

deposits happened, so as to cover its bed very widely, first with peculiar calcareous deposits (magnesian limestone), in which occur for the last time a few of the old forms of life (*Productæ*, *Crinoidea*, &c.).

The magnesian limestone of Yorkshire has yielded only the following marine families of animal life; the remarkable fishes called *Palæoniscus*, which abound in Durham and Northumberland, not being yet discovered in these strata in Yorkshire:—

Polyparia.	Dimyaria.
Brachiopoda.	Cephalopoda.
Monomyaria.	

PALÆOSAURIAN PERIOD.—The magnesian limestone is followed by arenaceous and argillaceous deposits, richly coloured by peroxide of iron (*New Red* formations). These are almost devoid of all trace of life; and if we were to judge by their aspect in the North of England, we might regard them as belonging to a period really deficient of organic forms,—a sort of interregnum of nature—separating the old Palæozoic from the new Mesozoic life. But this is not the true explanation. Elsewhere in the South of England, and more conspicuously in Europe, the new red formation contains both plants and animals, and they belong to the Mesozoic type. Among them are the Saurians of Bristol, called *Palæosaurus*.

TELEOSAURIAN PERIOD.—There is no proof that land had been raised to represent any other part of the area of Yorkshire, than that already indicated in the western part of the county, during the long period which elapsed while the Lias, with its numerous Saurians, Ammonites, and Belemnites, was deposited far to the east of the Penine hills.

This thick series of deposits has generally an argillaceous character—such as might be produced in parts of an ocean removed from violent currents, and receiving in abundance only the finer portions of matter which could be transported far before subsiding to the bottom. One exception to this occurs in the midst of the deposit. The marlstone and ironstone series