

CLASS of STRATA beneath the CHALK.

The preceding description having ended with the Chalk hills, which form the boldest feature of all the eastern and southern parts of England, it may here be necessary to make some observations on the class of Strata beneath.

Soils and Sub-strata as different as the appearance in the two surfaces, commence at the termination of Chalk: this difference is most striking in the northern and western parts. The most unobserving can scarcely pass without notice, in either of these, or a north-east direction out of London, this remarkable change in the country, which occurs on their descent from the Chalk hills.

In most parts a vale of considerable breadth appears to the extent of vision, parallel to the hills, which gives generally a correct notion of the country, as none of the Strata comprised within the class, which must necessarily be considered together, rise to great altitudes, or at least but rarely without some sort of intermediate valley. There are, however, some instances where the Sand (which is the next Stratum beneath the Chalk) rises to a greater height than the contiguous Chalk hills. Leith hill, and the hills about Longleat, Stourton, and Fonthill, are remarkable instances. These little hills show by their immediate connexion with the Chalk, that the greater sandy heights in the interior of Sussex and Kent, and those of Black Down and North York Moors, are formed of the same Strata. The materials of these vast spaces, and of those more inland; the vales of Blackmore, Wardour, Warminster, Pewsey, Whitehorse, and Aylesbury, and a similar vale extending through Bedfordshire to Cambridge, (with the Strata which compose the margin of those vales) form the class to be considered together, and which in many instances will be sub-divided with difficulty.

The districts enumerated consist of a great variety of Strata, which in the map are all represented by three colours—two blues, with a dark brown and its shades, representing the Oak-tree Clay, Purbeck and Portland stone, and the Carstone. The green sand being considered to occupy the white space on the map parallel to the termination of the Chalk, which is represented by green. The following is a more particular division of those districts of Strata:—

Three Sands, two Rocks, and two Clays.—Green or Chlorite Sand is the first, which contains Burstone, Fuller's earth, and Firestone. Indurated Brick earth succeeds, which is rather sandy and micacious. Sand and Rock, which produces the Portland and Swindon stone.—The other lower divisions come not within the present number.

Chlorite which gives the green tint, from which the name of Green sand has been taken, is repeated in the stony or concreted beds of land herein enumerated, and from these repetitions, the different courses of it, in different parts of the district, are liable to be mistaken or confounded.

The Oak-tree Clay also may be mistaken or confounded with the Brick earth, which in several parts produces good oak. It appears, however, on further investigation, that the Clay beneath the Portland stone, was the one generally so called by Mr. Davis in his Wiltshire report; and which in this, and the succeeding parts of the work, will be called by that name.

The green sand Stratum properly so called, which produces the extraordinary good land, is very limited in breadth, and is quickly succeeded by other sands, producing soil of an opposite quality.