

breadth of this tract varies generally from one to two miles, but if the Cambridgeshire gait is properly referred to these beds, it is there considerably greater.

(e) *Thickness.* Near Folkstone the cretaceous varieties occupy about 200 feet, and the inferior argillaceous beds about the same. From 300 to 400 feet may probably be assumed as a fair average thickness for these beds; which, like all other strata, are very variable in this respect when compared in distant points.

(f) *Inclination.* The strata are always conformable to the subjacent chalk, and therefore generally approach the horizontal position; but in the disturbed ranges of the Isle of Wight and Purbeck, they become nearly vertical.

(g) *Height.* The cretaceous and siliceous varieties, especially when they assume an harder texture, frequently form an under terrace beneath the escarpment of the chalk hills: this may be particularly seen in Berkshire. The highest hills thus formed, are those on which the old Roman camp called Sinodunum hangs over the Thames opposite Dorchester; they are detached and bold, and are probably about 500 feet above the sea. The argillaceous beds, having offered less resistance to the causes which have modified the surface of our continents, form low grounds at the base of the escarpment of these ranges.

(h) *Agricultural characters.* The cretaceous varieties are, like the chalk itself, favorable to the growth of the beech. Where this and the argillaceous varieties are blended, a warm crumbling marly soil, very rich and valuable, is produced; but where the argillaceous forms exclusively occur, a deep stiff clay which requires the labour of years to render it mellow. Flint gravel, derived from the overhanging chalk ridges, is however often spread over this tract, and materially modifies its characters.

(i) *Phænomena of Springs.* The waters which percolate through the rifted strata of the superjacent chalk, are usually thrown out by some of the more tenaceous beds in the upper part of this series; but having passed the line of these springs, it is necessary to sink the wells to a considerable depth, often 200 feet, in order to pierce the retentive argillaceous strata and reach the waters percolating through the subjacent sandy beds, and thrown up by their argillaceous partings.