

clusion. On the eastern boundary of the aforesaid region a number of disturbances were apparent, which were frequently associated with volcanic phenomena, and had caused the tremendous north-south fault of the Red Sea and the Jordan valley, also influencing the direction of strike of the Ural mountains and the western Ghats. East of this transversal line of disturbance, the leading Asiatic mountains had not in Europe the convex side of the strike-curves towards the north, but the convexities were towards the south.

A comparison of the Himalayas with the Alps showed a remarkable agreement between the two distant mountain-systems; Mesozoic, Palæozoic, and Crystalline rocks composed the high mountain-lands of both systems, yet there was the fundamental difference that the Tertiary rocks in the southern foreground of the Himalayas corresponded with those in the northern Molasse Zone of the Alps. Medlicott had already concluded from the general structure of the Himalayas that the chain had taken origin as the result of lateral compression from the north, and Suess tried to demonstrate a similar direction of movement, to the south or south-east, in other systems of Central Asia.

Suess agreed with Dana's opinion that the sedimentary rocks of the Euro-Asiatic systems had accumulated in pelagic geosynclinals; and he brought the frequent gaps and unconformities in the succession of strata carefully into relation with former oscillations in the extent of the ocean. Suess described in greater detail the transgression of the Cenomanian Ocean which spread over a considerable part of Europe, North and South America, and northern Africa, and drew from it the conclusion that stratigraphical evidences of transgressions and withdrawals of the waters of the ocean were even more valuable as a means of determining the approximate eras of certain events in the Earth's history than the discovery of the relative ages of mountain-systems.

In the concluding chapter of this work on the origin of the Alps, Professor Suess summarised his results as follows:—the strikes of mountain-chains do not always run parallel with the greater circles of the earth, but may be diverted by various obstacles; the major fold-systems of mountains take origin frequently, if not exclusively, in geo-synclinals and demand enormous periods for their development. Volcanoes play a subordinate part in the formation of mountains. Most