

Chalk (Maestrichtian sub-stage). In the neighborhood of Paris and in the department of Oise and Marne, a rock long known as the Pisolitic Limestone occurs in patches, lying unconformably on the White Chalk (Garumnian sub-stage). The long interval which must have elapsed between the highest Senonian beds and this limestone is indicated not only by the evidence of great erosion of the chalk previous to the deposit of the limestone, but also by the marked palæontological break between the two rocks. The general aspect of the fossils resembles that of the older Tertiary formations, but among them are some undoubted Cretaceous species. In the southeast of Belgium, the Danian stage is well exposed, resting unconformably on a denuded surface of chalk. In Hainault, it consists of successive bands of yellowish or grayish chalk, between some of which there are surfaces of denudation, with perforations of boring mollusks, so that it contains the records of a prolonged period (Chalk of St. Vaast, Obourg, Nouvelles, Spienne, and Ciply). Among the fossils are *Belemnitella mucronata*, *Baculites Faujasii*, *Nautilus Dekayi* (but no *Ammonites*, *Hamites*, or *Turrilites*), *Inoceramus Cuvieri*, *Ostrea flabelliformis*, *O. lateralis*, *O. vesicularis*, *Crania ignabergensis*, *Terebratulina striata*, *Fissurirostra Palissii* (characteristic), *Radiolites ciplyanus*, *Eschara* several species and in great numbers, *Echinocorys vulgatus*, *Holaster granulatus*. The well-known chalk of Maestricht is equivalent to part of these strata, but appears to embrace also a higher horizon containing *Hemipneustes striato-radiatus*, *Crania ignabergensis*, *Terebratulina striata*, *Fissurirostra pectiniformis*, *Ostrea lunata*, *O. vesicularis*, *Janira quadricostata*, and numerous remains of *Mosasauros* and of chelonians, together with *Voluta fasciolaria*, and other characteristically Tertiary genera of mollusks.¹⁶³ Similar strata and fossils occur at Faxoe, Denmark, and in the south of Sweden.¹⁶⁴ The terrestrial flora in the highest Cretaceous series at Aix-la-Chapelle has been already referred to (p. 1522).

The Danian stage is likewise represented in the south of France in some strongly contrasted forms. Toward the west it consists of marly, chloritic, and compact limestones (about 650 feet thick) with a marine fauna, including *Nautilus dani-*

¹⁶³ Dumont, "Mem. Terrains Cretaces," etc. 1878; Murlon, "Geol. de la Belgique," 1880.

¹⁶⁴ Hebert, Bull. Soc. Geol. France (3), v. 645; Lundgren, op. cit. x. 1882, p. 456.