

which have hitherto been unrecorded, and have also added a more minute description of this interesting moth. The accompanying lithograph represents the insect in its different stages, life size. This season (1878) beautiful specimens of both sexes were obtained during the month of June, from which our illustrations were made by Paul Riemann, a naturalist and artist. During 1877 the majority of examples obtained were females; during 1878 the reverse was the case, as males largely predominated.

It was ascertained that the time for the *Cossus* to emerge was from dark to early morning, or between the time of the setting and rising of the sun. Every day the empty cases were removed, and by counting them it was known how many to expect to find, which aided the collector much.

As might be expected from the aborted tongue, this *Cossus* is not attracted by sugar. The trunks of the trees from which they emerged, as well as neighboring trees, were sugared extensively during the time of their appearance, but not one came to taste the bait. During this process, in examining the sugared patches, the light from the bulls-eye lantern was thrown repeatedly upon the surface of the Poplar trees, and several were observed at different times in the act of emerging.

Just before the final transformation the pupa renews its efforts and pushes itself through the thin bark that has been allowed to remain by the larva. It pushes itself through the opening as far as the base of the abdomen, when, after a while, the exposed pupal skin becomes dry and splits, and the moth escapes, climbing up the bark of the tree, shaking out its wings until developed. The moths usually select the end of a dead and broken limb or protuberance of the roughened bark to rest upon, which their color so closely resembles that it is exceedingly difficult to discover their whereabouts.

The empty pupa skins remain at the entrance of the tunnel. The moth itself at first is rather sluggish, and can be captured readily on the bark of the tree in which it has passed its immature state. The moth is very liable to "grease," consequently it is advisable to let it thoroughly dry before capturing and pinning. The cavity of the abdomen should be stuffed, and a few drops of benzole previously put in the cavity or placed upon the material used as stuffing.

The chrysalids vary much in size, some of which are infested by an ichneumon fly, which preys on the caterpillar. A pupa was observed endeavoring to make its way to the surface of the bark, but seemingly unable