

proved by the organic remains they contain, to belong to the Plastic clay formation. (G. T. vol. ii. p. 191.)

A similar deposition of sand to that of Reading, containing a breccia of chalk-flints as its lowest stratum (about three feet thick), lies between Newhaven and Beachy Head on the coast of Sussex, in the cliff at Chinting castle, half a mile on the east side of Seaford. The sand is here fawn-coloured, with small flakes of mica, and occasionally contains irregular veins and masses of tubular concretions of iron-stone. Its greatest thickness is under 50 feet. Under this sand, the breccia of the lowest bed forms an ochreous pudding-stone, composed of sand and chalk flints (the latter both rolled and angular), the whole being strongly united by a ferruginous cement, and the flints being covered externally by a green coating like those in the oyster bed at Reading in Berkshire. The chalk rises suddenly to a lofty cliff on the east side of the flat ground that lies between Newhaven and Seaford, dividing the beds of the Plastic clay formation at Newhaven from their outlying fragments at Chinting, with which they were probably connected before the excavation of the valley of the Ouse. At Chinting castle there is but a small insulated portion of the sand and breccia incumbent on the chalk; the sand soon ceases in ascending the hill eastward from the castle, and afterwards the breccia, having formed a thin cap on the chalk for a short distance, disappears a little below the signal-house, about one mile east of Seaford; between which and Beachy Head, it is believed that nothing appears on the chalk but occasional patches of alluvial sand and gravel. But on the west side of the Ouse at Newhaven, the breccia appears covered by the sand as at Chinting castle; differing only in being less firmly cemented, but appearing equally identical with the oyster bed at Reading. (G. T. vol. iv. p. 294—5.)

Section \* of the Castle hill at Newhaven, commencing at the lowest bed. (G. T. vol. iv. p. 296.)

No.	feet
1. Chalk, containing alumine, in hollows on its surface .....	50
2. Breccia of green sand and chalk-flints, the latter covered with a ferruginous crust.....	1
3. Sand varying from yellow to green and ash-coloured . . . . .	20

\* These beds appear again on the opposite shores of France, near Dieppe, in the same relative position.