

flints is only 140 feet. (P.) At Handfast point on the coast of Dorsetshire, the flinty chalk is 600 feet thick, and that without 200 feet, but the peculiar position of this stratum at this place should make us cautious of relying on any estimate of its thickness, unless we are told in what manner it has been taken. (G. Notes from Middleton.)

Measuring the thickness of this formation in sections carefully constructed, of several parts of England in which it appears, and where the necessary data of the general level of the surface and the inclination of the beds are ascertained with tolerable precision, we may obtain an approximate result which gives between 600 and 1000 feet. (C.)

The best opportunity that has been afforded me of ascertaining the thickness of the chalk beds, is at Culver cliff in the Isle of Wight, where they are disposed vertically. A direct section of these beds seems to be about a quarter of a mile (or 1300 feet), and this is the general breadth of central ridge throughout the island except to the west of Newport, where it dilates and occupies a much greater superficial extent in consequence of the beds being inclined at a less considerable angle. (G. Notes.)

The chalk has been pierced by the well-digger in many places. In Lincolnshire near Rathby 300 feet; in Bedfordshire (Encyc. Brit.) 400 feet; in Kent, near Sittingborne, 363 feet; in Surrey, at Denbigh near Dorking 440 feet; in Hampshire, near Selborne (White) 300 feet, (G. Notes): but it is not mentioned whether these wells were sunk through the chalk, nor is any distinction made between chalk with flints, and without, and chalk-marle, into which these wells may have penetrated.

The flinty chalk, as before observed, is found forming the surface of this deposit almost every where. In two places however it has been found very thin. At Salcomb cliff in Devon, according to Polwhele, it is only three feet thick, and at Branscomb it varies from 12 to 40 feet (G. Notes): which may probably have been occasioned by the destruction of the upper beds, by the action of water. The flinty chalk has been penetrated beneath the beds of the London clay and Plastic clay formation at Stamford hill, three miles on the north of London, 100 feet, and 160 feet one mile on the east of London. (P.)

(g) *Inclination, &c.* The dip of the beds of chalk in the general is very inconsiderable. Near Hull in Yorkshire it is five yards in the mile towards the east. (G. Notes.)

On the north-west side of the *London basin*, as in Cambridgeshire and Bedfordshire, and about Devizes in Wiltshire,