

England. This is the earliest example of the bones of birds in the rocks.

We have now reached the top of the Mesozoic or Secondary Period. Its peculiar characters are as follows :

- 1. In it Mammiferous Animals are found but rarely, and of small size, belonging to the Marsupial sub-class.

2. The Reptiles have an immense development in this period. Their great size and abundance have led some authors to call this the Palæozoic Age, or the Reign of Reptiles. But such phrases are rather poetical than scientific.

3. The beautiful group of Ammonites and Belemnites with ramified divisions between the chambers, belongs exclusively to this period.

4. The Echinoderms are quite different from those of the Palæozoic Period. The Echinides and Stellerides have a great development.

5. The Polypi belong to peculiar groups not found scarcely in the palæozoic.

10. TERTIARY PERIOD.

As we pass from the secondary into the tertiary period, we find a decided change in the character of the organic remains, scarcely a species being common to the two divisions. Those which come in with the tertiary strata bear a strong resemblance to existing animals and plants, and numerous species are regarded by most zoologists as identical with those living now. But other eminent naturalists, among whom Agassiz stands at the head, are of the opinion that the fossil and living species are not in any case, perhaps, identical ; but only closely related. At any rate, we find the fossil species becoming more and more like those alive, as we ascend in the tertiary series, so that it becomes more and more difficult to distinguish between them.

Sir Charles Lyell's well-known division of the tertiary strata into Eocene, (the lowest group), Miocene and Pliocene, is founded on the per cent. of living species in the different groups. It does not exceed five per cent. in the Eocene, twenty-five in the Miocene, and is between fifty and seventy in the Pliocene. In fact the per cent. varies all the way from nothing to seventy from the bottom to top, and hence it seems a merely arbitrary assumption to stop at any particular per cent. Moreover, if the opinion of other eminent zoologists is correct, that the species are all extinct, this classification falls to the ground. Yet it is generally adopted by English writers, and it would