

cally distinct, both names should be retained. He also answered all objections that had been made by Gümbel to his application of Darwin's Coral-reef Theory in explanation of the calcareo-dolomitic masses of rock, and re-stated the theory on even firmer and broader grounds. In the same journal, during 1874 and 1875, two articles appeared by H. Loretz, affording a careful review of all the opposing considerations advanced by Gümbel, and confirming them upon the basis of his own observations in the border districts of South Tyrol and Venetia.

The publication of the combined researches of the Austrian Survey in the latter region (Mojsisovics' *Die Dolomit-Riffe*, etc.) in 1879, brought forward many new data, and presented an apparently complete corroboration of Richthofen's view that the calcareo-dolomitic masses represented coral reefs, constructed locally in the Upper Triassic seas of South Tyrol. So convincing an impression did this work create that the Reef Theory was accepted and explained in the geological text-books. The matter rested there for nearly twenty years, when it was again brought under detailed examination by Miss M. Ogilvie, whose first paper on the stratigraphy of various areas in South Tyrol appeared in the *Journal of the Geological Society of London*, and was supplemented by a full critical discussion of the coral-reef theory, adverse to its application to the dolomites (*Geolog. Magazine*, 1894).

The Esino limestone of the Lombardy Alps was made a special subject of research by Benecke, and the contributions by this geologist have successfully demonstrated the age and stratigraphical relations of this southern facies of the Alpine limestone (*Geogn.-Paläont. Beiträge*, 1876, and *Jahrb. für Mineralogie*, 1884-85). Benecke showed that the fauna of the Esino limestone, described by Stoppani, everywhere lay below the fossiliferous Raibl horizons. Mojsisovics in 1880 confirmed Benecke's results, and stated that the Esino limestone in the Val di Lenna directly succeeds the upper Muschelkalk; near the Lake of Como it succeeds the Perledo fish-shales, and is surmounted by Raibl strata. According to Mojsisovics, the Cephalopod fauna of the Esino limestone indicates the contemporaneity of the limestone with the more diversified Wengen-Cassian facies in South Tyrol. This short but important memoir by Mojsisovics has been followed by a large number of special contributions in more recent years.