

CLUNCH CLAY and SHALE.

SOIL.—*Colour*, Brown, darker and bluer wet.

Consistence, unabsorbent, adhesive, and tenacious clay; dries in hard lumps; cracks in dry summers.

SUBSOIL.—Much the same as the Stratum, in some places yellowish; deeper, gradually changing to blue.

EXCAVATIONS and Ditches, hold Water.

STRATUM, hard clay rising in lumps, called Clunch; deeper in the Stratum, blacker and laminated, called Shale.

WATER, The remarks on water in the Oak-tree Clay are applicable to this Stratum.

The best water in the clay vale district lies in gravel, or in the rocks beneath the clays.

Clunch Clay forms the base of the hills which are surmounted by the rocks and sands before described, appearing chiefly, if not wholly on the escarpment side of those eminences, and in the lower grounds of the several wide vales adjoining. Where the last mentioned and the Portland rock, and their accompanying sands also, become deficient, the absence of such partitions in these clays, which altogether form the broad district parallel to the chalk before-mentioned, renders the distinction between the thick clays and the Brickearth above them very difficult. And which of them keeps possession of the low surface, wherein they ought all to be found, must ultimately be determined by further and more accurate observations on these and other of their respective distinguishing characters.

The Stratum of the Clunch Clay, and the other clay on the confines of the stony district, terminate in some parts of their course in rounded low hills, which are called knolls or knowls.

A small hill by the Worcester road, two miles out of Oxford, and Lew-hill, near Bampton, are some of these. Other such occur between Malmesbury and Chippenham, and further westward along the courses of these Strata, through the vale of Blackmoor.

The general course of these very thick Strata of clay, through the interior of England, may be known as the site of the broadest vales before enumerated, and likewise of the lowest land in the island, and of that most frequently subject to inundation; but they also rise like other soft Strata, into hills of moderate elevation.

The outcrop or basset edge of the thick Stratum of Clunch Clay, from its N. E. course, through Buckinghamshire, enters Bedfordshire, between Olney and Bedford, and is protruded on the heights, into the great bend of the river Ouse, between these two places. The extreme continuation of the Clunch northward, seems to form the summit of drainage, through the remainder of Bedfordshire, north of the Ouse, and so continues to form the boundary between Northampton and Huntingdonshires, into the fens below Peterborough, and continues northward through Lincolnshire, under and parallel to the low land.