

of *rectilinea* on the other hand show apparently a marked tendency to obsolescence, and we possess several Illinois specimens in which we can detect but the merest trace of white on the veins; in fact, were it not for locality, they might easily be mistaken for *phyllira*. Continued breeding will be necessary to decide the question as to whether the above mentioned larval distinction holds good.

In the accompanying sketch we give a diagram of the position of the primary tubercles in the first stage of *phyllira*; this is apparently typical

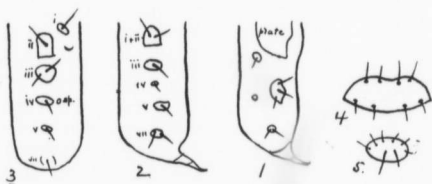


FIG. 7.

1. Prothoracic segment.
2. Mesothoracic segment.
3. Abdominal segment.

4. Prothoracic plate.
5. Small plate.

for the genus *Apantesis*, at least it holds good for all the species that are discussed in this present paper. On the meso- and metathoracic segments tubercles I and II coalesce forming a single wart with two setae; on the abdominal segments, I and II are separate, the former being minute; III contains two setae, a typical Arctian feature; IV is immediately behind the spiracle, V directly below IV, each one with seta; VI is absent and VII is represented only on those abdominal segments which bear no prolegs as a minute seta; on the thoracic segments VII is a more prominent wart with two setae. On the prothorax and 9th and 10th abdominal segments considerable reduction of the tubercles takes place. In the following descriptions if no reference to the position of the tubercles is made, it may be taken for granted that they correspond with the above diagram.

Ovum.—Conical from a flat base; very slightly sculptured; pale yellow, shiny, with no colour change until just previous to emergence when it becomes blackish; deposited promiscuously on the ground.

Stage I.—Head black with sparse setae; body pale greenish brown with blackish tubercles and large black thoracic plate, this latter containing 8 black setae arranged in an anterior and posterior row of four. On the thoracic segments the setae of tubercles I, II and III are black, the others being white; on the abdominal segments I–IX tubercle II contains a