

organic remains, which include terrestrial plants (*Equisetum*, *Sphenopteris*, *Alethopteris*, *Thuyites*, cycads, and conifers), fresh-water shells (*Unio*, 10 species; *Cyrena*, 5 species; *Paludina*, *Vicarya*, *Melania*, etc.), with a few estuarine or marine forms, as *Ostrea*, *Exogyra*, and *Mytilus*, and ganoid fishes (*Lepidotus*) like the gar of American rivers. Among the spoils of the land floated down by the Wealden river were the carcasses of huge deinosaurian reptiles (*Cetiosaurus*, *Titanosaurus*, *Iguanodon*, *Hylæosaurus*, *Polacanthus*, *Megalosaurus*, *Vectisaurus*, *Hypsilophodon*), long-necked plesiosaurs, and winged pterodactyles. The deltoid formation, in which these remains occur, extends in an east and west direction for at least 200, and from north to south for perhaps 100 miles. Hence the delta may have been nearly 20,000 square miles in area. It has been compared with that of the Quorra; in reality, however, its extent must have been greater than its present visible area, for it has suffered from denudation, and is to a large extent concealed under more recent formations. The river probably descended from the northwest, draining a wide area, of which the existing mountain groups of Britain are perhaps merely fragments.

**Lower Greensand.**—The Wealden series is succeeded conformably by the group of arenaceous strata which has long been known under the awkward name of "Lower Greensand." This group consists mainly of yellow, gray, white, and green sands, but includes also beds of clay and bands of limestone and ironstone. It has been subdivided in descending order as under:

Folkestone beds (Lower Albian in the upper part)	.	.	.	70 to 100 feet.
Sandgate beds	}	(Aptian)	{	75 " 100 "
Hythe beds				80 " 300 "
Atherfield Clay (Urgonian), resting on Wealden	.	.	.	20 " 60 "

These strata appear to represent the continental series up into the base of the Albian stage. The Atherfield Clay is well developed at Atherfield, on the south coast of the Isle of Wight. It contains an abundant series of fossils, among which are *Toxaster complanatus*, *Terebratula sella*, *Exogyra* (*Ostrea*) *Couloni*, *Ostrea Leymeriei*, *Perna Mulleti*, *Arca Raulini*, and others which indicate an Urgonian horizon for this band.<sup>130</sup> In the Hythe beds are found *Plicatula*

<sup>130</sup> For a list of the fossils of the Atherfield Clay and other members of the Lower Greensand in the Isle of Wight. see the Geol. Surv. Mem. on that island cited on the foregoing page.