

Object Lessons and Nature-Study.

By J. BRITTAIN, NORMAL SCHOOL, FREDERICTON.

Lessons on the Evergreen Tree.

LESSON II.

The pupils arrange themselves in *small* groups around the tree-tops (spruce) used in Lesson I.

OUTLINE OF LESSON.

1. What is the use of the terminal buds on the main stem? on the branches?
2. Of what use are the lateral (side) buds on the main stem? on the branches?
3. Cut off the main stem above the highest whorl of branches and find how many rings or layers of wood are in it.
4. How far down the tree does this youngest layer of wood extend?
5. Find whether it reaches out into any or all of the branches.
6. How old is the layer of wood next inside of the outermost layer? How far up and how far down the main stem does it reach?
7. Point out some branches into which this layer extends, and some into which it does not reach.
8. Answer similar questions about the other layers of wood.
9. Which is the *youngest* layer of wood?
10. How do the new layers of wood find room to grow under the bark?
11. Find whether the outer part of the bark is of the same age as the inner part throughout.
12. Why does the bark not increase in thickness more rapidly than it does as the tree grows?
13. What becomes of the outer bark when it gets old?
14. Look for pith in the stem of the spruce.
15. Describe the form and arrangement of the leaves of the spruce. Why are they called *needle-shaped* leaves or *needles*?
16. Find whether there are any leaves on the parts of the stem and branches which grew out in 1899—in 1898—in 1897.
17. Show whether the leaves ever fall off. Point out why the spruce is called an evergreen.
18. Observe the different kinds of trees as you pass by them in your walks, to see which you can tell the ages of by counting the whorls of branches.
19. Examine the "knots" in a spruce board and account for them.
20. Try to find why some forest trees have no branches near the ground while the branches of others of the same species have branches close to the ground.
21. Find whether the lower branches get farther above the ground as the tree increases in height.

Suggestions for History Lessons.

PREPARATION BY TEACHER.—No teacher can hope to give a good history lesson if he has not previously prepared for it. The teacher ought to have collected besides much additional information which has any bearing on the subject-matter of the lesson.

SUBJECT-MATTER.—Wars, battles, and dates, are well enough in their proper places, but they should not be allowed to monopolize the time. Special reference should be made to the social condition of the people, their customs, manners, dress, inventions, and discoveries.

BIOGRAPHY.—The lives of great men are always interesting to children, and can be made an important part of history. They also form a good means for moral training. The chief events in historical epochs are often more easily taught when taken in the biographies of the leading men of the time.

DATES.—Long lists of dates and events serve no purpose but to burden the memory. Teach *few dates* and then group the events around these. Always connect a date with the event. Many teachers find it hard work to get pupils to remember dates. The best remedy for this is to get the boys interested in the event and then there will be no difficulty in getting them to remember the date. Mark only the most necessary dates. Remember: *Few dates—very few!*

MAPS AND ILLUSTRATIONS.—These are very useful and always awaken interest. Encourage pupils to bring cuttings from newspapers and periodicals which have a bearing on the history lessons. Rapidly drawn sketches on the blackboard are very useful during history lessons. Maps are absolutely necessary, and geography should always be connected with history, where possible.

TEXT-BOOKS.—Books are useful for revising a lesson which has been previously given, but even then must be read under superintendence of the teacher, who should be always ready to give detailed explanation of this or that event which may not be quite plain to some pupils.

SUMMARY ON BLACKBOARD.—This should contain a brief outline of the lesson, with the chief events and their dates.

RECAPITULATION.—The following are some good ways of revising a history lesson:—

1. The teacher asks questions. All questions to be given in form of a complete sentence.
2. Allow each pupil in turn to give in a sentence something he has learned from the lesson just given.
3. Allow a pupil to come in front of the class and question the other children on the lesson.
4. Allow one or two pupils to give a brief resume of the lesson—each sentence to be in proper sequence.
5. The pupils should be allowed to write out the subject of their history lesson.

In all history lessons, whenever possible, appeal to the nobler instincts of the pupils. Love for good and brave deeds should be inculcated, as should also a righteous indignation against meanness, tyranny, or any other wrong-doing. Inspire patriotism, and bring out the duties of a citizen when an opportunity presents itself.—*School Journal.*