

last few years on the beach at Harwich. (G. T. vol. i. p. 327—336).

(d) *Range and extent.* The extent of this bed has not yet been completely ascertained. The nearest point to the metropolis at which it is seen, is Walton Nase in Essex, where it is exposed on the cliff for 300 paces in length; it caps the cliffs on both sides of Harwich. Quarries of it are worked on the southern bank of the river Orwell in Suffolk, and near Southwold, which is about two miles south of Lowestoff in the same county, it appears in the cliff, together with sand and red loam covering the London clay. But it may be concluded that the extent of this stratum is very considerable, since the same bed of shells is found on digging, through Suffolk and a great part of Norfolk; thus appearing to extend over a tract of at least 40 miles in length. (G. T. vol. 1. p. 377 & 529.)

(e) *Elevation.* The country formed by this bed is extremely flat; its surface may be considered as rarely exceeding 50 or 60 feet above the level of the sea.

(f) *Thickness.* The thickness of this bed is visible only perhaps on the coast of Essex, near Walton Nase, where it amounts to about 30 feet, and on the cliffs on both sides of Harwich, where its thickness is nearly the same.

(g) *Inclination.* It is nearly horizontal.

(h) *Agricultural character.* The tract occupied by this formation in Suffolk and Norfolk, affords a sandy soil blended with rich loams, and constitutes one of the most fertile and highly cultivated districts in England. The shelly mass of the crag itself also forms a useful improvement to the poorer sands. (C.)

(i) *Phænomena of water and springs.* This formation is generally porous, and affords no quantity of water except when pierced through; the water is then thrown up by the retentive substratum of the London clay. (C.)

(k) *Miscellaneous Observations.* The crag seems to claim priority of description, as being probably the newest bed of the upper marine formation, to which it is generally considered to belong by the best observers. The striking peculiarities belonging to the organic remains it encloses, are worthy of particular note. It has not hitherto been observed in immediate connection with either of the beds which are here associated with it as belonging to the same formation.