

12. Upper New Red Sandstone, and Muschelkalk. Called also Triassic System.—The sandstone of this group is called red, because much of it is stained by oxide of iron. There is found associated with it in Germany a great chalky formation, called the Muschelkalk or Shelly-limestone. 'It is in this system that rock-salt and salt springs occur in Cheshire and other parts of England.'—*Lyell*. 'A few traces only of fossil shells, fish, and plants, have been detected in this formation in England.'—*Ib.*
13. Magnesian Limestone System,—*i. e.*, stone composed of carbonate of lime and carbonate of magnesia, sometimes in nearly equal proportions: and Lower New Red Sandstone. Called also Permian System.—It was first pointed out by M. Agassiz, that all the bony fish of the Magnesian Limestone, and of all the more ancient formations, have the vertebral column continued into the upper lobe of the tail, which is much longer than the lower lobe, whereas, in strata newer than the Magnesian Limestone, the tail-fin is divided into two equal lobes, as in most living fishes, the vertebræ not being prolonged into either lobe.
14. Coal.—The bulk of this formation consists of sandstone, shale, and limestone; but many beds of coal are interstratified with them—hence the whole are called carboniferous or coal-bearing. 'The coal is entirely compressed land vegetation, chiefly from trees of great size, whose stems, branches, leaves, etc., are abundant in or on the interposed shales and sands.'—*Dr. P. Smith*. 'One of the most remarkable peculiarities of the coal fossils is the singular preponderance of the tribe of ferns, and the great variety of form in which plants of this kind are developed.'—*Ansted*.