

Mountain limestone is one of the most important calcareous rocks in England and Wales, both from its extent, the thickness and number of its beds, the quantity and variety of its organic remains, and its richness in metallic ores, particularly of lead. In Derbyshire, where the different beds of limestone have been pierced through by the miners, the average thickness of the three uppermost is about 160 yards; the beds are separated by beds of trap or basalt, resembling ancient lavas. The lowest limestone has not been pierced through. In the northern part of Yorkshire, and in Westmoreland and Cumberland, the beds of mountain limestone alternate with beds of greywacke-slate, and of coarse sandstone. In North Wales, and in Somersetshire, mountain limestone forms entire mountain masses, of vast thickness, distinctly stratified; the strata often varying in colour, and sometimes in the nature of their organic remains.

The beds of mountain limestone in England and Wales vary much in colour and quality. The colour is most commonly light grey, but it is sometimes black and sometimes a reddish brown, or is variegated. The limestone is generally sufficiently hard to receive a high polish, and forms what is denominated marble, of considerable beauty. The texture is more or less crystalline.—The prevailing characteristic organic fossils are encrinites and madrepores. The upper beds of mountain limestone in Derbyshire appear to be composed almost entirely of encrinites. A bed of black limestone with madrepores occurs in Westmoreland; it is more rare in Derbyshire, but is found in the lower part of the mountain limestone in North Wales, and Shropshire, and also in Devonshire. It takes a beautiful polish, and is much used for chimney-pieces. The black colour appears to be derived from bitumen, for it is injured by heat, and is entirely expelled by burning. Mountain limestone is generally a nearly pure carbonate of lime; but some beds, and even entire hills of this limestone, contain a large portion of magnesia, like the dolomite of the Alps. The mountain magnesian limestone of England is generally harder than the common limestone, and has frequently a reddish brown colour. Bredon Hill, in Leicestershire, and Cloud's Hill, in its vicinity, are composed entirely of magnesian limestone; there are several beds of similar limestone which form low hills in the adjacent country: they may all be regarded as an extension of the Derbyshire mountain limestone, ranging southward towards Charnwood Forest, and terminating at Grace Dieu, where the limestone is nearly in contact with the granitic and porphyritic rocks. I say these may be regarded as an extension of the Derbyshire mountain limestone, though the continuity is partly concealed by a covering of the red marle, and by coal measures: the limestone contains the same characteristic fossils as the Derbyshire limestone, particularly encrinites (screw stones), and the euomphalus; but these are not abundant. The strata of Bredon Hill and Cloud's Hill are much exposed, having been extensively quarried for lime during a long period; they