

portions are represented by some of the uppermost beds of the Norwich Chalk.

The Cretaceous system is sparingly represented in Ireland and Scotland. Under the Tertiary basaltic plateau of Antrim there lies an interesting series of deposits which in lithological aspect differ greatly from their English equivalents, and yet from their fossil contents can be satisfactorily paralleled with the latter. They are thus arranged:<sup>153</sup>

Hard white limestone	65 to 200 feet	= zone of	<i>Belemnitella mucronata.</i>	} Senonian.
“ “	13 “ 16 “	“	<i>Marsupites.</i>	
Glauconitic (Chloritic) Chalk	. . . . . 3 “ 6½ “	“	<i>Micrasters.</i>	} Turoonian.
Glauconitic (Chloritic) sand and sandstone	. 3 “ 16 “	{ “	<i>Holaster planus.</i> <i>Terebratulina gracilis.</i>	
Gray marls and yellow sandstones	. . . . . 3 “ 30 “	“	<i>Holaster subglobosus.</i>	} Cenomanian.
Glauconitic sand	. . 6 “ 10 “	“	<i>Pecten asper.</i>	

In the west of Scotland, also, relics of the same type of Cretaceous formations have been preserved under the volcanic plateaus of Mull and Morven. They contain the following subdivisions in descending order:<sup>154</sup>

White marly and sandy beds with thin seams of lignite	. . . . . 20 feet
Hard white chalk with <i>Belemnitella mucronata</i> , etc.	. . . . . 10 “
Thick white sandstone with carbonaceous matter	. . . . . 100 “
Glauconitic sands and shelly limestone, <i>Pecten asper</i> , <i>Exogyra conica</i> , <i>Janiro quinquecostata</i> , <i>Nautilus deslongchampsianus</i> , etc.	. . . . . 60 “

**France and Belgium.**<sup>155</sup>—The Cretaceous system so extensively developed in western Europe is distributed in large basins, which, on the whole, correspond with those of the

<sup>153</sup> Barrois, op. cit. p. 216. R. Tate, Q. J. Geol. Soc. xxi. p. 15.

<sup>154</sup> Judd, Q. J. Geol. Soc. xxxiv. p. 736.

<sup>155</sup> The Cretaceous system has been the subject of prolonged study by the geologists of France, and has given rise to considerable differences of nomenclature. The main subdivisions recognized and named by D'Orbigny have been generally adopted. But great diversity of opinion exists as to the names and limits of the lesser groups. There has been a tendency to excessive elaboration of subdivisions. The minor sections of the geological record must always be of but local significance, and it is to be regretted when they are treated as of any higher importance. M. Hebert refrained from burdening geological nomenclature with a long list of new names for local developments of strata, contenting himself with employing D'Orbigny's names for the formations or sections, and subdividing these into upper, middle and lower stages. The student will find some of the rival systems of classification collected by Mr. Davidson, Geol. Mag. vi. 1869.