ple extent, forming, when expanded, a quadrant of a circle, with five or six nervures radiating from their base, and folded longitudinally.

In the *Hemiptera*, the tegmina, or as they are here called, the *hemi-elytra*, are coriaceous towards their base, but membranous towards their extremity, and the true wings are folded transversely, so as to cross one another. These hemi-elytra are employed to strike the air in flight, and their movements accompany those of the wings.

Insects having four thin membranous and transparent wings are arranged under two orders; namely, the *Neuroptera* (Fig. 160,) in which the lesser nervures form an interlacement of fibres, crossing one another nearly at right angles, like net-work, or lace; and the *Hymenoptera* (Fig. 161,) in which they are disposed like the ramifications of arteries or veins, diverging at acute angles from the main trunks. The insects belonging to these two orders enjoy extensive powers of flight. *Libellulæ*, and *Æschnæ*, which are included in the first of these orders, never close their wings, but, when they are not flying, keep them constantly expanded, and ready for instant action. They fly with the greatest ease in all directions, sideways, or backwards, as well as forwards, and can instantly change their course without being obliged to turn their bodies. Hence they possess great advantages both in chasing other insects, and in evading the pursuit of birds. *Bees*, which are hymenopterous insects, have often been observed to fly to great distances from their hive in search of food. The humble bee adopts a very peculiar mode of flight, describing, in its aerial course, segments of circles, alternately to the right and to the left. The velocity with which these insects move through the air, in general, much exceeds that of a bird, if estimated with reference to the comparative size of these animals.*

* I have been favoured by Mr. George Newport with the following account of the structure of the sting of the Wild Bee. (*Anthophora retusa*, Kirby) which he has lately carefully examined, and from whose drawings of the dissected parts the annexed figures (163) have been engraved. "The sting of this bee, A, is formed of two portions placed laterally together, but