

may be gathered by handfulls, and are in general extremely perfect; some of them can scarcely be distinguished from recent shells, and few of them are found in the London clay; they are accompanied by roundish nodules of green indurated marle. In Bramble Chine, the banks of which belong to this bed, there is a large bed of fossil oyster shells, the greater part of which are locked into each other in the natural way; agreeing in this, and in other respects with the Upper Marine formation of the Paris basin. On comparing the fossils of this bed with those of the Crag, it will be observed that the *natica canrena* occurs in both, and that this bed contains two species of *ampullaria*, the Crag one other.

(*d*) *Extent.* This bed is most readily observed and studied on the cliff of Headon hill on the north-west coast of the Isle. It appears about half way up the cliff, and is separated from the Upper Fresh-water bed, which covers it, by a coat of sand a few inches thick. It passes from thence round Totland and Colwell bays, and may be traced all round the north side of the Isle, and is visible at Cowes, Ride, and Bembridge. The shells of this bed are numerous on the shore near Cowes. But the whole north shore of the island has been for ages in a state of constant ruin by the action of the sea and the sliding down of the soil. It is difficult therefore to find any part of the strata in their original situation; on this account fresh-water and marine shells are frequently found together in confusion.

(*e*) *Height of hills, &c.* In the Isle of Wight it appears only to form a bed, not distinctly alone constituting any considerable tract; its actual boundaries from the formentioned causes, being unknown.

(*f*) *Thickness.* The thickness of this bed in Headon hill is 36 feet; it does not appear to have been determined in any other part of the Isle.

(*g*) *Inclination.* In Headon hill, this bed dips a few degrees to the north.

CHAPTER III.

FRESH-WATER FORMATIONS.

Section I. *General view of these formations.*

For a description of these interesting formations, and also, we may add, for a knowledge of their existence in England, we are indebted to a communication to the Geological Society, 'on