

2. HASTINGS BEDS.—Sand and sandstones, with calciferous grit, or *Tilgate-stone*, alternating with clays and limestones.
3. ASHBURNHAM BEDS.—Clays, shales, and bluish-grey limestones and sandstones.
4. PURBECK BEDS.—Clays, sandstones, and shelly limestone, called *Purbeck marble*. Limestone, with layers of *vegetable mould*, and trunks of trees in a vertical position—the petrified *Forest of Portland*.

Such is the assemblage of deposits which the term wealden, first employed in this acceptation by Mr. Martin,* is intended to denote. Clays, and limestone almost wholly composed of fresh-water snail-shells, 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 forest, in which the trees are still standing, and the vegetable mould undisturbed! The upper clay-beds and marbles form the deep valleys or wealds of Kent and Sussex—the middle series constitutes the forest-ridge. The Purbeck 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 appear beneath the Shanklin sands; and their characteristic fossils are continually washed up on the shore at Brook-point.

* Martin's Geology of Western Sussex.