

Triassic date had consisted almost entirely of fresh or brackish-water beds, in which the bones of terrestrial and amphibious reptiles were the most characteristic fossils. The new fauna was, as might have been expected, in part peculiar, not a few of the species of mollusca being referable to new genera; while some species were common to the older, and some to the newer rocks. On the whole, the new forms have helped greatly to lessen the discordance, not only between the lias and trias, but also generally between paleozoic and neozoic formations. Thus the genus *Orthoceras* has been for the first time recognised in a neozoic deposit, and with it we find associated, for the first time, large ammonites with foliated lobes, a form never seen before below the lias; also the *Ceratite*, a family of cephalopods never before met with in the upper trias, and never before in the same stratum with such lobed ammonites.

We can now no longer doubt, that should we hereafter have an opportunity of studying an equally rich marine fauna of the age of the lower trias (or *bunter sandstein*), the marked hiatus which still separates the Triassic and Permian eras would almost disappear.

*Archæopteryx macrurus*, Owen.—I could readily add a copious list of minor deposits, belonging to the primary, secondary, and tertiary series, which we have been called upon in like manner to intercalate in the course of the last quarter of a century into the chronological series previously known; but it would lead me into too long a digression. I shall therefore content myself with pointing out that it is not simply new formations which are brought to light from year to year, reminding us of the elementary state of our knowledge of paleontology, but new types also of structure are discovered in rocks, the fossil contents of which were supposed to be peculiarly well known.