

In comparing the antennæ of the Grylloblattids with those of the typical Blattids (e. g., the antennæ of *Periplaneta americana* Linn) we find no such close correspondence in the number of segments, since the typical Blattid antenna is composed of considerably over a hundred more segments than are present in the antenna of *Grylloblatta*. Furthermore, the segments of a Blattid's antenna are of a very different type from those of a Grylloblattid's antenna, the smaller proximal antennal segments being more annular in outline in the Blattids. In the antennæ of the Embiids and Grylloblattids, on the other hand, there is not only a remarkable correspondence in the number of segments composing the antennæ, but the similarity extends even to the relative size and the outline of the antennal segments themselves.

In both *Embia* (Fig. 9, 1) and *Grylloblatta* (Fig. 9, 2) the scape (Seg. I) is much larger than the pedicel (Seg. II). Furthermore, the pedicel (Seg. II) is of about the same width as the postpedicel (Seg. III), but is shorter than the postpedicel (Seg. III) in both *Embia* (1) and *Grylloblatta* (2). In both insects, the postpedicel (Seg. III) is longer than the succeeding two segments. (Segs. IV and V) which are somewhat annular, or broader than long, in outline. The sixth segment (Seg. VI) is slightly longer than the two preceding it, in both *Embia* and *Grylloblatta*, while here is a slight increase in length in the seventh segment in both insects. The segments from this point on, gradually become longer, slenderer, and more cylindrical in both insects, and the correspondence, even to the minutest details, is so striking, that even the veriest tyro could not fail to perceive the remarkable similarity in the antennæ of these two insects. On the other hand, one has but to glance at the antennæ of a typical Blattid, to convince himself that the segments of its "whip-lash" antenna are of a very different type from those of *Grylloblatta*; and if any conclusions are to be drawn from a comparative study of the antennæ, they would clearly point to a remarkably close relationship between the Grylloblattids and Embiids, and a much more distant relationship to the Blattids.

It might be mentioned in passing, that the antennæ are situated nearer to the base of the mandibles, and below the eyes, in Embiids and Grylloblattids; while in the typical Blattids, the