shire. They surround all the midland coal-fields and Permian beds between Shrewsbury, Coventry, and Derby, and from thence, everywhere unconformably overlying the Permian rocks, they stretch north in a long band from Nottingham to the river Tees.[1] The general arrangement of these strata will be easily understood by help of the diagram, p. 154.

No fossils are known in the New Red or Bunter Sandstones of England, but a few marine shells are found in equivalent strata on the Continent.

In England, above the Upper soft red sandstone are beds of red, white, and brown (Keuper) sandstone, with interstratifications of red marl, often ripple-marked, and containing bones and footprints, chiefly of Labyrinthodont reptiles, together with a few plants and a peculiar fish, *Dipteronotus cyphus*, found near Bromsgrove, in Worcestershire. The larger impressions of footprints are 8 to 10 inches in length, and in front of each there often is a smaller one made by the forefoot, fig. 33.

In beds of Magnesian conglomerate at the base of, and associated with the New Red Marl at the edge of the Mendip Hills, Dr. Riley and Mr. Stutchbury discovered

[1] The Muschelkalk (absent in Britain) may be well seen, among other places, near Gotha, and at Eisenach, in Thuringia. It is a grey shelly limestone, rich in *Terebratulæ*, *Trigoniæ*, *Myæ*, *Plagiostomas*, *Aviculæ*, *Oysters*, and *Pectens*. The genus *Ceratites*, closely allied to, if not a true *Ammonite*, occurs here. Lamellibranchiate molluscs, some of new genera, abound as individuals, while Brachiopoda (excepting *Terebratulæ*) sink in the scale.

At Guttenstein and Werfen, in the Austrian Alps, there are strata at the base of the New Red Sandstone which are not Permian, and which contain a rich and peculiar fauna—*Ammonites*, *Belemnites*, and other secondary forms, being mixed with *Orthoceratites*, *Goniatites*, and other genera usually considered characteristic of Palæozoic times.