

OAK TREE CLAY.

SOIL.—*Colour*, Brown, yellowish, bluish.

Consistence, Tenacious, unabsorbent Clay ; cracks in dry summers.

SUBSOIL.—Scarcely anywise different from the thick mass of the Stratum.

Colour, Sometimes yellowish tenacious Clay, varying to blue and yellow mixed, and deeper to the regular blue of the Stratum.

EXCAVATIONS, and Ditches, hold Water.

STRATUM, Hard blue Clay, interlaminated with stony nodules of indurated Marl, and layers of Fossil shells ; some blacker, laminated, splits like Clay slate ; some bitumenized wood.

WATER, In every pit and ditch, and through the winter in the foot-marks of every heavy animal. In summer short of water, and that in the wells generally of a bad quality.

SOIL, very different from that of the Stratum, is in this district common to a Subsoil of Gravel, which abounds with calcareous matter. This will be described at the end of the work, as such Fossils vary not according to their sites, but according to the nature of the Strata, from whence the fragments of the compound appear to have been torn, and rounded in water.

This is the second Stratum of the Clay vales, or those within the lowland class, at the foot of the Chalk hills. In some parts of the course of this Stratum it would appear to be properly the first thick blue Clay Stratum, descending in the series of British Strata ; the Clays above the Chalk being generally brown or dun coloured, or rarely exposed so blue as those below the Chalk, which form the two great interior Clay and Marl vale districts : that nearer the Chalk is more of a Brick-earth. As deep as the plough goes, the Clays in Essex are generally brown, but here the plough frequently exposes the native blue colour of the Stratum. Where the subsoil partakes thus much of the nature of the Stratum, this kind of land is little cultivated. Amongst these Clays a subsoil of a lightish brown yellow is exposed by the plough.

Widely-extended parts of this Stratum, and also insular and widely-detached hills of it rise upon a base of sand and stone, to considerable altitudes between the vales of White-Horse and Isis, and also between the vales of Aylesbury and Ottmoor. Badbury and Faringdon Hills, Bagley Wood and Shotover, on opposite sides of the Thames, below Oxford, and Brill Hill, are some of the most remarkable.

The surface composed of this Clay is of great breadth between Swindon and Wotton Bassett. Thence eastward it connects with the vale of White-Horse, where it extends wide and long, and lies so flat as to give name to Standford in the Plain ; and in the space before mentioned, the names of Morton and Even-Swindon, are evidently taken from low, level, and watery parts on the surface of this Stratum.

It appears to be this Clay which forms the deepest part of the Strata, exposed by the vast rising in the under-Strata between the fork of the Chalk hills, in Kent and Sussex.