

of the Tunbridge Wells Sand. The formation extends over Hanover and Westphalia; the Wealden of these countries, according to Dr. Dunker and Von Meyer, corresponding in their fossils and mineral characters with those of the English series. So that "we can scarcely hesitate," says Lyell, "to refer the whole to one great delta."\*

The overlying Weald clay crops out from beneath the Lower Greensand in various parts of Kent and Sussex, and again in the Isle of Wight, and in the Isle of Purbeck, where it reappears at the base of the chalk.

The upper division (or the Weald clay) is, as we have said, of purely fresh-water origin, and is supposed to have been the estuary of some vast river which, like the African Quorra, may have formed a delta some hundreds of miles broad, as suggested by Dr. Dunker and Von Meyer.

The Lower Greensand is known, also, as the *Néocomien*, after Neocomium, the Latin name of the city of Neufchatel, in Switzerland, where this formation is largely developed, and where, also, it was first recognised and established as a distinct formation. Dr. Fitton, in his excellent monograph of the Lower Cretaceous formations, gives the following descending succession of rocks as observable in many parts of Kent:—

	Feet.
1. Sand, white, yellowish, or brown, with concretions of limestone and chert . . . . .	70
2. Sand, with green matter . . . . .	70 to 100
3. Calcareous stone, called Kentish rag . . . . .	60 to 80

These divisions, which are traceable more or less from the southern part of the Isle of Wight to Hythe in Kent, present considerable variations. At Atherfield, where sixty-three distinct strata, measuring 843 feet, have been noticed, the limestone is wholly wanting, and some fossils range through the whole series, while others are confined to particular divisions; but Prof. E. Forbes states, that when the same conditions are repeated in overlying strata the same species reappear; but that changes of depth, or of the mineral nature of the sea-bottom, the presence or absence of lime or of peroxide of iron, the occurrence of a muddy, sandy, or gravelly bottom, are marked by the absence of certain species, and the predominance of others.†

Among the marine fauna of the Néocomian series the following

\* Lyell's "Elements of Geology," p. 349.

† Ibid, p. 340.