

This limestone often forms in large concretionary and botryoidal masses; the concretions are often as large as a cannon ball, and sometimes grouped together like chain shot. These concretions are dispersed through an arenaceous form of similar materials.

Mr. Smith in his geological map of Yorkshire subdivides the magnesian limestone, or, as he calls it, red-land limestone, thus :

1. A hard bluish white thin bedded stone which at Kinnersley, Knottingly and Brotherston, makes the lime celebrated for agricultural purposes.
2. Red and blue clay and gypsum.
3. A soft yellowish calcareous freestone or magnesian limestone.

These beds are separated from the superior red marle, by a thick conglomerate.

Mr. Buckland has observed in Yorkshire beds closely resembling the Rauchwacke or cellular limestone of the continent, associated with magnesian limestone. See farther particulars in the local account.

The following more detailed particulars relating to the external characters and æconomical application of the beds constituting this formation, together with their disposition and order in which they occur, are extracted from notes kindly lent to the Editor by Mr. Greenough.

Its general colour is buff, but it also occurs white, of various shades of yellow, also of fawn and salmon colour; occasionally of a brown or reddish hue, which prevails chiefly near the partings (Farey) where it is often dendritic.

Its texture is frequently arenaceous, but is sometimes composed of minute rhombic crystals, and is occasionally oolitic, (Mr. Wynch.) It is often carious, the cavities being sometimes lined with calcareous spar. Between Shields and Hartlepool it is crystalline and cellular, from which cause it resists the stroke of the hammer: it is slaty at Baldon hill, Marsdon Rocks, &c. near Newcastle.

The limestone of Sunderland is flexible, near Ravenstone, it contains beds as compact as the Portland, and of the same colour.

At Ferrybridge in Yorkshire it is fetid; its odour does not however arise from the presence of bitumen, but according to Mr. Aikin from sulphuretted hydrogen.

Large masses of it are detached by the agency of fire. In this process that portion of the stone which is impregnated with iron becomes brick-red. Considerable quantities of fuel are required to burn it into lime, and it is apt occasionally to vitrify. Near Sunderland, the brown is generally quarried;