CHAPTER XXII.

THE MIOCENE AND PLIOCENE FORMATIONS.

THE Eccene strata of England taken as a whole may be looked upon as estuarine beds. At the base, the Woolwich and Reading beds, and also the upper parts of the series in the Isle of Wight and Hampshire, consist of strata deposited in brackish, salt, and fresh water, at or near the mouth of a great river, and the abundance of plants and terrestrial remains in the London Clay, and other marine divisions of the series, proves that they also were deposited near the mouths of such rivers, say, as the Mississippi and Amazon. Both in their lower and upper divisions, these strata in France and England contain a large terrestrial mammalian fauna, the genera of which are so antique that they have no very close relation with those now living. Nevertheless, they are remotely related to living genera, and some may even be the direct ancestors of living species through Miocene and Pliocene intermediate forms. give an idea of the antiquity of this old fauna, it is safe to say that when they lived the Alps had scarcely any place as a principal mountain range.

This book has little to do with palæontology, but I have already stated in a previous chapter, that in Germany there are formations containing terrestrial (as distinguished from marine fossils), with mixed Eccene and Miccene generic forms, and I lay a little