

The second order of *pricking flies*, namely, the *Two-winged Flies* (Diptera), are also found in a fossil state in the oolites, together with Half-winged Flies; but they probably developed out of the Hemiptera by the degeneration of the hind wings. In Diptera the fore wings alone have remained perfect. The principal portion of this order consists of the elongated gnats (Nemocera) and of the compact blow-flies and house-flies (Brachycera), the former of which are probably the older of the two. However, remains of both are found in the oolitic period. The two small groups of lice-flies (Pupipara) forming chrysales, and the hopping-flies (Aphaniptera), probably developed out of the Diptera by degeneration resulting from parasitism.

The eighth and last order of Flies, and at the same time the only one with mouth-parts adapted to sipping liquids, consists of *moths* and *butterflies* (Lepidoptera). This order appears, in several morphological respects, to be the most perfect class of Flies, and accordingly was the last to develop. For we only know of fossil remains of this order from the tertiary period, whereas the three preceding orders extend back to the oolites, and the four biting orders even to the coal period. The close relationship between some moths (Tineæ) and (Noctuæ), and some caddis-flies (Phryganida) renders it probable that butterflies have developed from this group, that is, out of the order of Gauze-winged Flies, or Neuroptera.

The whole history of Flies, and, moreover, the history of the whole tribe of Arthropoda, essentially confirms the great laws of differentiation and perfecting which, according to Darwin's theory of selection, must be