

Similar beds may be traced round the sloping terrace that bounds the north-west and south sides of the plain of Blackheath, the surface of which consists of a bed of rounded pebbles, * about 20 feet thick; beneath this is a bed of sand, identical with No. 12 of Loam Pit hill, resting on another of plastic clay, which supports the water of all the wells on Blackheath, and possesses the same peculiar dark red colour with the plastic clay of Reading, Corfe Castle, and Paris, and has been used for pottery. † Beneath this clay, the Woolwich shell beds, and subjacent thick ash-coloured sand, are to be seen in several parts of the sloping terrace that surrounds the Blackheath plain. Under these, on the north side, appears the chalk, separated from the ash-coloured sand by the same thin pebble bed as at Reading.

* The bed of pebbles covering Blackheath consists almost wholly of rolled chalk flints, such as the neighbouring strata of the plastic clay formation contain abundantly, and from which they were probably derived. (G. T. vol. iv. p. 291.)

The *Hertfordshire puddingstone* is composed of ovate siliceous pebbles of various colours imbedded in a siliceous cement. These pebbles appear to be no other than altered chalk flints of the same æra with those found at Blackheath, and differing only in their being united by the cement. Many of the purest varieties of the Blackheath pebbles, if polished, are exactly similar to those of the Hertfordshire puddingstone. Large blocks of a coarse variety of the same siliceous puddingstone are not uncommon on the surface of the chalk in the south of England; as at Bradenham near High Wycombe in Bucks, at Nettlebed in Oxfordshire, at Portesham near Abbotsbury in Dorsetshire, and in Devonshire. They have not yet been found imbedded in their native stratum, which seems to have been destroyed extensively above the English chalk, and to have been a member of that series of irregular alternations of beds of clay, sand, and gravel, either separate or mixed together, which has been designated the Plastic clay formation. (G. T. vol. iv. p. 301.)

† It is probable that the plastic clay contains at Blackheath, as at Corfe Castle, Alum bay, and Loam Pit hill, the remains of vegetable matter approaching to coal; and this circumstance has given origin to the erroneous opinion so prevalent, that there is good coal at Blackheath, if government would allow it to be worked.

The very high improbability of finding good coal above the chalk, is acknowledged by all who have even the smallest acquaintance with the English coal mines. The presence of black vegetable matter in a state approaching charcoal, in almost all our secondary argillaceous strata, has caused endless vain attempts to search for useful coal, in formations where the discovery of that substance would be contrary to all experience in this country. No good coal has I believe been yet found in England in any stratum more recent than the new red sandstone, or red rock marle. That of the Cleveland moors in Yorkshire being above the *lias* and in the oolite formation, is of so bad a quality as scarcely to form an exception to this position. (G. T. vol. iv. p. 289.)