

12, *Calocampini*, only *Lithophane* (*Xylina*), *Lithomia*, *Calocampa* and *Xylomigis*; 13, *Cleophanini*, only *Cleophana*. I regard *Nyctophæata* as a Heliothid; 14, *Cuculliini*; 15, *Eurhipiini*; 16, *Ingurini*\*; 17, *Anomiini*\*; 18, *Litoprosopini*\*; 19, *Calpini*; 20, *Stiriini*; 21, *Plusiini*; 22, *Heliothini*; 23, *Tarachini*; 24, *Cerathosiini*; 25, *Eustrotiini*; 26, *Hyblæini*.

There remain to be considered the geometriform *Noctuidæ*, or the *Catocalinæ* (*Noctuæ fasciatæ*), the pyralidiform *Noctuidæ*, or the *Deltoïdinae* and a small sub-family group, the *Brephinae*, containing only two genera, with few species, found in northern latitudes and elevations over Europe, Siberia and North America, a relic of a preglacial fauna. The genera are *Brephos* and *Leucobrephos*.

As may be drawn from the above names applied to the leading groups, the *Noctuidæ* are a large family, with various resemblances to the surrounding families of moths. The Owlet moths touch the Spinners, the Spanner and Sparkler moths, while the typical *Noctuinæ*, from their total form and embryology, bring the whole family, in a linear arrangement, between the two first. In number of species and structural variation the *Noctuidæ* yield to no other in interest, and its large representation in North America commends it to the attention of the student. For the student I have at least originally shown the way his studies in this group should be carried on. The matters of detail have not always seemed so important to me as the method, and this method I have originally introduced into the study, combining my reading with observations under the microscope. There is growing up a tendency, especially in Europe, where the living material is wanting, to engage in a sort of book working of nature. The new student constructs, out of the writings and pictures of others, some new turn to our views of life and variation, fancying even that Darwin may be damaged by such methods. It is vanity displayed in vain.

#### Sub-family *Catocalinæ*.

The earliest recognition of this group which I find in literature is that of Borkhausen, who calls this *Noctuæ fasciatæ*, in contradistinction to the *Noctuinæ*, or *Noctuæ nonfasciatæ*. These terms are clumsy and had better give way to those proposed by Packard (Proc. P. S. N. H., Vol. I., 153, et seq.). The wings are broad; primaries triangulate; secondaries