

The inclination of the strata, at the bottom of the clay, lessened as they approached the town of Swanwich; in these cliffs, I observed a stratum of fossil wood, similar to what has been described at Compton in the Isle of Wight, and occupying the same situation.

The section fig. 5. in the plates accompanying this work, exhibits a representation of the series at this spot. It will there be farther seen that the substrata of the Purbeck and Portland limestone, &c. emerge from beneath these arenaceous formations, and constitute the southern promontory of this peninsula. On the western side of this, the coast again trends northward. At the point where it again approaches, in consequence of this inflection, the line of the chalk hills, is a tract about four miles long, rendered in the highest degree remarkable and interesting by a series of nearly circular bays, guarded in front by projecting capes and reefs of the Portland rock, and excavated backwards into the interior as far as the chalk; thus forming regular oval basins, not having more than one-third of their circumference open towards the outer sea. The precipitous sides of these basins afford the finest sections of all the formations intervening between the Portland beds and the chalk. The outer capes of these coves, which exhibit the Portland beds, are lofty, being transverse sections of a ridge of hills of that formation traversing the peninsula longitudinally from east to west. The inner cliffs, which exhibit the arenaceous formations, are low; being cut into a valley, which, throughout this tract, separates the above ridge from that of chalk. Cliffs, and towering eminences of the latter, form the back of each cove.

There are six of these coves, which occur in this order beginning from the east; 1. Worthbarrow cove; 2. Lulworth cove; 3. Stare cove (a very small excavation); 4. a larger cove unnamed; 5. Man-of-war cove, and Durdle or Barn-door cove; remarkable from a perforated and arched rock forming its eastern cape, whence it has acquired the latter name.

The sections in all these correspond to those before described in the Isle of Wight, and at Swanwich bay. At Lulworth cove, which is perhaps the most remarkable of these on account of the regularity of its circular form, the beds of wood coal contained in the iron sand are very strikingly exhibited.

Mr. Webster has well observed that these coves are equally remarkable for their singular form and picturesque character, as from their comprising in so short a space the epitome of so considerable a portion of the English strata.