Silurian series, and have suffered degradation ever since; that the chain of the Ural was in existence, for it is of older date than the Permian strata; that the mountains of the Schwarzwald then rose high into the air, for they are older than the New Red Sandstone; but the Alps, the Pyrenees, and some other mountain chains, if they existed at all, were in the rudimentary stage of comparatively low lands, feebly indicated by the occasional occurrence of fresh-water beds amid the Oolitic and Purbeck strata, and by such phenomena as the occurrence of *Pterodactyles*, and the long-tailed *Archæopteryx macrura*,¹ in the Solenhofen state of Bavaria.

That a broad low-lying land existed at that time, amid which rose groups and ranges of mountains in what is now Europe, there is no reason to doubt, and how that phase of physical geography came to an end will form part of the subject of next chapter.

¹ A bird with a long vertebrated feathered tail.