

(f) BETWEEN LYME, AND SIDMOUTH IN DEVON.†

It has been stated in our account of the range and extent of this formation, that several insulated, and, as they are termed, outlying masses of it, occur considerably beyond the western termination of the principal and continuous range formed by it. The sections of the south-western of these detached groups against the coast in the east of Devon, afford the last chalk cliffs in this direction.*

These commence a little to the west of Lyme Regis (on the western border of Dorsetshire), and form a line extending between six and seven miles westward to the mouth of the Axe. The chalk does not however occupy the whole of the cliff, but is confined to its higher region; the central being possessed by the subjacent green sand, and the lower by the lias; for the chalk and green sand, in their extension westwards, overlie all the intermediate formations, and become immediately incumbent upon the lias, which in its turn terminates about two miles east from Axmouth; the green sand being thus brought into contact with the marle of the new red sandstone formation. The undulation of the upper line of the cliffs cuts in four places through the chalk to the subjacent green sand, forming five distinct summits which bear the names of 1. Ware; 2. Pinhay; 3. Whiteland; 4. (not particularly distinguished); 5. Dowlands. This enumeration proceeds from east to west: between Ware and Pinhay a fault occurs which throws down the strata to the west; beneath Pinhay and Whiteland an undercliff occurs much resembling that in the Isle of Wight. The chalk has here subsided in a series of terraces descending in beds successively lower and lower towards the sea; the stratification is throughout this range nearly horizontal, and the lower strata agree with those before described.

On the west of this range, the river Axe empties itself into the Channel through a wide valley occupied by the subjacent new red sandstone, beyond which are the precipices distinguished as the White cliffs. Here the strata dip rapidly to the west; the green sand and chalk reappear in the face of the cliff, and are brought down in succession by the inclination of the strata to the level of the beach. A portion of the upper part of this cliff was about fifteen years since detached, and subsided towards the beach. This point exhibits a striking

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* Mr. De la Beche has communicated a detailed account of this part of the coast in a very able memoir laid before the Geological Society, from which the above brief abstract is principally taken.