

In addition to the writings of T. N. Dale (1876), G. Curioni (1877), and Lepsius (1878), on portions of the Lombardy Alps and Etsch Valley, Benecke has done much valuable work in the vicinity of Lake Garda, the Adamello Massive and Judicarian Alps, and Bittner has contributed excellent stratigraphical accounts of the complicated Judicarian district (1879-83), and the neighbourhood of Recoaro (1883). Amongst the most important palæontological contributions are ranked the monographs by Kittl, J. Böhm, and Koken on the Triassic Gastropods of South Tyrol, by Bittner on the Brachiopods and Lamellibranchs, and the monograph by Salomon on the stratigraphical relations and the fauna of the Marmolata Mountain (*Palæontographica*, 1895).

In the Northern Alps there has continued the greatest insecurity about the true position of the Hallstatt limestone and the parallelism of Partnach strata and the various horizons of Cardita strata. A geological investigation of the Karwendel mountains was commissioned by the German and Austrian Alpine Club, and was excellently carried out under the direction of Rothpletz by several members of the Munich School of Geology. The results, published in 1888, showed that typical "Cardita" strata lie below the Main Dolomite of North Tyrol, and their fauna undoubtedly differs from the Partnach strata which underlie the Wetterstein limestone and contain *Koninckina Leonhardi*, typical St. Cassian fossils.

Almost simultaneously with the publication of these results, Wöhrmann showed that the plant-bearing sandstones near Partenkirchen, which had been relegated by Gümbel to Partnach strata, were layers interbedded with the upper Cardita or Raibl deposits. Skuphos traced the development of the Partnach strata through a considerable region, and showed that they continually form the basis of the Wetterstein limestone, and exhibit sometimes a marly, sometimes a calcareous lithological character. As Fraas had said in 1893, in his admirable description of the geology of Wendelstein Mountain, the fossils of the Partnach strata have the closest resemblance to the fauna of St. Cassian or to that of the Reiflinger strata in North Tyrol, and are best regarded as Upper Muschelkalk.

Skuphos contended that the Lower Cardita strata of Pichler were palæontologically identical with Raibl strata; and