In the mountainous regions of the Alps it is always difficult to determine the age of beds, in consequence of the disturbed state of the strata; for instance, the lofty chain of the Swiss Jura consists of many parallel ridges, with intervening longitudinal valleys; the ridges formed of contorted fossiliferous strata, which are extensive in proportion to the number and thickness of the formations which have been exposed on upheaval. The proofs which these regions offer of comparatively recent elevation are numerous. In the central Alps, Cretaceous, Oolitic, Liassic, and Eocene strata are found at the loftiest summits, passing insensibly into metamorphic rocks of granular limestone, and into talcose and mica-schists. In the eastern parts of the chain the older fossiliferous rocks are recognised in similar positions, presenting signs of intense Plutonic action. Oolitic and Cretaceous strata have been raised 12,000 feet, Eocene 10,000, and Miocene 4,000 and 5,000 feet above the level of the sea. Equally striking proofs of recent elevation exist in the Apennines; the celebrated Carrara marble, once supposed—from its crystalline texture and the absence of fsssils, and from its resting—1. on talcose schists, 2. on quartz and gneiss—to be very ancient, now turns out to be an altered limestone of the Oolitic series, and the underlying crystalline rocks to be metamorphosed Secondary sandstones and shales. Had all these rocks undergone complete metamorphism, another page in the earth's history would have been obscured. As it is, the proofs of what we state are found in the gradual approach of the rocks to their unaltered condition as the distance from the intrusive rock increases. This intrusive rock, however, does not always reach the surface, but it exists below at no great depth, and is observed piercing through the talcose gneiss, and passing up into Secondary strata.

At the close of this epoch, therefore, there is every probability that Europe and Asia had pretty nearly attained their present general configuration.