

*Foliage leaves:* Simple experiments to illustrate leaf functions, for example, transpiration, manufacture of starch in sunlight, disappearance of starch in darkness, exhalation of a gas by green water-plants, exhalation of carbon dioxide.

*April, May, and June*

*Trees:* Mode of branching and identification by leaves, bark, and wood of maple, willow, or oak, a conifer, apple, and plum, or cherry.

Description and identification of twelve different species of flowering plants, representing at least six different orders and including both monocotyledons and dicotyledons.

*Ferns:* General structure and habits of a common fern.

*Review:* General review and comparison of the characteristics of the larger groups of plants taken up in the Course, summarizing and classifying.

A collection of plants to be made in the second year; also a collection of ten economic woods

The collection of plants shall include carefully selected and prepared specimens of the species chosen for identification as required above.

## PHYSICS

### FIRST YEAR

*November to April*

*Introductory:* Measurement in Metrical and English units of length, area, volume, and mass; structure and use of the Balance; The Three States of Matter, defined and explained.