ferous series, for while between Nottingham and the neighbourhood of Leeds they lie upon Coal-measures, between Leeds and the vicinity of Darlington they overlap the north edge of the Yorkshire coal-field, and rest directly on the Millstone Grit and associated shales as far as the south end of the Durham coal-field, north of which they again lie on Coal-measures.

The limestone and marl slate are often fossiliferous.

In Lancashire, Cheshire, and North Staffordshire, the Permian strata chiefly consist of red marls and sandstones, interstratified near Manchester with a few thin bands of Magnesian Limestone, where both limestones and marls are fossiliferous, containing bivalve shells of the genera *Pleurophorus*, *Bakevillia*, and *Schizodus*, *Turbo*, *Natica*, &c. Similar marls and sandstones, bordered by New Red Sandstone, stretch at intervals from the border of the North Staffordshire coal-field to that of Shrewsbury, and skirt the Denbighshire coal-field on the east. In the more central parts of England the same kinds of rock border the Coalbrookdale, Forest of Wyre, South Staffordshire, and Warwickshire coal-fields. In the Permian strata of Warwickshire there are beds of conglomerate, the waterworn pebbles of which largely consist of fragments of Carboniferous Limestone. A few stems of trees have been found in them, together with *Calamites*, and two or three casts of shells of the genus *Strophalosia* (fig. 31), together with a Labyrinthodont Amphibian, *Dasyceps Bucklandi*.

A large extent of Permian red sandstones and marls occupy the beautiful Vale of Eden in Westmoreland and Cumberland (see fig. 104, p. 521), from whence Permian strata extend into the valleys of the Nith and