

are often seen attached to the limbs of trees. If these are gathered and kept out of doors during the winter, and brought into the school in the early spring, the scholars will be interested in watching for the appearance of the moths. The cocoons of the *Promethea* Emperor Moth are usually to be found each fall on the lilac. Caterpillars of many kinds can be collected all through the season and with a little care, reared to maturity. An easy way to obtain larvæ is to beat the foliage of trees and shrubs over an inverted umbrella. The greatest pleasure in entomology is the study of the life-histories and habits of species. The field is wide, and there is still a vast amount of work to be accomplished. The most useful work can be done in studying the early stages of moths. Only a small percentage of these have been thoroughly worked out, and careful observations recorded are of much importance. Specimens of the mature forms collected in the field, in many cases, are more or less rubbed or damaged, and always inferior to bred material. For few larvæ, ordinary jelly jars with tin lids will answer. Some earth should be put in the bottom of each jar, as many caterpillars pupate in the ground. Fresh food should be fed every day and care taken to keep the jars clean. If a number of the same caterpillars are being reared, larger jars will be necessary.

If at all possible, at least one specimen of each kind should be preserved for future reference and study. This is best done by inflation, and specimens thus prepared are more valuable than those put in liquids. Proper apparatus may be purchased from dealers in entomological supplies, such as : an oven, in which to dry the empty skins while being inflated ; a spirit lamp to furnish heat ; some glass tubes drawn out to different sizes at one end ; some clips made of watch spring and held to the glass tubes by means of a band cut from rubber tubing ; a double rubber bulb with about three feet of tubing attached ; and a pair of fine curved forceps. The process, briefly, is to (1) kill the caterpillar in a cyanide bottle ; (2) place it on a piece of blotting paper, cover it with a strip of the same paper, and gently press out, through the anal orifice, using the pair of fine forceps, all the body contents ; (3) attach the anal segment to one of the glass tubes, fastening it with one or two of the spring clips ; (4) connect the glass tube to the tubing of the double bulb and inflate the larval skin by gently squeezing the outside bulb, at the same, with the other hand, hold the caterpillar in the oven to dry. When perfectly dry, the larva should be carefully removed from the glass tube and mounted with shellac on fine wire, one end of which should be first wound several times around an insect pin. Naturally, at first specimens will be spoiled, but with care good results will soon be obtained. It is best to begin with hairless larvæ.