

Dr. Fitton* has traced the wealden beds, or rather the lowermost division, the Purbeck, in the vale of Wardour, which is a valley of denudation, in the south of Wiltshire, like that of the South-east of England, on a small scale. In this valley the various members of the chalk occur in their regular order of superposition, resting on clay and Purbeck limestone, and having the Portland stone beneath.† In France, on the coast of the Lower Boulonnais, and in the valley of Bray near Beauvais, strata of a like character are observable; the Sussex marble (*lumachelle-à-paludines*), and a fern peculiar to the wealden, have been discovered by M. Graves of Beauvais, to whom I am indebted for specimens. It is probable that the wealden may have extended over a still larger area, for the same fossil plant (*lonchopteris Mantellii*, Tab. 73) has been found in strata beneath the green-sand, in Sweden, by Professor Nillson, who informed me that several of the fossil plants from Tilgate Forest were analogous to specimens he had collected in the little island of Bornholm, off the Danish coast. Without implicitly relying upon these observations, the wealden may be considered as covering an area 200 miles in length from west to east, and 220 miles from north-west to south-east; an extent but little exceeding the delta of the Ganges or of the

* Consult Dr. Fitton's Memoir "On the Beds below the Chalk;" Geological Transactions, 1837.

† Ibid. p. 424.