The remains of winged insects have sometimes been found in the upper secondary strata in England, particularly in the calcareous slate of Stonesfield, Oxfordshire, where numerous impressions of the elytra, or hard cases which cover the wings, of coleopterous insects occur. Professor Buckland very ingeniously conjectures that these winged insects might serve as food for the flying lizards (Pterodactyli) that are found in the same strata, and were cotemporaneous with them. Of all the four grand divisions of the animal kingdom, the *Articulated* has supplied the smallest number of fossil organic remains.

Molluscous Animals.—Shells of these animals, chiefly bivalves, occur in the limestones of the transition series; but the number of the species is comparatively small. Some chambered shells, particularly orthoceratites, are found in transition limestone.

In the secondary strata that cover the transition series, shells of molluscous animals, both bivalves and univalves, are more abundant, and the number of the species is greatly increased.

It is in the lower strata of this series that chambered shells, such as nautilites and ammonites, first become numerous: some species are continued into the chalk strata, but no ammonites are found in the strata above chalk. Trochiform or top-shaped spiral univalve shells first appear in the lower part of the secondary series, but become more numerous in the upper part of this series. In the tertiary strata above chalk, the species of univalve shells greatly exceed those of the bivalves: in the lower strata, the reverse is the case. We may further remark, that, as the tertiary strata are the most recent of regular rock formations, so the organic remains which they contain, bear a closer resemblance to the shells of molluscous animals living in our present seas, than what are found in the more ancient strata. Some of the shells in the upper part of the tertiary strata appear, indeed, to be identical with those of existing species.

The different classes and orders of molluscous animals that have left their remains in the lower and the upper strata, doubtless possessed, each, the peculiar organization that best enabled them to exist and multiply under the peculiar condition of our planet, that was cotemporaneous with the epoch of their creation. When this condition was changed, their numbers were diminished, or they disappeared entirely, and were succeeded by different races, with an organization adapted to other modes of existence, and to the new circumstances in which they were placed. Such are the legitimate inductions which we appear justified in making, from the organic remains in the different strata. The further consideration of this interesting enquiry will be resumed in the succeeding chapters.

Vertebrated Animals are arranged under four classes:—fishes, reptiles, birds, and mammiferous animals. Remains of fishes are exceedingly rare in transition rocks; but they appear, decidedly, in the lower secondary strata. The entire bodies are, sometimes, well