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| 4. Series of clay beds containing coaly matter, sel-nites and fibrous gypsum, also leaves of plants, and sulphur-coloured clay | 20 |
| 5. Foliated blue clay containing cerithia and cyclades and a few oysters. In this clay is a seam of iron pyrites about an inch thick, with pyritical casts of cyclades and cerithia. | 10 |
| 6. Consolidated argillaceous rock full of oysters, with a few cyclades and cerithia | 5 |
| 7. Alluvium full of broken chalk flints mixed with sand | 10 |

(d) Dorsetshire.

Potters' clay is described by Dr. Berger as alternating with the loose sand of this formation in the trough of Poole, in beds of various thickness at different depths, and he says that from a cursory chemical examination by Dr. Marcet, the existence of alumine, lime, magnesia, oxide of iron and silica were discovered in it. It feels greasy and smooth, its colour varies from ash-grey to blue, its fracture is a little shining and uneven. It contains cylindrical blue nodules, (called *pins* by the workmen) of a more close texture, in which there is probably a greater proportion of the oxide of iron. This clay is sent to Staffordshire where it is mixed with ground flints, and employed in the finer kinds of pottery. Its specific gravity is 1.723. Beneath this potters' clay lies a seam of some thickness, of an extremely friable earthy brown coal, which crumbles to pieces when put into water. It burns with a weak flame, emitting a particular and rather fragrant smell of bitumen, somewhat analagous to that of Bovey coal, but is of less specific gravity. *Pins* of clay frequently traverse it. (G. T. vol. i. p. 254.)

All along the north side of the range of chalk hills which extend from Handfast point to beyond Corfe Castle, there is an extensive stratum of pipe clay in a horizontal position. It contains a bed of coal so exactly resembling that of Alum bay, that this circumstance, added to the quality of the clay, and its position above the chalk, is sufficient to identify it. The same stratum of clay, though not of equal quality, may be traced in the hills near Poole, and is found in many parts of that extensive tract called the trough of Poole. (W.)

I have been favored by S. L. Kent, Esq. M. G. S. with the following section afforded by a Quarry of Pipe clay, situated on the borders of Poole harbour, and about two miles west of Poole.