cured has left-the school, through the neglect of the school authorities, or of the succeeding teacher, the apparatus is lost or broken, and the specimens of minerals scattered. It seems to me that the Board of Education would do a very good thing were it to oblige every district to provide a cabinet, no matter how plain, of sufficient capacity to hold a small library above, with a closet below in which natural history specimens and apparatus for lessons in elementary science might be arranged and safely kept.

As spring advances, lessons on our native trees and other plants are in order, and for these lessons material is abundant and accessible, without cost in money, even to the schools of our villages and towns.

We have but few birds in winter; but by the first of April the migratory birds will be beginning to return to the land where they broke their shells and first opened their eyes on the bright but dangerous world. And then the children and the teachers, too, can find much to learn on their way to and from school, and on their other walks. Town and village children, with sharp eyes and sympathetic hearts, will find much to see, for during the season of migration, many birds frequent the suburbs, parks and shores.

A nature calendar should be kept in every school. If black-board space cannot be afforded, the entries may be made on a sheet of foolscap paper, pasted on cardboad and hung upon the wall.

The spring calendar may begin with that day in March upon which the sun reaches the equinoctial. In this calendar should be recorded the more striking weather phenomena - snow-storms, rain-storms, floods, droughts, the disappearance of the snow, the opening of the brooks and rivers, etc.; the state of the buds on the trees, the swelling of the buds, the order in which the leaves of the different species open out, when the leaves of each are half-grown and full-grown, when each species blooms; and the dates of the early and later spring flowers. The first arrivals of the different species of migratory birds should be entered in their order; when observed the second time; when they begin to build their nests; the first bumble-bee and the first butterfly seen; the opening of the music of the frogs and toads. Easily observed celestial phenomena should be included—when and where the new moon was first seen-and the full moon; the hour at which the sun rises at the first of each month, and when it sets; the length of the day (time of day-light), counting from sun-rise to sun-set at the first of each month, and the length of the night, etc.

If encouraged by the teacher, most of the children will watch closely for contributions to the calendar, and

and will thus quicken their observing faculties and broaden their sympathies and interests. The teacher and each pupil should make a copy of the calendar for preservation.

## Questions for February.

(Answers to be sent to the editor of this department, J. Brittain, Normal School, Fredericton, by March 15th.)

- 1. Get a branch from a birch tree out of doors, and make a drawing of that part of it which bears buds.
  - 2. Do the same with a maple branch.
- 3. Find how long a time intervenes between sun-rise and sun-set, and between sun-set and sun-rise, on St. Valentine's Day. Show the arithmetical operation.
- 4. What wild birds did you observe during the last half of February? How did you know each? and what was each doing at the time?
- 5. Find how many toes a dog has on each foot. How do his claws (toe-nails) differ from those of a cat?

## Suggestions for Primary Grades.

By Mrs. S. B. PATTERSON.

## Short Talks on Fuel.

Introduce the subject of heat on one of these cold mornings when Jack Frost is nipping everybody's fingers. How do we keep him out of our houses? Perhaps by stoves in the different rooms, or, possibly, by hot water, steam, or hot-air furnace. The children will be interested by the reference to their respective homes, and may be allowed to describe the method used.

What sort of fuel do we use? Can you tell of any people who have neither wood nor coal to warm their houses? This should suggest last month's talks about the Eskimos with their stone lamps in which pieces of blubber from the whale are melted into oil, burning on a wick of dried moss. Refer also to the peat used in Ireland and other places. Tell of the use of natural gas for heating and other purposes, where men have simply to bore deep down into the earth and sink pipes leading the gas to their houses and into the empty stoves, dropping in a piece of burning paper to set it on fire. There it blazes away, heating the house, and doing all the cooking they wish without leaving behind it any ashes to lift.

Wood.—Why is wood brought to our houses mostly in winter? By a few questions as to the farmer's work during different seasons of the year, lead the children to see that the men have more time for such work in the winter. Show also that a load is more easily hauled in sleds on the snow than on bare ground with wheels,