

Westbury, and Maiden Bradley. The Vale of Wardour is another deep indentation reaching almost to Wilton, from which the chalk returns to Shaftesbury, and then sweeps in a concave arch by Cerne Abbas to Beaminster, and suddenly retires in a narrow eastward course by Abbotsbury and Upway to Corfe Castle. This remarkable ridge of chalk (nearly vertical), reappears in the Isle of Wight at the Needles, and ends at the Culver Cliffs. Detached portions of chalk lie on the green sands of Blackdown; Portsdown and Thanet are detached ridges.

In Ireland, a large detached tract of chalk lies under the basalt of Antrim. About Ballycastle, Glenarm Bay, and Larne, and at Belfast, the superposition of the basalt on the chalk is very plainly seen. There is no chalk in Scotland or Wales.

On the continent of Europe, the cretaceous rocks are no where more perfectly developed than in France, where a complete series of the chalk and green sand formations encircles with a broad ring the tertiary basin of Paris; filling large tracts in Artois, Picardy, Normandy, Touraine, and Champagne; bordering the Channel from Boulogne to the mouth of the Seine, and resting every where on an oolitic basis, except on the Belgian frontier about Avesnes and Mons. Here it touches the slaty rocks of the Ardennes, and covers their parallel bands of coal and limestone. It continues north of the Meuse to Maestricht and Aix-la-Chapelle, and reappears beyond the Rhine in a narrow range and argillaceous condition, north of the Westphalian continuation of the Ardennes from Essen to beyond Paderborn. Detached portions occur about Hanover and Brunswick\*; and from the appearance of it at Grodno, Prentzlow, Luneburg, the isle of Rugen, and many parts in Jutland, Zealand, and Scania, there can be little doubt that chalk

\* The upper part, or slaty, marly limestone, rather than chalk, is called planerkalk; the lower or sandy rock is called quadersandstein: distinctions still clearer in the large area within the Bohemian mountains, where on the course of the Elbe the rocks of this system are widely spread.