

considered as the necessary results of Natural Selection. The whole tribe, so rich in forms, begins in the Archilithic period with the class of *Crabs* breathing by gills, and with the lowest *Primæval Crabs*, or *Archicaridæ*. The form of these *Primæval Crabs*, which were developed out of segmented worms, is still approximately preserved by the remarkable *Nauplius*, in the common larval stage of so many *Crabs*. Out of the *Nauplius*, at a later period, the curious *Zoëa* was developed, which is the common larval form of all the higher or mailed crabs (*Malacostraca*), and, at the same time, possibly of that *Arthropod* which at first breathed through *tracheæ*, and became the common ancestor of all *Tracheata*. This *Devonian* ancestor, which must have originated between the end of the *Silurian* and the beginning of the *Coal* period, was probably most closely related to the still living *Primæval Flies*, or *Archiptera*. Out of these there developed, as the main tribe of the *Tracheata*, the class of *Flies*, from the lowest stage of which the *spiders* and *centipedes* separated as two diverging branches. Throughout a long period there existed only the four biting orders of *Flies*—the *Primæval flies*, *Gauze-wings*, *Straight-wings*, and the *Beetles*, the first of which is probably the common primary form of the three others. It was only at a much later period that the *Licking*, *Pricking*, and *Sipping* flies developed out of the *Biting* ones, which retained the original form of the three pairs of jaws most distinctly. The following table will show once more how these orders succeeded one another in the history of the earth.