. I take pleasure in telling of one sweet girl of whom nature was making "a lady of her own." To her I am indebted for my first vision of *Corydalis glauca*. Walking up to the door of her home I spied this plant in the front garden, in its very latest blooming, the slender seed-pods crowding away the dainty rose-colored flowers. Though I had never met it before, no introduction was needed. As soon as the first courtesies of conversation had been observed, I made haste to ask my friends about the unusual plant. The girl I have mentioned said she found it in spring in a piece of burnt pasture land, and that she thought it must be a wild kind of Bleeding Heart. Was she not clever to observe that? She knew nothing of botany as a book study. She was very proud of her plant, though her father remarked that it was just a weed, and that they might have trouble yet getting clear of it.

One weed that they will have trouble to rid their the land of is *Senecio Jacobaea*, which has become a pest throughout the country, and has reached these mountains and straths.

We saw a low spreading plant covering a yard and a half of ground like a bristly green rug. We were told that its name is Ground Juniper, and that its berries were good to put into whiskey to make gin out of it! (A little "brewing" is done in securely hidden places in these woods.)

We saw two newly cleared fields radiant with clumps of scarlet elderberry, and near them a swamp full of snowy Turtleheads (*Chelone glabra*).

We picked up some stalks of Agrimony along the edge of a field near a wood, and among the spruce trees we were delighted to find the Partridge-berry (*Mitchella repens*) with its exquisite flowers. To me it seems as beautiful as the Mayflower, and more graceful. Summer after summer I have seen it, and still it seems each summer that I am only noticing for the first time its delicacy and fragrance.

By the way, the people here call its fruit "Snake-berries," too, and warn the stranger not to eat them.

I did not see the white Pond Lilies though they were blooming on Brora Lake two or three miles away.

The fame of the lake, however, rests not on its lilies, but on its trout.

**Junior English Literature.**

I have been asked for a few notes on the life of Eugene Field, the writer of some selections in the N. B. readers.

Eugene Field was born in St. Louis, Missouri, in September, 1850. He lost his mother when he was six years old, and was brought up by an aunt in Mass., and educated at a private school. In 1868 he entered Williams College, but left it the following year on account of his father's death. He afterwards attended Knox College, Galesburg, Ill., and Missouri State University. He then spent six months in Europe, visiting England, Ireland, France and Italy. Shortly after his return he was married, in 1873, and settled in St. Louis. He engaged in newspaper work in that city, and later on, in other cities of the State. In 1881 he became managing editor of the *Denver Tribune*, in connection with which paper he grew to be widely known, and from this time on he wrote short stories and poems.

In 1889 he was forced to go abroad for rest and change. His family went with him, and while in Europe he lost his eldest son, Melvin. This is the bereavement of which he writes in the letter printed in Reader No. 4, p. 217, and the well known song, "Little Boy Blue," is generally supposed to have been suggested by this sad event. He was very fond of children, and a general favorite with them.

Mr. Field died in November, 1895. His best known books are the following: "A little Book of Western Verse," 1889. "A Little Book of Profitable Tales," 1889. "With Trumpet and Drum," 1892. "The Love affairs of a Bibliomaniac," 1896, and "The House," 1896.

I have also been asked to give some suggestions for connecting the work in English Literature with English History. This is something that, in my opinion, should always be done with younger children, *i. e.*, children from 10 to 14. At this period the interest in history is caught by striking events, such as battles and sieges, and the lives of individuals, while the trend of great movements, motives of statesmen and rulers, conditions of the people, legislation and so on, do not interest until a later stage of development. This is the time, then, to insist on a clear outline of English history being fixed in the memory, and my experience is that a poem bearing on historical events or persons, thoroughly memorized, serves as a nail to drive the lesson home.

As I have written some general hints on this subject before, I shall confine myself now to giving

some account of the work done by a class of girls averaging 13 in age, during the last term. Our work in English history was the period from 1714 to the present time, as given in Mr. Robertson's excellent little text book. We began to study poetry in connection with it when we came to the time of Nelson, and the poems studied are "The Battle of the Baltic," selections from "Marmion" and Tennyson's "Ode on the Death of the Duke of Wellington." The plan was as follows: From six to ten, or even twelve lines, according to difficulty, were written on the board, copied by the class, and committed to memory at once, from half an hour to three quarters being allowed for the task. The copies were shown, and marked for writing, neatness and accuracy. As a rule no other writing lesson was done on that day. The girls were expected to look up in the dictionary the meanings of any strange words, as they came to them, but such difficult references as "Gadite wave," "Hafnia," and so on were explained in a brief note on the board. The recitation was sometimes called for on the same day, sometimes not until after. A review of lines previously learned might be expected at any time. The recitation was generally precluded by a little talk about the selection, linking it with what had gone before and with the history lessons. Then word-perfect, distinct, intelligent recitation was expected. Two lessons of this kind were set each week. I found the lines from Scott, ("Introduction to Marmion," Canto I.), on Pitt, Nelson and Fox, one of the most interesting and useful selections I have ever used in this way. We began at "To mute and to material things new life revolving summer brings," and studied down to "Of two such wondrous men the dust." A few facts were given about Scott's life, the time of writing these lines named, and the feelings of the poet when writing were considered. Now comes in the history already learned. Why does Scott say "Oh, my country's wintry state?" Whose was "the mind that thought for Britain's weal?" Whose "the hand that clasped the victor's steel?" After a few such questions the pupils were eager to grasp the references for themselves. Pictures of Scott, Pitt, Fox and Nelson were shown, and also views of Westminster Abbey, where Pitt and Fox are buried near each other in the north transept, and St. Paul's Cathedral, where in the crypt, exactly under the centre of the dome, stands the tomb of Nelson. The children were encouraged to express their appreciation of the lines, giving reasons, where they could, for liking particular passages, finding others dull or difficult and so on. The favorite lines were those beginning: "Hadst

thou but lived, though stripped of power," and ending, "The warder silent on the hill." Every girl seemed to feel the beauty and force of the similes here. The most difficult passage was from, "Who, when the frantic crowd amain," to "Brought the freeman's arm to aid the freeman's laws." The difficulty was admitted, a little extra time given, close reference made to the history in every line; finally, a little rallying put the class on their mettle, and it became a point of honor not to miss in these lines. To my great pleasure I found that the children used the lines they had learned to illustrate their history as they went on. "Spurned at the sordid lust of pelf, and served his Albion for herself," they fitted to other statesmen besides Pitt, and in one case at least these lines served to point a contrast.

Tennyson's ode presented more difficulties, naturally. A few felt the appropriateness of the varying metres and rhythms, as in the passage where "Let the bell be tolled" occurs as a refrain, but most resented the irregularity. "There is nothing to go by; one verse isn't like another," complained one girl. But I believe that familiarity will bring the beauty home to each in some degree, though it may not be a high one. We have not finished this poem, for we broke off as Christmas drew near to learn Milton's "Ode on the morning of Christ's Nativity." And let me digress to beg for a higher standard of Christmas poetry than, I fear, prevails in many of our schools. What a shame it is waste time over the jingles that appear in too many school journals and other periodicals, when our children might be acquiring the treasure of such lines as those I have named, or Shakespeare's "Some say that ever 'gainst that season comes," or Ben Jonson's noble verses "I sing the Birth was born tonight," or even to come down to a lower standard, Domett's "It was the calm and silent night," Keble's "What sudden blaze of song," or Phillips Brooks' "Oh little town of Bethlehem." To go back to Scott and Tennyson: The opportunity to draw attention to figures of speech, different metres, rhymes, and alliteration, was not lost. The last topic is always an interesting one; the pupils quickly picked out the less subtle effects of alliteration, as in "Let the mournful martial music blow," and "Sorrow darkens hamlet and hall." The lines from "Marmion" abound in figures of different kinds, which they soon learned to distinguish, though without the use of long names, such as oxymoron, or metonymy. I need hardly say that no time was given to either parsing or analysis, except in the very few cases where to make plain whether a word was used as a noun or verb,

as subject or object, would clear up a misunderstanding of the sense.

Everything else was subordinated to securing, first, some degree, varying with each child, of appreciation of the interest and beauty of the poetry, and secondly, as I said before, word-perfect, distinct and intelligent repetition. I can hardly insist too strongly upon this latter point. In ninety-nine cases out of a hundred it depends upon the patience and unflinching firmness of the teacher. One hesitating, bungling recitation passed, may be out of sheer weariness and despair on the teacher's part, will undo the work of a dozen lectures on accuracy. A memory lesson, imperfect, is worse than useless. Moreover, good poetry is too beautiful to be marred by bunglers. In every school there will be children who will tell you they cannot learn poetry. My experience leads me to believe that it is true in about one case in a hundred.

ELEANOR ROBINSON.

### Songs and Finger-Plays in Primary Schools.

BY MRS. S. B. PATTERSON.

The selection of a new song for primary grades is rather a serious business. There are so many important points to be considered that frequently one is tempted to give up in despair, and usually after determined perseverance must be contented with something short of one's ideal of perfection. The subject-matter should meet the experience of the children, the poetry must be good, and the words within their comprehension. Also, the music must be simple and attractive. To find all these united in one school-song is to find a prize indeed. When such a discovery is made, the thought of sharing with others should be one of the first impulses of the fortunate teacher, and at least the name of the song and of the book in which it is found might be sent to the REVIEW with a word of commendation.

It is wise, perhaps, not to give too many songs; but there should be considerable variety in the few. One or two songs specially adapted to the season of the year, a few songs with motions, one or two hymns, a patriotic song besides the National Anthem, and at least one humorous song, should be included in the list. When one season passes away, and a new song is given in honor of the next, it may still be well occasionally to sing the old songs for the sake of helping the children to gain a connected view of the year as a whole. A song for rainy days and a song for sunshine, one for wind



and one for clouds, may be used as occasion demands when marking the day on the blackboard calendar for the month.

Take special note of the children's favorites, and search out the source of the attraction. It may help in the selection of future songs, and may also give some insight into child-nature.

Encourage individual children to sing alone, one after another rising and singing a line or a verse of a new song, ostensibly to help the others. Besides being good practice it is the only way in which one can find out the child's own version of the words, and his rendering of the music. Do not, however, let these motives appear on the surface, or give criticism that may develop self-consciousness or cause a feeling of having failed. Let the audience applaud all honest effort, even if the results be poor. The singer was invited to try, and he has done his best; that was all that was asked of him. Meanwhile, the teacher takes a note of all mistakes in words and music, and at another time, when attention is not specially directed to those who made them, the errors are corrected, indirectly if possible. In many cases it will be discovered that the child has a most peculiar and senseless version of the words of a song.

In introducing a new song it is a good plan to sing or hum the air without words occasionally for a day or so, one child and another singing over a few notes at a time as given by the teacher, and then two or three together singing them, until the tune is familiar. The words are then given as the outcome of circumstances, whether following some nature lesson, celebrating a national event, epitomizing a story, or accompanying a finger-play.

Train the ear to listen. It is good exercise once in a while to have a listening game. Let one child stand with face to the wall while another steals softly up behind and sings a few notes of the scale. Then let the first child name the singer. Lead the children to distinguish between harsh and sweet tones. Help them to see how the difference is made, to avoid rough, throat noises, and to cultivate low, sweet singing.

Use the song frequently when the children are unnecessarily restless as a means of securing quietness and order, preparatory to some lesson or to desk work. Without remark, simply start some such motion song as "Roll the hands," singing one or more verses as may seem desirable; and then, taking immediate possession of the moment's lull at the close of the song, begin an attractive preface to the lesson,

or give required directions for the deskwork. In this way, through indirect means, attention has been gained far more effectively than by noisy commands or repeated ringing of bells.

"ROLL THE HANDS."

(Selected.)

Key D.

{ : s . f | m : m . r | m : m | s : — | m : }  
1. Roll the hands, roll the hands so slow — ly,

{ | m | r . r : r | r . r : s | m : — | — : }  
As slowly as slowly can be,

{ m . f | s : s . l | s : m | f : — | l : }  
Roll the hands, roll the hands so slow — ly,

{ f | m : m | r : r | d : — | — || }  
And fold your arms with me.

Verse 2.—Roll the hands, roll the hands so swiftly, etc.

" 3.—Tap the feet, tap the feet so softly, etc.

" 4.—Tap (1) the feet, tap the feet so loudly, etc.

" 5.—Clap the hands, clap the hands so softly, etc.

" 6.—Clap the hands, clap the hands so loudly, etc.

" 7.—Go to sleep, go to sleep so soundly, As soundly, as soundly can be,

Go to sleep, go to sleep so soundly, And nod your head with me.

" 8.—Wake up, wake up so brightly, As brightly, as brightly can be;

Wake up, wake up so brightly, And sit up straight with me

(1) Not stamp the feet, but tap, the heels remaining on the floor while the toes tap loudly.

Select different verses of this song for variety, not usually singing all at one time. Encourage the children to suggest other movements, and help them to arrange new verses to suit the exercise.

Finger plays should be given, wherever possible, in connection with lessons in nature-study. Then, as on future occasions the play is repeated, it serves as a review, strengthening the memory by recalling old facts and deepening the impressions made through previous observation. Illustrations of this may be seen in the play called "The Sheep," given in the REVIEW (Jan. 1901), in connection with "Talks on Wool and Clothing;" also in "How the Corn Grew," given with "The Farmer and His Work." (REVIEW, May, 1901).

At times, however, it may be desirable to give such plays simply for relaxation or for finger-exercise. In that case, to intensify the interest and secure correct expression in the recitation or singing, it is well to preface the play with a short sketch, in simple language, of the story contained. Weave in, now and again, the actual words and phrases of the play, so that it may easily become familiar, and may

suggest the incidents of the story as pictured in the mind. Such a sketch is given below with the simple little play of the "Five Little Squirrels," which is so great a favorite with many children.

Once upon a time a family of five little squirrels lived very happily together in the woods. Besides the mother and the father, there was a strong brother squirrel, a sister who could not run so fast, and a tiny baby squirrel. One day they were all sitting on the branches of a beech tree, tasting the sweetness of the nuts, when the mother noticed that the father squirrel was looking sharply away off through the woods with his bright little eyes, as if he saw something that frightened him. He had his head turned to one side, too, as if he was listening for something. So she anxiously said, "What do you see?" But he answered, "I don't see it yet, and I don't hear it, but I can tell by the smell that there's a gun somewhere near us!"

This frightened the mother and the older ones very much, and the big, strong brother, who could scamper so fast, said, "Oh, let us run!" But the weaker sister, who could not run so quickly, whispered in a faint little voice, "Let's hide in the shade!" And she looked around to find a thick bunch of leaves to creep into. But the baby squirrel had never seen or heard of a gun before, and he sat up very straight and said, "I'm not afraid!" Just then, "Bang!" went the gun, and they ran every one! How they did scamper! Even the baby was frightened at last and whisked off with the others, and they all got away safely.

Five little squirrels sat on a tree; (1)

This one (2) said, "What do you see?"

This one (3) said, "I smell a gun!"

This one (4) said, "Oh, let us run!"

This one (5) said, "Let's hide in the shade;"

This one (6) said, "I'm not afraid!"

BANG! (7) went the gun, and they ran every one!

- (1) Left hand raised to a vertical position with fingers extended.  
 (2) Thumb in vertical position, other fingers closed; a questioning look on face.  
 (3) Forefinger erect; a very serious, apprehensive expression on face.  
 (4) Middle finger erect; brave, independent expression.  
 (5) Ring finger erect; timid, beseeching expression.  
 (6) Little finger erect; general drawing up of whole finger to denote boastfulness and daring.  
 (7) Give one loud clap, shooting the right hand forward rapidly the full length of the arm, while the left hand as rapidly disappears behind the back.

### Carleton County Teachers' Institute.

The teachers of Carleton County, N. B., held their twenty-fifth annual session at Woodstock, on Thursday and Friday, the 18th and 19th December. Over eighty teachers were present; and the sessions, which were more than usually interesting, were guided by Mr. N. Foster Thorne, who made a most capable and efficient president. Inspector Meagher was pre-

sent and took part in the discussions, adding greatly to the interest of the meeting. Mr. I. N. Draper read an excellent paper on "Discipline," touching the many difficult points of this question in a way that must prove helpful to the teachers present. Mr. F. A. Good read a paper on "Bird Study," illustrating the subject with specimens, drawings, books and papers, and, what proved far more effective, his own admirable way of presenting this and kindred nature study subjects in his school. The paper has since been published in the Carleton *Sentinel*. One of the best discussions of the Institute — and every paper was discussed with spirit and point — took place on Miss Lina B. McLeod's paper on "Geometry," which was followed by an illustrative lesson to a class of Grade IX. pupils from the Woodstock Grammar School. The paper, which has since been published in the Woodstock *Press*, is valuable for its excellent way of presenting this difficult and often badly taught subject. The illustrative paper—or rather talk—on "Drawing," by Mr. E. J. Branscombe, was admirable in its way. For more than an hour Mr. Branscombe held the close attention of his audience by the skilful and beautiful drawings which he executed off-hand on the blackboard. It was an illustrative lesson, *par excellence*, and the Inspector and his former pupils gave testimony to the excellent results that Mr. Branscombe had secured in his school. The editor of the REVIEW was present at all the sessions, contributing addresses on Nature Study, and taking part in the discussions.

The Institute elected the following officers for the session of 1903, which will be held in Woodstock: I. N. Draper, President; Miss Minnie Carman, Vice-President; G. H. Harrison, M. A., Secretary; Miss Ruth Reid, Mr. F. A. Jewett, additional members of the Executive.

At the public meeting on Thursday evening, a fine programme of speeches and music was carried out.

### A FEW STRAY NOTES.

Inspector Meagher spoke of Dr. G. R. Parkin's plan to have many pupils engage in competitive work at the blackboard at once, to see who would make the fewest mistakes.

Mr. Branscombe liked to undertake the conduct of an unruly school. There was always plenty of energy in it.

Mr. Good—Foxes prey on field mice. In Carleton County, as foxes have been killed off, field mice have increased, to the destruction of orchards and grain.

How to deal with pupils that pilfer—Arouse their self-respect if possible; but an occasional good thrashing is beneficial.

**Ouranopsis.**

(After Jeremy Taylor.)

I. ALLEN JACK IN "ACADIENSIS."

Once in a woodland glade, with sense of joy,  
I wandered, light of foot, a happy boy.

Birds were singing,  
Streams were springing  
In shim'ring showers;  
And bright-hued flowers,  
With fragrance rare  
Scented the air.

Heaven seemed around me, but the heaven above  
I saw not through the screen of leafy grove.

Slow through that woodland glade, now sere and bare,  
I wandered, weak and old and bowed with care.

No sound I heard  
From brook or bird;  
The birds had fled;  
The flowers were dead;  
The scentless breeze  
Sighed through the trees.

Earth's joys had vanished, but the heaven above,  
Blue, soft and sweet, I saw from leafless grove.

**The Old Year and the New.**

The Old Year goes away; her eyes are sad—  
The eyes of one who hopes or fears no more.  
Snow is upon her hair; gray mists have clad  
A form the vesture of the spring, which wore.  
The new buds quicken now beneath the clay;  
But not for her—the Old Year goes away.

The New Year enters in: a happy child,  
Who looks for flowers to fill the outstretched hand,  
And knows not fear although the winds be wild.  
Soon shall the birds be singing in the land,  
On the young leaves the patter of soft rain,  
And violets ope—the New Year comes again.

So with this mortal life: now young, now old,  
A spring which never dreams of frost and snow,  
Summer and autumn—then the tale is told;  
With tired step, in wintry days we go.  
God grant a waking on some happier shore,  
Where the lost youth and joy come back once more!  
*Littell's Living Age.*

MARY GORGES.

**A Plea for the Pupil.**

A parent once sent the following message to a teacher: "Will you be kind enough to teach the arithmetic lesson to my child? I am willing to hear the lesson every evening, but I do not have time to teach the lesson." Many teachers still spend too much time in hearing classes. This is true from the primary grade through the high school. The Greek idea of the pedagogue is the correct one. He is etymologically, as well as in fact, a leader of young people. What would we think of the leader of an army who, day after day, would send the army ahead into marshes and pitfalls, and would go to rescue it only after it had become hopelessly entangled? Would we not say that the leader had utterly failed to comprehend the functions of a leader, and that through his ignorance the army had been unfitted for marching and for battle.

There are many teachers who are always twenty-four hours late with their explanations. They assign lessons that they know the class will not get, but "to develop mental fibre," as they think, they allow the class to struggle with these impossible tasks and then explain the difficulties the next day. The writer through experience learned that there were a number of things in Plane Geometry that no class could get from a text-book. After "assigning" a lesson in his usual way on the Locus of a Point two years in succession, he learned that not only did the class fail to get the lesson, but his work was doubly hard the next day for the reason that the members of the class were thoroughly discouraged and did not wish to hear the word Locus, and in addition he had to remove a number of preconceived notions of the subject because they were incorrect. The following year he was careful to go over the whole lesson with the class, so that their first notion of the Locus of a Point was correct. He dismissed the class with a few original exercises to be worked. Let no one say that the teacher did the work of the class. The class left the classroom with the two essentials of work, intelligence and enthusiasm. The next day they returned with bright faces, clear heads, and the originals solved.

— *W. A. Wetzel in N. E. Journal of Education.*

AMONG the visiting curlers to Canada of the Royal Caledonia Club of Scotland, is one gentleman of almost gigantic proportions, named Kirk. A witty fellow-countryman, who has long made his home in Canada, on being introduced to the giant, said, "Mon! Mon! Ye're nae a Kirk; ye're a Cathedral."

### Meaningless Music.

"Give me thought first," is excellent advice to follow, especially before teaching a song to the youngest children. The meaning of the words and the spirit of the hymn or song are as necessary to its proper rendering as though the words were to be read instead of sung. Of course, if the words are before the pupils, mistakes are less liable to occur. Many people have dull ears, or have never been trained to hear accurately. These are the poor spellers, and their articulation is muffled and confused.

A little talk of the poems we sing, especially of our hymns and patriotic songs, would bear much fruit. We have heard, perhaps, of the "consecrated, cross-eyed bear." It should be a warning.

A pretty little round, apparently needing no explanation,

"A boat, a boat to cross the ferry,  
We'll float and sing and all be merry,  
Sing, sing, sing and be merry!"

a close listener discovered was being jubilantly sung by a class of bright little foreigners, "And all be married!"

"My mother has a picture of St. Cecilia," said Margie.

"I'd much rather have a picture of Saint Solly, though I've never seen one," said Alice.

"Who is Saint Solly?" asked another little girl interested in art.

"Why, don't you know the one we sing about?"

"The Saint Solly, mortal (Saints all immortal) and fair,  
Are robed in her garments of white,  
Over there."

Let us sing with the heart and with the understanding also. "The meaning of the song goes deep."—*School Education*.

### The English Education Bill.

There are in England at the present time just about 20,000 elementary schools. All these have a financial connection with the government. About 6,000 of them, however, are strictly secular schools, called board schools, managed by school boards. In their case the government, through the school boards, pays all bills and assumes all responsibility and authority. The remaining 14,000 schools are called voluntary schools. They are supported in large part by religious denominations. About 12,000 of them belong to the Anglicans, and 1,000 to the Roman Catholics. The rest are in the control

of the Nonconformists, that is, of Protestants who are outside the Church of England. Now the new bill takes all these voluntary schools and provides for their support from public rates and taxes. Their management will remain practically what it is now. The secular authorities will appoint only one-third of their managers or trustees; the remaining two-thirds will continue to be Anglicans, Roman Catholics, Wesleyans, Baptists and Presbyterians, as before.—*Chicago Tribune*.

Go into the fields and woods some sunny day in midwinter and watch the birds. It is very interesting to note the various methods by which our winter birds solve the problem of finding enough to eat. And, after all, they don't seem to find it the most discouraging task. On the contrary, even in the coldest weather you will find the birds teaching us all a lesson of happiness.—*St. Nicholas*.

Little Tommie had been put to bed alone. It was upstairs, and the thunder rolled and lightning flashed unmercifully. He lay quietly until he could no longer stand it, and then his little night-gowned figure appeared at the head of the stairs.

"Ma!" he cried.

"Yes, my son," came the calm rejoinder.

"I'm afraid, ma. It thunders so, and I'm all alone."

"Go back to bed, Tommie," came his mother's voice. "Don't you know nothing can hurt you?"

Tommie went back to bed, but not to stay.

"Ma!" he cried again, and this time the little figure was half-way downstairs.

"Tommie," called his mother, "don't you know I have told you nothing can hurt you, God is always with you?"

"Then, ma," and this time there came an audible sniff from the weeping Tommie, "you come up and sleep with God and let me sleep with pa."—*Lippincott's Magazine*.

### CURRENT EVENTS.

The revolt in Morocco, led by a pretender to the throne, has reached serious proportions. The Sultan's army of ten thousand men was completely routed on the 23rd of December, and, abandoning everything, fled in disorder to Fez. British, Spanish and Portuguese ships are gathering on the Moroccan coast, and it seems probable that some of the powers will intervene.

The civil war in Colombia is at an end, the treaty of peace between the two parties providing for the election of a congress in which both shall have representation.

Hayti has a new president, whose election is more or less regular, and who is supported by the army. It may be hoped that the turmoil in the black republic is over.

There is another little revolution in the district of Acre, in Bolivia. The Acre country is on the upper waters of the Amazon and is rich in rubber production. The ultimate purpose of the rebels, it is thought, is to secure annexation to Brazil.

That there should be almost always an insurrection in progress somewhere in the great Chinese Empire is not surprising. Just at present there is said to be one of serious importance, which may result in the formation of an independent government in Kan-su and Shen-si, which, lying in the northwest of China proper, are geographically in the very centre of the empire.

Venezuela now has a foreign war. Her ports are blockaded by British, German and Italian warships, and President Castro has been brought to terms, and forced to give some heed to the demands that are made upon him. It is expected that these demands will now be referred to the Hague tribunal. Castro has agreed with France to treat her claims as those of Great Britain, Germany and Italy; but has refused a similar promise to Belgium, Spain and Holland.

It is difficult to deal with Venezuela, because of the state of anarchy which usually prevails within her territory. She has seen more than a hundred revolutions since the days of Bolivar, the longest period of quiet being under the dictatorship of Blanco, 1870-1889. The present revolution began in 1899. Castro was then its leader; but he seized the government three years ago, and took the field against his former companions in arms. In virtue of an election held in 1901, he now claims to be the constitutional ruler. His success in scattering the insurgents a few weeks ago was but temporary. They are again gathering in force. By his ill-treatment of foreigners and his insolent replies to diplomatic representations, he has brought about the present complications. He has interfered with trade by blockading his own coasts; seized the property of British and other foreign citizens; countenanced filibustering against British territory; suspended payment of interest on the national debt; and, latterly, finding that his government could no longer borrow money, has granted concessions to British and German firms for the building of railroads and then seized the rail-ways when built.

"May I be permitted by means of first wireless message to congratulate Your Majesty on the success of Marconi's great invention, connecting England and Canada." This is the text of the message from Lord Minto to the King, which was sent from Cape Breton to Cornwall on December 20th. Since that date, a wireless message has been sent from Cape Cod to England, a distance of six hundred miles further.

Perhaps the most brilliant and imposing pageant that the world has ever seen is that attending the opening of the great durbar in India, at which, on the first day of January, King Edward VII. was proclaimed Emperor of India. The durbar, which means audience, is being held at Delhi, the ancient capital of the Mogul emperors, and will continue for some weeks. The King is represented personally by his brother, the Duke of Connaught, and officially by Lord Curzon, the Governor-General of India. They made their state entry into the city on December 29th, borne by the largest elephants in India; and oriental magnificence has never surpassed the display of the official procession. This, and the grandeur of the ceremonies of the proclamation, will have great effect upon the minds of Asiatic people; and will, perhaps, do more than we can understand to promote the peace and prosperity of India.

The mammoth which was found nearly two years ago, frozen in the ice of Northern Siberia, where it has rested for thousands of years, has with great difficulty been excavated and brought to St. Petersburg. The legs and feet resemble those of an elephant, except that the latter has three toes and the mammoth has five. The hair is of a brownish yellow color, and so long and thick that the animal could hardly have felt cold in the lowest temperature. Blood was found in the body, and in its mouth were the remains of food. It had probably slipped when grazing, and fallen into a crevasse, where it became frozen fast.

Just one hundred years ago, John Dalton, of Manchester, England, founded the atomic theory of chemistry. Now English scientists are developing the idea of the electron, or electric atom; which is supposed to give electric currents by rapid motion, magnetic fields by rotary motion, and the phenomena called radiation by the waves of its vibrations. These electric atoms are assumed to be solid particles, much smaller than atoms of matter, and it is even supposed that matter itself may prove to be an electrical phenomenon, with atoms made up of aggregations of electrons.

Sir Humphrey Davy put a wire gauze envelope around the miner's lamp, and thus removed the greatest danger of fire damp explosions. A Russian scientist, Prof. Artemieff, of Kief, has devised a suit of clothes made of wire gauze, which will protect the wearer from electric shocks of every kind.

The map of the islands north of Canada will have to be redrawn, later information of the discoveries of Capt. Sverdrup, the Norwegian explorer, showing that Ellesmere Land extends much farther west than was supposed, and that another land mass lies beyond it. Land thus extends far north of the Parry archipelago; and the new land masses are larger than any in that group of islands.

The offer of some of the Boer leaders to fight for the British in Somaliland has been accepted.

The British South Africa Company will undertake immediately the construction of the Cape-to-Cairo rail-

way up to Victoria Falls, and a steel bridge across the Zambesi at that point. Later, and probably before the end of the present year, they will carry the work to the bend of the Kafu, 300 miles further north, when Rhodesia will have a total of over 2,500 miles of railway.

The new Pacific cable from Canada to Australia, the "All-Red" cable, as it is called, because it touches only on British territory, is now open for regular business.

The United States will probably adopt the Canadian banking system, which is acknowledged to be the best in the world. It provides an elastic currency, a safe note issue, and the advantage of branch banks in small places, of which they feel the need.

It is estimated that sixty thousand people came to Canada this year from Nebraska, Minnesota and the Dakotas. Only about half that number have come from the British Isles during the year; but that is an increase of more than ten thousand over the British immigration of the preceding year. It is becoming known, both in the United Kingdom and in the United States, that Canada's greatest tracts of farming lands are still untilled, her greatest mines yet undiscovered, her timber reserves of such vast area that the figures seem incredible, her waterways unequalled, and that life and property are safer in Canada, and the punishment of crime more swift and sure, than in any of the republics of the three Americas. Nowhere in the world, unless it be in South and Central Africa will the population increase so rapidly in the near future as it will in Canada.

Britain is now responsible for the welfare of over half of the two hundred million inhabitants of Africa. Forty millions are under the British flag, and British influence in Egypt and the Soudan touches a hundred millions more.

The ceremonies attending the completion of the great dam at Assouan took place on the 11th of December, in the presence of the Duke and Duchess of Connaught, the Khedive, and Earl Cromer, the British agent in Egypt. The immense structure will hold back a thousand million tons of water, saving it for irrigation work. A canal with four locks carries boats past the dam. The supplementary dam at Assiout, not yet completed, will be half a mile long, or about half the length of the Assouan dam. Together they will add 2,500 miles to the area of land under cultivation in Egypt.

Great distress prevails in the sheep raising districts of Australia, owing to the prolonged drought. Sheep are dying of starvation, and the grain crops in some sections are a total failure.

A disastrous earthquake has occurred at Andijan, a town in Russian Turkestan, by which 15,000 houses were destroyed and 4,000 people killed. For ten days or more after the first shock, the ground continued to oscillate, and a general subsidence of the site of the town was feared.

The telegraph cable from California to the Hawaiian Islands has been completed, and the first message was sent over it on New Year's day. It is proposed to extend it to Manilla.

Dr. Sven Hedin, the Swedish explorer, has returned to England from his journey through Central Asia. The results of his three years of travel will involve a complete alteration of existing maps of that region. On the shores of Lob Nor, an ancient nor (or lake) in Turkestan, now dry, he found among the ruins of houses and temples Chinese manuscripts 1600 years old, which prove that Lob was then an important place on a great highway from Pekin to Kashgar. It is now a scene of awful desolation, with no sign of life of any kind. Lob Nor was known to earlier explorers as a wide shallow marsh, rather than a lake. This is the usual character of the nors of Central Asia, where streams lose themselves in the desert; though in some cases the shallow lakes thus formed are so salt that no vegetation will grow in them. Dr. Hedin will require several years to prepare his work for publication.

The proposed new railway to run north of Lake Winnipeg is called the Trans-Canada railway. Its western terminus is to be at Port Simpson, near the mouth of the Skeena; its eastern termini in summer at Quebec and Chicoutimi, and in winter at St. John and Halifax, by connection with the Intercolonial. It is already built from Quebec and Chicoutimi as far as Lake St. John, on the Saugenay. Thence it is proposed to run north-westerly, within the northern limit of cereal growing territory, with a short branch line to reach the navigable waters of Hudson Bay, at the mouth of the Nottaway river. This scheme is admittedly a rival to that of the transcontinental extension of the Grand Trunk, and claims government aid in preference to the latter, because it will lie wholly within Canadian territory.

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## SCHOOL AND COLLEGE.

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A conference, composed of representatives of the Atlantic Province colleges and superintendents of education, with Dr. G. R. Parkin, was held at Mount Allison University, Sackville, in December. Dr. Parkin, who had just returned from Oxford, described the arrangements that had been made at that university for the reception of candidates under the Rhodes' scholarship bequest, and the necessity of establishing some impartial system of selection. If the trustees of the bequest carry out their present intention, about 24 Canadian scholars will be continually getting the advantage of an Oxford education. The following conclusions were arrived at during the conference for the guidance of the Rhodes' trustees: 1. That one scholarship be allotted to candidates from each of the provinces of Nova Scotia, New Brunswick and P. E. Island. 2. The competition for these scholarships shall be open only to graduates or under-graduates of at least two years' standing of degree-conferring colleges or universities. 3. The ordinary age limit of candidates shall be twenty-three years, provided, however, that in exceptional circumstances

a candidate whose age does not exceed twenty-five years may be nominated. 4. Scholars being British subjects shall be selected by the trustees on the nomination of the college within the territory in which the scholarship is assigned.

The pupils of the Advance Department of Grand Manan Superior School gave an entertainment in the public hall on the evening of December 13th. In spite of the stormy weather, the hall was comfortably filled by an audience that highly appreciated a varied programme of recitations, dialogues and music. The financial result was very encouraging also, and is set aside as the nucleus of an organ fund. The teacher and pupils have to thank the trustees for furnishing the latest Webster's International Dictionary and stand.

The School trustees of St. Andrews, N. B., have decided to introduce manual training into their schools at once. Ten benches and the necessary tools have been ordered, and Miss Agnes E. Lucas, who has been teaching at Musquash, St. John County, has been engaged as teacher. Miss Lucas will devote half of her time to teaching manual training and half to other subjects. Miss Sadie Inch, of Fredericton, will probably be engaged to teach at Musquash.

The School Trustees of Mascareen, St. George, Charlotte County, have decided to start the work in their school, and have ordered equipment of three benches and the required tools. The teacher, Miss Harriette Bolt, deserves great credit for the interest she has aroused, and for raising a large part of the funds necessary to purchase equipment.

Miss Ethel I. Mersereau, daughter of Inspector G. W. Mersereau, has been appointed manual training instructor in the Campbellton, N. B., schools, in which it has been decided to introduce this branch of practical education. Miss Mersereau is an enthusiastic student and well fitted for the position, having taken the course at Truro with Prof. Kidner, and a special course at Fredericton with Prof. McCready.

A concert was recently given by the South Ohio, N. S., school under the direction of the teachers, Mr. H. W. Churchill and Miss Winifred Moses, who have taken a great interest in the progress of the school. It was very successful, and greatly enjoyed by the large audience present. The sum of \$27 was realized, to be expended in buying a flag and starting a school library.

An alumnae society of the graduates of the St. Vincent's High School, St. John, has been formed. The objects are to promote a closer relationship and a wider culture among the graduates of the school. Lectures and musical entertainments under the auspices of the society will be held during the winter.

Inspector R. P. Steeves, of Sussex, N. B., was recently married to Miss Susan McKenzie, of Boston, formerly of Point de Bute, Westmorland County. The REVIEW extends its best wishes for a happy New Year and a happy married life to Mr. and Mrs. Steeves.

A concert was held in the school at Ferryville, Carleton County, Miss Mabel Shaw, teacher, just before the Christmas holidays. The amount of \$8.50 was realized, which will be expended in procuring chemical apparatus and sets of the Perry Pictures.

Miss Margaret S. McNabb, teacher at Fair Haven, Charlotte County, with the help of some friends, held a pie supper on December 6th. The sum of ten dollars was realized, which will be used in procuring maps for the school.

Arrangements have been made for starting a manual training department in the schools at Windsor, Kentville, Bridgetown, Annapolis, Digby, New Glasgow, Sydney, Sydney Mines, North Sydney, and Glace Bay.

Mr. Angus Dewar of Fairville, has taken the principalship of the Harcourt, N. B., Superior School. Miss Sadie Sterling, of Fredericton, becomes principal of the Fairville school.

The Ottawa public school board recently took a plebiscite of parents on the home work question with the surprising result that two to one voted in favor of home work.

Miss Annie H. Whittaker who has been teaching at Old Ridge, St. Stephen, has been appointed to the position of principal assistant in the St. John High School.

The School Trustees of both St. Stephen and Milltown, N. B., have voted to start manual training in their schools, but will not be ready before September.

Miss Ethel Hazen Jarvis, who had been assistant to the principal in the St. Stephen High School, has assumed charge of one of the primary schools in that city.

Miss H. Beatrice Smith, of Oak Bay, has become the principal of the Milford, St. John County, school.

In Chatham and in Sackville manual training work in the public schools will probably be started in September.

### RECENT BOOKS.

FIRST BOOK OF FORESTRY. By Filibert Roth, Chief of the Division of Forestry, United States. Cloth. 291 pp. Illustrated. Ginn & Company, publishers.

This book has been prepared for the special purpose of rendering intelligent and efficient the growing sentiment in favor of forest protection. It is written clearly, simply and interestingly; it explains the principles of forest preservation and use; also of forest planting, the re-foresting of waste lands; the relation of forest and water supply; and it gives specific directions for the proper care of the wood lot on the farm. It describes the various industries connected directly with the forests and the values of the different timbers. It gives an account of the various enemies of the forests, viz., fire, insects and grazing animals, and shows how these foes are best met. It is fully illus-

trated with pictures taken from American forests, and deals especially with forest problems from the standpoint of a practical forester. It is a most valuable book for teachers, scholars, and for the country home.

THE SHAKESPEARE CYCLOPAEDIA AND NEW GLOSSARY. By John Phin. With Introduction by Edward Dowden, LL. D., D.C.L., Litt. D., Professor of English Literature in the University of Dublin. Cloth. Pages xxviii+428. Industrial Publication Company, New York.

To enjoy Shakespeare fully we must understand him thoroughly, and this volume aims to give the meaning of all the old and unusual words found in Shakespeare's works, and of the ordinary words used in unusual senses and in unusual forms of construction, as well as explanations of idiomatic phrases, etc. It also gives full explanations and elaborate notes on the mythological, biographical and antiquarian references, as well as on folklore, local traditions, legends, allusions, proverbs, old English customs, etc. The introduction by Professor Dowden forms a notable contribution to Shakespearian literature.

ADDRESSES ON WAR. By Chas. Sumner. THE FUTURE OF WAR. By Jean de Bloch. Cloth. Pages 319 and 380. Ginn & Company, Boston.

These are two notable books and will command a wide reading: The first contains the three great addresses by Chas. Sumner—"The True Grandeur of Nations," "The Commonwealth of Nations," and "The Duel Between France and Germany with its Lesson to Civilization,"—in which are so well portrayed the happiness and blessings resulting from peace, and the horrors and folly of war. The second is a low-priced but beautifully printed edition of Bloch's great book, which has done more than any work in modern times to rouse the world to a sense of the waste and wickedness of war. As a powerful arraignment of war and a plea for universal peace, the book has probably no equal.

GEOMETRICAL DRAWING AND DESIGN. By J. Humphrey Stanton, Royal Academy of Arts, London. Cloth. Pages 243. Macmillan & Co., London.

A course of geometrical drawing or practical geometry provides a valuable preliminary training for so many handicrafts and professions that it must be regarded as essential to all students whose work is to be adapted to modern requirements. The course outlined in this book aims at giving students the ability to construct ordinary geometrical figures, and the power to apply these as the basis of further studies in geometry and of ornamental and decorative work.

INTRODUCTION TO BOTANY. By W. C. Stevens, Professor of Botany in the University of Kansas. Cloth. Pages 436+127. D. C. Heath & Company, Boston.

This book is intended for use in high schools. Care has been taken to make it accurate, scientific and comprehensive. It is free from errors of emphasis and proportion which are conspicuous in many modern botanies. It contains an Analytical Key and Flora, and provides for the use of teachers a convenient manual, em-

bodying all the recommendations of the Committee upon Botany appointed under the auspices of the National Educational Association.

HISTORY FOR GRADED AND DISTRICT SCHOOLS. By Ellwood W. Kemp, Indiana State Normal School, Terre Haute, Ind. Cloth. xiv+537 pages. Ginn & Co., Boston.

This book presents a systematic course of history for children from the first grade through the eighth. It is intended as a guide to teachers and as a text-book to be put in the pupils' hands as soon as they are able to read. The material presented is based upon the idea that children may be taught systematically something of the great facts of ancient and mediæval history, and that all history is the united movement of mankind toward freer institutions. It is written in simple style.

EVERYDAY ENGLISH. Book I. Language Lessons for Intermediate Grades. By Jean Sherwood Rankin. Cloth. Pages 232. Educational Publishing Company, New York.

"More language and less grammar," and "Plenty of work for the pupils," are the key-notes of this book. There is no doubt that great waste of time and irreparable abuse of the mother tongue are caused by introducing formal grammar too early to children. This book endeavors to show us a better way by making language itself a fascinating exercise, with carefully graded, bright and fresh examples for young pupils.

Harriet Martineau's THE PEASANT AND THE PRINCE. Edited by Henry W. Boynton. Pages 204. Houghton, Mifflin & Co., Boston. (Riverside Literature Series).

The Peasant and the Prince is a good example of Miss Martineau's method. It is a sketch of the condition of French society just before the outbreak of the Revolution, and is written in a vivid and simple style.

LIGHT FOR STUDENTS. By Edwin Edser. Cloth. Pp. 579. Macmillan & Company, London.

This book will meet the requirements of students who wish to obtain an accurate and comprehensive knowledge of geometrical and physical optics. The first ten chapters are devoted to explaining the laws of reflection and refraction of light. The remaining ten chapters to the development of the wave theory of light.

FIFTY YEARS A TEACHER. By Barney Whitney, and MY FIRST YEAR'S WORK—An Actual Experience. C. W. Bardeen, Syracuse, N. Y.

These two subjects are attractive, but the reader feels a disappointment in them—the former being somewhat egotistical in tone, and the "experience" of the latter too general to interest the special reader.

BLACK'S GRADED PRIMER and BLACK'S GRADED FIRST READER. Cloth. Illustrated. C. W. Bardeen, Syracuse, N. Y.

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Schiller's "DEATH OF WALLENSTEIN." Edited with introduction and notes by Chas. A. Eggert, Ph. D. Cloth. Pages xlvii+189. D. C. Heath & Co., Boston.

Schiller's *Wallenstein*, owing to the great length of the trilogy, is not usually read in its entirety in college classes, but the *Wallenstein's Tod* is the part commonly studied. This, with copious notes and scholarly introduction, has just been published with beautiful text and binding which distinguishes the Heath's Modern Language Series.

INTEREST AND EDUCATION. By Prof. Chas. DeGarmo, Cornell University. Cloth. Pages 231. The Macmillan Company, New York.

This is a distinct and valuable contribution to pedagogic literature. The author discusses the varied methods of teaching and their results in developing character, interest and enthusiasm. The teacher of experience, as well as the young teacher, will derive much benefit from a perusal of this excellent work.

### JANUARY MAGAZINES.

The *Canadian Magazine* for January commences the year with a bright table of contents, including many valuable articles for the home reader, including the first instalment of the War of 1812, by Dr. James Hannay, Canadian Celebrities, No. 39, Wireless Telegraph Station at Glace Bay, with stories, poems, people and affairs, and other timely contributions which make up an excellent number.... The January *Atlantic* opens the New Year with a cheerful editorial welcome, which wittily sums up past achievements of this typical American magazine, and promises happily for the future. The number is replete with notable articles, stories, sketches, poems and essays. .... Lord Rosebery's fine tribute to Mr. Gladstone, contained in the address which he gave at the recent unveiling of the Gladstone statue at Glasgow, is published in *The Living Age*. Mr. R. Bosworth Smith's paper on Owls in *The Living Age* for December 13th is one of the most informing and at the same time one of the most diverting contributions to natural history.... The *Chautauquan* for January has a fine table of contents, embracing civic and travel studies, nature study, talks about books, etc.... The *Delineator* for January has many noticeable features. Here are some interesting questions from it: Who was "The Poet of the Poor?" What foreign queen married an American? Who was the "wisest fool in Europe?" What noted mathematician fired a fleet with a burning glass? Who said "An honest man is the noblest work of God?" Who was the original of Browning's "The Lost Leader?" Which American poet was said by Lowell to have been "two-fifths genius and three-fifths pure fudge?" Who said, "I cannot afford to waste my time making money?" .... *Acadiensis* for January, the first number of volume three, is excellent in matter and illustration. Dr. I. Allen Jack contributes an appropriate and suggestive article on Christmas among the Birds, Dr. W. F. Ganong one on The Origin of the Place-names in Inglewood Manor, and there are poems and original matter of local interest. D. R. Jack, St. John, publisher.... The second number of the *Kit-Bag*, published at Fredericton by Mr. Theodore Roberts, has made its appearance. It is an attractive magazine both in make and contents.... The January magazine number of *The Outlook* contains some six or eight illustrated articles besides full-page portraits, poems, a story, and the usual very full editorial treatment of current history and literature.

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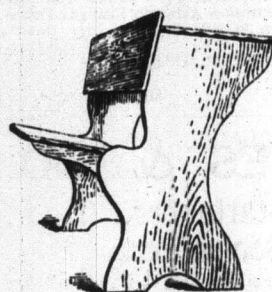
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