

cocoon, Fig. 3. From these, after a few weeks, the perfect moths emerge. They are very active at night, and, when disturbed, have a habit of dropping to the ground and remaining perfectly still

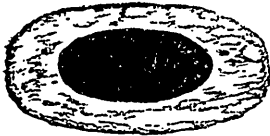


FIG. 3—COCCON.

as if dead, where, from their dull colours, they are difficult to detect. When at rest, their wings lie horizontally over their backs, and the upper ones entirely cover the lower pair. The upper wings are generally crossed with one or more wavy lines, and always bear two

characteristic marks—one about half way down the wing, oricircular in shape; the other nearer the tip, reniform or kidney shaped. Fig. 4 shows "The Gothic Dart Moth" (*Agrotis subgothica*, Haw.,) with wings closed and expanded; this is a very common and injurious species, the caterpillar of which is too well known as the "Dingy Cut-worm."

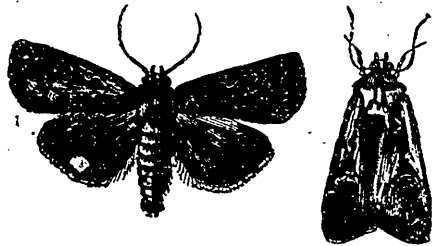


FIG. 4—GOTHIC DART MOTH.

Cut-worms may be divided into three classes, according to their habits, and remedies must be applied in a slightly different manner for each. These classes are:—

1. Climbing Cut-worms, or those which climb trees and destroy the buds.
2. Surface Cut-worms, or those which live on the surface of the ground and cut off herbaceous plants just beneath the surface of the soil.
3. Those which combine both of these habits.



FIG. 5—AMPUTATING BROCADE MOTH.

Of the first class, a good representative is the Climbing Cut-worm (*Agrotis scandens*, Riley). The Dingy Cut-worm, the caterpillar of the Gothic Dart Moth (Fig. 4), belongs to the second class, and the "Variegated Cut-worm" (*Agrotis saucia* Treit.), and the "Yellow-headed Cut-worm," which turns to the "Amputating Brocade Moth"

(*Hadena arctica* Bois.) (Fig. 5) are good representations of the third class.