

## CHAPTER XIV.

## CRETACEOUS SERIES.

WHEN the continent described in last chapter had endured for a long period of time, submergence of the area began to take place, accompanied by the deposition of the purely marine CRETACEOUS SERIES, which in England is as follows, the oldest beds being placed at the bottom :

Upper	{	Chalk with flints.
		Chloritic marl, Chalk marl, and Chalk without flints.
		Upper Greensand.
		Gault.
Lower	{	Lower Greensand.
		Atherfield Clay.

I may here mention that in parts of the Continent of Europe, there are certain *marine* formations intermediate in position and date between the Oolitic and Cretaceous rocks, which are known as the Neocomian beds, so called from Neocomium, the ancient name of Neuchâtel, in Switzerland, where they are well developed. The assumption that the Hastings Sands and Weald Clay are the *fresh-water* equivalents in time of the lower and middle parts of these continental beds, is undoubtedly correct, the Lower Greensand of English geologists being the British representative of the Upper Neocomian strata.

Mr. Judd has shown that at the south end of Filey