

tensive, forming the whole coast from Worthing in Sussex to Christchurch in Hampshire, and extending from the latter place, inland by Ringwood, Romsey, Fareham, and passing a mile or two south of Chichester to Worthing. It forms the whole of this tract from the above named places to the coast, except where it is covered by alluvium, or by a sandy tract, analagous to the Bagshot sands, constituting Beaulieu forest, and a part of the New forest. It is also found in the Isle of Wight, and extends, nearly *in a vertical position*, along the island from Alum Bay on the west to Whitecliff Bay on the east, between the nearly horizontal freshwater and upper marine beds on the north and the nearly vertical beds of the Plastic clay formation on the south of it. See Plate 2, fig. 6. (G. Map). To this it may be added, that this clay forms the bottom of the channel termed the Solent, which is between the Isle of Wight and coast of Hampshire. Bognor rocks consist of it.

The occupation of the very large tracts just recited, by the London clay, has been proved over a great portion of it by the sinking of wells, as already adverted to in treating of the chemical and external characters of this stratum, and by the cutting of roads, as over Shooter's hill and Boughton hill in Kent; and the cliffs which it forms, and which are numerous and extensive, have been mentioned as being particularly favorable to the collection of the organic remains it encloses.

(e) *Height of hills, &c.* The country formed by this stratum is generally low, and may for the most part be considered as flat, or at the most as consisting of very gentle undulations. Here and there however it rises; the highest point it attains is the summit of High Beech in Essex, being 759 feet above the level of the sea; Langdon hill on the coast of the same county is 620 feet high; Danbury hill is not greatly inferior; Shooter's hill in Kent is 446 feet high; Richmond hill and St. Ann's hill in Surry, which consist of this clay, are less elevated.

The northern half of the isle of Sheppy consists of a range of hills of above 200 feet in height, presenting to the sea cliffs of the London clay about 90 feet in height and four miles in length, and declining gradually towards the east and west. These cliffs have been formed by the action of the sea, and of which whole acres sometimes fall at once. (G. T. v. ii. p. 192.) The cliffs at the Reculver on the north-west coast of the Isle of Thanet (C) consist of this clay and are about 70 feet high.\* Hordwell cliff in Hampshire has already been mentioned as about 150 feet high.

\* These are remarkable for the very rapid encroachment of the sea; it is said that in the reign of Henry the Eighth the church stood nearly a