

of the low grounds of East Berkshire, near Bray, presented a rock and fossils exactly agreeing with those of Bognor.

(d) *Range and extent.* This clay forms the superior stratum of the chalk basin of London, except where it is partially covered by the sands of the upper marine formation, already described as appearing on the surface of Highgate hill, Bagshot, Frimby, and Purbright heaths, &c. or by alluvial sands, gravel, and loam.*

It extends uninterruptedly and in a south-westerly direction from Orford on the coast of Suffolk, about 20 miles north-east of Harwich, and a little to the north of Ipswich, in that county, to the South of Coggeshall, and thence to Roydon, in Essex; whence it turns nearly south, extending to a little on the west of Edmonton in Middlesex, and thence in a north-westerly direction by Chipping Barnet and South Mims to the north of Ridge hill; here it suddenly turns southward, and afterwards south-west by Harefield and Uxbridge to a little on the east of Colnbrook: it then turns nearly west, crosses the Thames by Windsor to Twyford, and thence passes to its extreme point on the west, which is about three miles south-west of Reading in Berkshire. It then turns to the south-east in an irregular line to within a very short distance of Farnham and Guildford in Surry, and by Epsom and a little north of Croydon to Deptford in Kent; in which direction, at the distance of about five miles beyond its general boundary, an outlying and insulated mass of this formation constitutes the upper regions of the conspicuous height called Shooter's hill, forming its rounded summit and reposing on the platform of Blackheath where the inferior beds of the plastic clay, &c. appear.

The London clay therefore constitutes a very large part of the soil of Suffolk, nearly the whole of Essex, including Hainault and Epping forests, quite to the sea, the whole of Middlesex, and portions of Berkshire, Surrey and Kent; in the latter county it appears on the northern side of the Medway, constitutes the Isle of Sheppy, the cliff from Whitstable to the Reculver north of Canterbury, and extends in a south-westerly direction nearly to that city, and thence westward about six miles to Boughton hill; a small patch of it is visible on the south-west of Ramsgate in Pegwell Bay. (G. Map.)

In the chalk basin of the Isle of Wight it is also very ex-

* The beds of the Plastic clay are often so similar to those of the London clay, that it is by no means easy to trace in every instance their demarcation. The boundaries indicated above, are therefore only given as the nearest approximation to accuracy which the present state of our information admits, and may very probably allow of many local corrections; the position of the springs, to which the sands underneath this formation serve as an immense reservoir, affords the best guide in tracing its limits. (C.)