

of organic remains. This is visible with little interruption for five miles, from the signal-house above Folkstone to the foot of Shakspeare's Cliff, in which distance it dips only about 300 feet, in the direction of north-east by east.

Proceeding from St. Margaret's Bay, the beds of flint appear to have nearly the same dip towards the north: whence it may be concluded, that the chalk strata in the neighbourhood of Dover dip somewhat less than a degree towards a point between north-east by east and north.

#### CHALK WITH NUMEROUS FLINTS.

##### I. *With few Organic remains.*

The low range of cliff between Walmer Castle and St. Margaret's Bay, being about five miles long from north to south, consists altogether of the chalk with numerous flints. The rise of the cliff is gradual; its highest part being that immediately contiguous to St. Margaret's Bay, where it scarcely attains 200 feet in elevation. In consequence of its nearly uniform hardness from the base to the summit, it is almost precipitous, and suffers but little from decay or casual fall; but it is so low in some places, as at Kingsdown Bay for instance, as scarcely to exceed 20 feet above the beach. The beds of flints are frequent and thin, being on an average scarcely two feet apart; and the flints are obviously separate from each other. But a remarkable deviation from this general rule is observable immediately on the west of St. Margaret's Bay; where a continuous stratum of flint, about an inch and a half thick, rises from the beach, and is readily traced at least two miles from that bay: soon afterwards another rises which is about half an inch thick, and is visible for nearly a mile about 20 feet below the former.

Quitting St. Margaret's Bay for Dover, the chalk with numerous flints appears to rise gradually; forming, at the latter place, when viewed from the shore, apparently about one-third the whole height of that part of the cliff upon which the castle stands. Soon after leaving St. Margaret's Bay, the beds of flint begin to increase in distance and in thickness; in the latter respect they go on increasing to that part of the cliff which is immediately beneath the castle; where the thick beds, protruding at least two feet beyond the chalk, give rise to the idea of their consisting each of one mass of flint, but which their rugged edges, as viewed from below, seem to render at least doubtful. Some of these beds exceed a foot in thickness.