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spot of the debris of those rocks on which it immediately rests. At one point we find pieces of coal-shale, in another of mountain limestone, recognizable by its peculiar shells and zoophites. Fractured bones, also, and teeth of saurians, are dispersed through some parts of the breccia.

These saurians (which until the discovery of the Archegosaurus in the coal were the most ancient examples of fossil reptiles) are all distinguished by having the teeth implanted deeply in the jaw-bone, and in distinct sockets, instead of being soldered, as in frogs, to a simple alveolar parapet. In the dolomitic conglomerate near Bristol, the remains of species of two genera have been found, called *Thecodontosaurus* and *Palæosaurus* by Dr. Riley and Mr. Stutchbury;* the teeth of which are conical, compressed, and with finely serrated edges (figs. 459 and 460).



Sir Henry de la Beche has shown that, in consequence of the isolated position of the breccia containing these fossils, it is very difficult to determine to what precise part of the Poikilitic series they belong.[†] Some observers suspect them to be triassic; but, until the evidence in support of that view is more conclusive, we may continue to hold the opinion of their original discoverers.

In Russia, also, Thecodont saurians of several genera occur, in beds of the Permian age; while others, named *Protorosaurus*, are met with in the Zechstein of Thuringia. This family of reptiles is allied to the living monitor, and its appearance in a primary or paleozoic formation, observes Prof. Owen, is opposed to the doctrine of the progressive development of reptiles from fish, or from simpler to more complex forms; for, if they existed at the present day, these monitors would take rank at the head of the Lacertian order.[†]

We learn from the writings of Sir R. Murchison, S that in Russia the Permian rocks are composed of white limestone, with gypsum and white salt; and of red and green grits, occasionally with copper ore; also magnesian limestones, marlstones, and conglomerates.

‡ Owen, Report on Reptiles, British Assoc., Eleventh Meeting, 1841, p. 197.

^{*} Geol. Trans., Second Series, vol. v. p. 349, pl. 29, figures 2 and 5.

⁺ Memoirs of Geol. Survey of Great Britain, vol. i. p. 268.

[§] Russia and the Ural Mountains, 1845; and Siluria, ch. xii. 1854.