## HINTS ON COLLECTING COCOONS OF THE LUNA MOTH—Tropæa luna.

## BY ROBERT BUNKER.

Many Entomologists are under the impression that the cocoons of this species and *polyphemus* are exactly alike in appearance. This is a mistake; and the collector who has been misled by writers on the subject and has got together by careful searching a dozen cocoons, expecting at least to get a small share of *lunas* from them, is greatly disappointed when they change to find them all *polyphemus*.

Having had some experience in collecting cocoons of both species, I will endeavor to point out the differences. The *polyphemus* cocoons are white. or dirty white, 1.25 to 1.75 in. long (those producing females the largest), with rounded ends; sometimes angular, caused by leaves being moulded unevenly to the surface; generally coated with white powder; firm in texture, and producing silk of a coarse quality.

The *luna* cocoons are chestnut brown, a little larger than *polyphemus*; egg shaped; very thin, and frequently rough on the surface, covered with warts and excrescences; they seldom show the print of leaves on their surface.

From my own observations, I am strongly inclined to the opinion that the larva of this fair queen of the night seldom spins its cocoon between leaves in the tree, but crawls to the ground and fastens it to any object that comes in its way. This belief has been strengthened by frequently finding cocoons with grass moulded to their surface; furthermore, last fall I found a cocoon firmly attached to a tuft of grass six or eight inches from the ground, and another fastened to a twig or sucker about the same distance from the ground; add to the above the fact that cocoons are almost always found on the ground near the trunk of the tree, and we have a pretty clear case that the habits of this elegant species are quite different from those of polyphemus.

Hickory, Beech and Oak are the food plants of this species; *poly-phemus* has a much wider range, and is, consequently, far more numerous. In collecting I find about six of the latter to one of the former.

Spring is the best time to search for cocoons, as most of the leaves blow away during the winter, leaving the cocoons exposed to view; it is best, however, to look for them both in fall and spring.