

(*f*) *Thickness, &c.* The London clay has been pierced in various places to different depths. One mile east of London it was found to be only 77 feet thick: at Tottenham, in the sinking of several wells it was found to be 110 to 120 feet: at White's Club-house, St. James's, 235 feet: at the Dock-yard at Portsmouth 102 feet, while in Portsmouth 266 feet were sunk down, without getting through the clay. It is said that at Lord Spencer's at Wimbledon in Surrey, it was pierced to the depth of 530 feet without passing through it. Most of the wells in Essex are very deep: at Colchester barracks 108 feet, Chelmsford barracks 300 feet (P. T.), East Hanningfield 474 feet (G. Notes), Epping 392 feet.

The actual thickness of this clay in Sheppey is estimated, by adding the height of the cliff to the depth of the wells, at 530 feet, but it may be supposed to be much thicker in Essex; for if to the depth of this clay at Epping (392 feet), we add 300 feet, the superior height of High Beech, (which is about five miles from that place and scarcely one mile nearer the termination of the clay), we may assume it at High Beech to be about 700 feet thick. (P.)

(*g*) *Inclination.* The beds of this clay are so nearly horizontal, that no perceptible difference from that position has been observed that we are aware of in the chalk basins of London and the Isle of Wight; except in the Isle itself (see Pl. 2. fig. 6.), where this bed is nearly vertical. This extraordinary deviation in regard to position will be treated of hereafter in speaking of the numerous accompanying beds of sand and clay belonging to the plastic clay formation, and of the chalk, of which the position is nearly the same.

(*h*) *Agricultural character.* This clay chokes the plough and rolls before it in a broken and muddy state; after rain it is not slippery, but adheres to the shoes; after drought it presents cracks nearly a yard in depth and several inches in breadth. On the Nore, south of Walton it forms a sort of pavement in many places, and divides by desiccation into small columns resembling, on a small scale, the Giant's causeway. (G. Notes.)

mile distant from the coast; in the Gentleman's Magazine is a view of it about the middle of the last century, which still represents a considerable space as intervening between the north wall of the church-yard and the cliff; that wall and half the church-yard have since been washed away and the church is yearly threatened. The accumulation of ruin at the foot of the cliff is striking, the whole area being included by the massive walls of the Roman station Regaltium; large fragments of that wall are mingled with the wreck of modern cottages and the boulders of marlstone washed from the clay, and the beach is strewn with fragments of Roman pottery and bones from the modern cemetery. (C.)