

furnished us with an electrotype of the plate for the use of this journal. The smaller figure is the natural size of the bug, the larger one a magnified representation of the same.

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## HINTS ON DESCRIBING CATERPILLARS.

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When comparing descriptions of larvæ made by different writers, the labor of the student is often greatly increased by the want of order and method in their compilation. With a view of simplifying details and lessening labor, the following suggestions are offered, with the hope that they may serve to stimulate some to enter earnestly into this interesting branch of our favorite study.

When we take up a caterpillar with the intention of describing it, the many ornamentations, markings and diversities of color belonging to it, are sometimes quite confusing, unless we begin to classify them, when the most complex appearance is soon markedly simplified. We have for some time past made it a rule to take descriptions precisely in the following manner and order. First, the full *length* of body when in motion; then *form*, whether cylindrical, onisciform, or otherwise; if strongly annulated or ringed, a note is made of that also.

Beginning with the *head*, which we call the first segment—making the total number thirteen—take first its size, large, medium, or small. Next *form*, flattened, rounded, or pointed, and whether strongly bilobed or not. Then color, markings and appendages, such as spines or hairs; giving also the color of mandibles.

Commencing the body with the upper surface, give first its general color; next markings, such as stripes, lines or spots, working from anterior to posterior segments; then ornamentations or appendages, such as hairs, spines, horns, tubercles or granulations, with their size, form and color.

Under surface—first general color, then markings, &c., finishing with color and form of feet and prolegs.

By steadily observing a particular arrangement of this sort, descriptions may readily be compared with one another and their identity or distinctness established with little labor.

It is also an excellent plan to underline some of the most prominent and striking features in the appearance of a larva, by which one may often at a glance decide whether it is likely that a certain caterpillar before you is or is not identical with a particular description. In Stainton's "Manual of Butterflies and Moths" this plan is carried out, and the prominent characteristics thus given in a few italicised words will frequently relieve one of the labor of reading a description throughout.