

## PORTLAND STONE.

**SOIL.**—*Colour, Brown.*

*Consistence,* absorbent, sandy loam; much intermixed with stones, which vary in quantity, size, and hardness, as the different beds of rock occupy the surface, commonly called Stonebrash.

**SUBSOIL,** Orange brown, all stone, or sand and stone alternating, absorbent.

**EXCAVATIONS,** all dry; in sand and stone; some made down to the water.

**STRATUM,** masses of stone in thick beds or layers; bluish white, brownish white, and some hard blue or blue grey.

*Disintegration,* Few persons who have not made observations on this subject can be aware, how a rock nearer and nearer to the surface, gradually divides into building stone, wall stone, rubble stone, and soil. This should be particularly attended to in tracing the terminations or outcrops of rocky Strata.

**WATER.**—Copious springs flow from the bottom of the rock.

The Swindon stone, unlike many other great rocks, forms not of itself, any elevated or distinct ranges of hills, except at particular places, and then only, too frequently in conjunction with the lower Strata, by which those of the stone are hidden or much obscured. The rock is also subject to great change in appearance and quality, yet the Portland stone can be easily identified at particular places, along the course of the Stratum which produces it, to as great an extent as some of the other Strata with which it alternates. Portland Isle is one extremity, and Hambleton hills, in Yorkshire, the other. The rock, however, it is evident from various causes, cannot, in a connected line of outcrop, ever be traced from one of these points to the other, which is a space of 300 miles, but the Strata above and below, which seem to inclose the rock, if not the identical beds of stone, may be recognized for a considerable part of the distance. It is best known in Portland, Purbeck, Wiltshire, the vale of Aylesbury, and in Kent and the vale of Pickering. Hambleton hills also produce the Portland variety. The stony land on the western border of Dorsetshire, appears to be the same. It has long been worked for building, equal in quality to that of the noted island, in the vale of Wardour. Sand is much blended with it at Swindon.

This rock, though long worked to a great extent in several places, in others would be discovered with difficulty. Its site is in many parts near the foot of the Chalk hills, and in others so widely distant from them as to leave the intermediate course doubtful with a skilful Geologist.

It contains some very thin beds of chert or flint, and some thick beds of Freestone, as soft as Chalk.

Large flinty nodules are sometimes enclosed in the Freestone, the beds of which vary much in different quarries. The organized fossils vary less. They are therefore in this instance, remarkably useful in identifying the Strata.