

lithological grounds. The Devonshire rocks were not without fossils, and considerable collections of these had already been gathered by different residents in the county, but no one had yet endeavoured to make a comparison between them and those of known stratigraphical horizons elsewhere. This task was undertaken at last by William Lonsdale (1794-1871), who towards the end of the year 1837 came to the conclusion that the greywacke and limestone of South Devonshire, judged by their fossil contents, must be intermediate between the Silurian and the Carboniferous formations, that is, on the parallel of the Old Red Sandstone of other parts of Britain.

Such a decision from a skilled palæontologist raised up some serious difficulties, which completely non-plussed the two able geologists who the year before had gone so gaily down to the south-west of England to set matters right there. It seemed to them as if Lonsdale's opinion was opposed to what had been regarded as definitely settled in the stratigraphy of the older stratified rocks. For two years they continued in complete uncertainty as to the solution of the problem. But at last after the examination of innumerable specimens, endless discussion, and interminable correspondence, they came to adopt Lonsdale's views. They saw that the abundantly fossiliferous rocks of South Devon contained, in their lower members, fossils that reminded them of Silurian types, while in their upper members, they yielded species that were common also to the Carboniferous Limestone. The two geologists therefore recognised in these rocks an intermediate series of strata, containing