

Sub-family *Cossinae*.

The larva and moth are long-bodied, and this group is characterized by the former being internal feeders. They are brown and livid in color and coleopterous-looking, as are internal feeders generally, belonging to whatever order of insects. They have this habit in common with *Castnia*, and *Sesia*, but this has probably survived, while the other characters have differentiated so that we cannot consider the habit as uniting them in a modern family. The female *Cossus* has an external ovipositor, which is an index for the habit of the caterpillar. The ocelli are wanting and the tongue is quite rudimentary. The male antennæ are pectinate, the wings are somewhat narrow and the habitus is sphingi-form. I have watched the exclusion of *Cossus* from the cocoon, the very active and moveable chrysalis being forced out into the air before the shell is broken. Dr. Bailey gives a good account of the transformations of Bailey's Goat Moth, *Cossus centerensis* of Lintner. We have representatives of the European genera *Cossus* and *Hypopta*, while *Prionoxystus robinia*, the Locust Goat Moth, seems to me decidedly a distinct form of North American origin.

Sub-family *Hepialinae*.

In this group we have, without a doubt, the lowest Spinners. The long thorax, with its subequal metathorax, draws the insertion of primary and secondary wings apart. The subequal wings with pointed tips and the 12-veined secondaries, the short antennæ, spurless tibiæ are suggestive of the Neuroptera. The distribution of the group is very general throughout the world; and this fact, together with the striking structural resemblance of its members, leads us to believe we have to do with an old and long preserved type of moth. The caterpillars are root feeders, like those of the *Cossinae*, sixteen footed, naked, yellowish. The eggs are remarkable for their fineness, looking like gunpowder. The cocoon is subterranean, a cell lined with silk. We have very fine species in North America, referred by Dr. Packard to *Sthenopsis*, but which, notwithstanding their size, seem to me congeneric with the European *Hepialus humuli*. The limits of the genus may be reached with the beautiful *H. auratus*, which has a structural ally figured by Herrich-Schæffer from Brazil. The species are generally rare; the moths fly in the dusk of evening and are an object of interest, with most collectors.