

istic of the older Tertiary formations. The common Upper Chalk crinoid, *Bourgueticrinus ellipticus*, occurs there in great numbers; also *Ostrea vesicularis*, *Baculites Faujasii*, *Belemnitella mucronata*, and the great reptile *Mosasaurus*; but associated with such Tertiary genera as *Voluta*, *Fasciolaria*, and others. At Faxoe, on the Danish island of Seeland, the uppermost member of the Cretaceous system (Danian) contains, in like manner, a blending of well-known Upper Chalk organisms with the Tertiary genera (*Cypræa*, *Oliva*, and *Mitra*). In the neighborhood of Paris also, and in scattered patches over the north of France, the Pisolitic Limestone, formerly classed as Tertiary, has been found to include so many distinctively Upper Cretaceous forms as to lead to its being relegated to the top of the Cretaceous series, from which, however, it is marked off by the decided unconformability already described. These fragmentary deposits are interesting, in so far as they help to show that, though in western Europe there is a tolerably abrupt separation between Cretaceous and Tertiary deposits, there was nevertheless no real break between the two periods. The one merged insensibly into the other; but the strata which would have served as the chronicles of the intervening ages have either never been deposited in the area in question, or have since been in great measure destroyed. In southern Europe, especially in the southeastern Alps, and probably in other parts of the Mediterranean basin, no sharp line can be drawn between Cretaceous and Eocene rocks. These deposits merge into each other in such a way as to show that the geographical changes of the western region did not extend into the south and southeast. In North America, also, on the one side (pp. 1530, 1578), and in New Zealand on the other, there is a similar effacement of the hard and fast line