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## POPULAR ENTOMOLOGY.

THE ENGRAVER BUTLES (FAMILY IPIDÆ).

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Beetles of the Family Ipidæ have been described from almost every portion of this continent from Mexico to Alaska, and will probably be found wherever their food-plants occur. Many species are described from the West Indies, and a very large number from Central and South America, and from Europe. Many are known from Japan, Australia, Ceylon, South Africa and elsewhere. A few species seem almost world-wide in distribution; others are known only from small regions. A number of species, e.g., Eccoptogaster rugulosus and Xyleborus dispar, have been introduced into America from Europe.

The North American members of the family Ipidæ are usually somewhat elongate and cylindric in form, and brown or black in colour. They vary from one to a little over eight millimeters in length. *Crypturgus pusillus* is one of the smallest species, and *Dendroctonus valens* probably the largest. The legs are rather small and weak, as becomes their habits. The antennæ are short and geniculate, with an extremely large club, which is usually annulated. The vast majority of the Ipidæ cut their breeding tunnels in the bark or wood of trees or shrubs. The chief North American exceptions are referred to below.

Their burrows are of great interest, and often of remarkable regularity and beauty. Those of many species are so characteritsic that it is often easy to determine which species has been at work from an examination of the tunnels and galleries alone.

A large portion of our North American species infest conferous trees, the pines and spruces being especially subject to attack. Of deciduous trees, the oak, beech and hickory suffer severely, and there is scarcely a northern tree but serves as food-plant for one or more species of this family. As a rule