

of the lower classes prevailed *chiefly*, at the commencement of organic life, but they did not prevail *exclusively*; we find in rocks of the transition formation, not only remains of radiated and articulated animals and mollusks, such as Corals, Trilobites, and Nautili; but we see the vertebrata also represented by the Class of Fishes. Reptiles have been found in some of the earliest strata of the secondary formations.\* In the footsteps on the New Red sandstone, we have probably the first traces of Birds and Marsupialia. (See Pl. 26<sup>a</sup>. and 26'.) The bones of Birds occur in the Wealden formation of Tilgate forest, and those of Marsupialia in the Oolite at Stonesfield. (See Pl. 2. Figs. A. B.) In the midway regions of the secondary strata, are the earliest remains yet discovered of Cetacea.† In the tertiary formations, we find both Birds, Cetacea, and terrestrial Mammalia, some referrible to existing genera, and all to existing orders. See Pl. 1, fig. 73—101.

Thus it appears, that the more perfect forms of animals become gradually more abundant, as we advance from the older into the newer series of depositions: whilst the more simple orders, though often changed in genus and species, and

\* E. g. In the Magnesian Conglomerate of Durdham Down near Bristol, and in the bituminous marl slate, (Kupferschiefer) of Mansfeld in the Hartz.

† There is, in the Oxford Museum, an ulna from the Great Oolite of Enstone near Woodstock, Oxon, which was examined by Cuvier, and pronounced to be cetaceous; and also a portion of a very large rib, apparently of a whale, from the same locality.