

basin may be inferred from the fact that one portion only of the sand and gravel that accumulated in it even now measures 6000 feet in thickness. The surrounding land was densely clothed with a vegetation indicative of a much warmer climate than Europe now can boast. Palms of American types, as well as date palms, huge Californian pines (*Sequoia*), laurels, cypresses, and evergreen oaks, with many other evergreen trees, gave a distinctive character to the vegetation. Among the trees too were planes, poplars, maples, willows, oaks, and other ancestors of our living woods and forests; numerous ferns grew in the under-wood, while clematis and vine wound themselves among the branches. The waters were haunted by huge pachyderms, such as the *dinotherium* and *hippopotamus*; while the *rhinoceros* and *mastodon* roamed through the woodlands.

A marked feature of this period in Europe was the abundance and activity of its volcanoes. In Hungary, Rhineland, and Central France, numerous vents opened and poured out their streams of lava and showers of ashes. From the south of Antrim, also, through the west coast of Scotland, the Farøe Islands, and Iceland, even far into Arctic Greenland, a vast series of fissure-eruptions poured forth successive floods of basalt, fragments of which now form the extensive volcanic plateaux of these regions.

The mild climate indicated by the vegetation in the deposits of the Swiss lake prevailed even into Polar latitudes, for the remains of numerous evergreen shrubs, oaks, maples, walnuts, hazels, and many other trees have been found in the far north of Greenland, and even within $8^{\circ} 15'$ of the pole. The sea still occupied much of the lowlands of Europe. Thus it ran as a strait between the Bay of Biscay and the Mediterranean, cutting off the Pyrenees and Spain from the rest of the continent. It swept round the north of