the *cretaceous*, *oolitic*, *saliferous*, and *carboniferous* systems, each containing littoral, marine, and oceanic deposits; sandstones having been formed amidst the agitated waters of the sea shores, clays in tranquil bays and gulfs, and limestones in deep water. I purpose, in the present discourse, to explain the geological characters of the first two of the series, namely, the CHALK and the WEALDEN.* The former is composed of rocks that have been accumulated in the depths of a sea of great extent; the latter, of the sediments of a vast delta; the one affording a striking illustration of the nature of *oceanic*, and the other of *fluviatile* deposits.

In the diagram (Plate VII.) the wealden (3*) is represented as an intercalation between the chalk and the oolite (3, 4), because it is of limited extent, and where absent, as in the midland counties of England and on the continent, the chalk lies upon the oolite, as will be shown in the next lecture. As both the chalk and the wealden are fully developed in the south-east of England, the phenomena about to be described may be examined with but little inconvenience; and an extensive collection of the peculiar fossils of these formations may be seen in my museum.†

* The term Weald is derived from the German *Wald*, a wood or forest. The *Weald* of Sussex was formerly an impenetrable forest, called *Anderida* by the Romans, and *Andredswald* by the Saxons.

† Now in the British Museum. See Descriptive Catalogue of the Mantellian Museum, 8vo. fifth edition.