Subdivisions.

- 1. Weald clays, with Sussex or Petworth marbles.
- 2. Tilgate-grit, and Hastings sands.
- 3. Ashburnham clays, shales, and grey limestones.
- 4. Purbeck beds; argillaceous shale, and freshwater limestones and marbles. Petrified forests, and layers of vegetable earth, with cycadeous plants, and other coniferæ.

Obs.-Clays and limestones, almost wholly composed of fresh-water snail-shells, and minute crustacea, occupy the uppermost place in the series; sand and sandstones, with shales, and lignite, prevail in the middle; while in the lowermost, argillaceous beds, with shelly marbles or limestones, again appear; and, buried beneath the whole, is a petrified pine-forest, with the trees still standing, and the vegetable mould undisturbed! The upper clay beds and marbles form the deep valleys or wealds of Kent and Sussex, and the middle series constitutes the forest-ridge. The Purbeck strata are obscurely seen in some of the deepest valleys of eastern Sussex ; they emerge on the Dorsetshire coast, form the island or peninsula whose name they bear, and surmount the northern brow of the Isle of Portland. At the back of the Isle of Wight, the Wealden beds