## CHAPTER X.

## PERMIAN STRATA.

In England there are certain red strata, known as Permian, which occupy a sort of debatable ground, lying between the Carboniferous and New Red or Triassic series. Sometimes they have been classed with the former, sometimes with the latter, by those who like to insist on hard and fast lines of division between each formation. These strata, lying not quite conformably either with the underlying or the overlying formation, I prefer to consider as in some sense transition beds, making one of the steps in that change of the physical geography of our area which put an end to the development of Coal-measures, and made it possible under new conditions for the Permian strata to be deposited.

They are usually divided (as in Germany) into two subformations, viz.:—

Magnesian Limestone and Marl Slate, Rothe-todteliegende.

The higher English beds in certain areas consist chiefly of Magnesian Limestone or Dolomite, interstratified with certain marls, and the lower of red marls, sandstones, and conglomerates. But if we take England as a whole this division does not hold good, for in the eastern part of England the Magnesian Limestone often lies directly on the Coal-measures, and in Lancashire and