

Bronn regarded the middle Alpine limestone as Jurassic or Liassic. In comparison with these indefinite surmises regarding the age of Alpine limestone deposits, the secure identification of Muschelkalk in the neighbourhood of Recoaro and Rovegliano by Maraschini (1822), Catullo (1827), and Murchison makes a refreshing impression.

The discovery of the wonderfully rich fossil locality of St. Cassian in South Tyrol proved a turning-point in the history of Alpine geology. Leopold von Buch had brought St. Cassian fossils with him from one of his journeys in the Dolomites, and he sent them to Count Münster for identification. In 1834 Count Münster published in the *Neues Jahrbuch* the description of a large collection of St. Cassian fossils, most of which had been sent to him by Lommel. Of one hundred and twenty-eight species, Münster thought he could identify seven as Muschelkalk species, two as Liassic, and six as Jurassic. Münster's famous work published in 1841, entitled *Beiträge zur Petrefaktenkunde*, is a monograph of the St. Cassian fauna. The investigation of four hundred and twenty-two species of Mollusca, Brachiopods, Echinoderms, Corals and Sponges by Count Münster led him to conclude that twelve of the St. Cassian species also occurred in the Carboniferous limestone and Zechstein, ten in the Muschelkalk, eleven in the Liassic, and three in the Jurassic rocks; of these so-called "common species" thirteen are said to be actually identical, the others analogous. Count Münster could not ascertain any definite palæontological sequence that would harmonise with the stratigraphical succession then commonly accepted for the Tyrol.

Münster's palæontological work contained an introductory geological part written by H. L. Wissmann. The succession of the strata between St. Lorenzen and St. Cassian and at the northern side of the Schlern Mountain was described by Wissmann. He called the red sandstone and the shaly and calcareous strata immediately above the Botzen Porphyry *Seis strata*, from the name of a village Seis at the base of Schlern Mountain, and explained them as identical with the "Werfen Strata" which had been described in North Tyrol. Leopold von Buch had previously identified the red sandstones of this group with the "Bunter Sandstones" of Germany, and the shaly and calcareous strata with the "Wellenkalk" or lower horizon of Muschelkalk in Germany. The "Seis Strata" are as a rule suc-