

very different facies according to the part of the country where it is examined. In the northern basin, according to M. Hébert, only its lower portions occur, separated by a notable hiatus from the base of the Senonian stage, and consisting of marly chalk with *Inoceramus labiatus*, *I. Brongniarti*, *Ammonites nodosoides*, *A. peramplus*, *Terebratulina gracilis* (Ligerian sub-stage). He placed the zone of *Holaster planus* at the base of the Senonian stage, and believed that in the hiatus between it and the Turonian beds below the greater part of the Turonian stage is really wanting in the north. On the other hand, Dr. Barrois and others would rather regard the zone of *Holaster planus* as the top of the Turonian stage (Angoumian sub-stage). In the north of France, as in England, it is a division of the White Chalk, containing *Ammonites peramplus*, *Scaphites Geinitzii*, *Spondylus spinosus*, *Inoceramus inæquivalvis*, *Terebratula semiglobosa*, *Holaster planus*, *Ventriculites moniliferus*, etc. Strata with *Inoceramus labiatus*, marking the base of the Turonian stage, can be traced through the south and southeast of France into Switzerland. These are overlain by marls, sandstones, and massive limestones with *Exogyra columba* and enormous numbers of hippurites (*Hippurites cornuvaccinum*, *Radiolites cornu-pastoris*, etc.). These hippurite limestones sweep across the centre of Europe and along both sides of the great Mediterranean basin into Asia, forming one of the most distinctive landmarks for the Cretaceous system.

Senonian.—This stage is most fully developed in the northern basin, where it consists mainly of white chalk separable into the two divisions of: 1st, *Micraster* (Santonian) sub-stage composed of chalk beds, in the lower of which *Micraster cor-testudinarium*, and in the upper *M. cor-anguinum* is the prevalent urchin. The same palæontological facies occurs in this and the other group as in the corresponding strata of England already described. 2d, *Belmontella* (Campanian) sub-stage, with *B. quadrata* in a lower zone, and *B. mucronata* (Meudon Chalk) in a higher. In the south and southeast of France the corresponding beds consist of limestones, sandstones, and marls, with abundant hippurites, and also include some fresh-water deposits and beds of lignite.

Danian.—This subdivision of the Cretaceous system is specially developed in the northern basin. In the Cotentin, a limestone with *Baculites anceps*, *Scaphites constrictus*, and other fossils has been paralleled with the Maestricht