

Section iv. Pliocene

§ 1. General Characters

The tendency toward local and variable development, which is increasingly observable as we ascend through the series of Tertiary deposits, reaches its culmination in those to which the name of Pliocene has been given. The only European area, in which Pliocene strata attain any considerable dimensions as rock-masses, is in the basin of the Mediterranean, especially along both sides of the Apennine chain and in Sicily. In that region, reaching a thickness of 1500 feet or more, they were accumulated during a slow depression of the sea-bottom, and their growth was brought to an end by the subterranean movements which culminated in the outbreak of Etna, Vesuvius, and the other late Tertiary Italian volcanoes, and in the uprise of the land between the base of the Apennines and the sea on either side of the peninsula. Elsewhere the marine Pliocene deposits of Europe, local in extent and variable in character, reveal the beds of shallow seas, the elevation of which into land completed the outlines of the Continent at the close of Tertiary time. Thus these waters covered the south and southeast of England, spreading over Belgium and a small part of northern France, but leaving the rest of northern and western Europe as dry land. Here and there, in southeastern Europe, evidence exists of the gradual isolation of portions of the sea into basins, somewhat like those of the Aralo-Caspian depression, with a brackish or less purely marine fauna. In some portions of these basins, however, as in the Karabhogas Bay of the existing Caspian Sea, such