where now the coal strata extend, and much beyond their actual extent. And there is no doubt that the elevation of this tract into great ranges of hills is the work of a somewhat later geological period.

The region of the coal strata indeed, and all the area connected with it, was undoubtedly sinking continually until the completion of the latest of these strata. But afterwards a great change took place. The whole great area of the sea-bed, in this part of the globe, was displaced, in some places raised to the extent of some few thousand feet, so as to constitute ridges of dry and *elevated land*. This as applied to Yorkshire caused the production of the great Penine Chain, which extends southward through Derbyshire, and northward through Durham and Northumberland. We have thus the distinct appearance of a *part of the land of Yorkshire* above the Primæval Ocean.

The augmentation of land in this diagram, as compared with the former one (p. 174), is in the Penine chain of the west of Yorkshire, P. Where the land sloping from this passes, at S, under the sea-level of the period, L, it is worn nearly to a sloping plane. On this, and farther to the east, the sea deposited the Magnesian Limestone, New Red, Lias, Oolites, and Chalk.

The life of this period is partly marine, partly freshwater, partly terrestrial. Of marine life we have the following main groups:—

Foraminifera.	
Polyparia	41
Crinoidea	40
Echinida	3
Conchifera Dimyaria	32
Conchifera Monomyaria	24
Brachiopoda	100
Gasteropoda	91