

means of elucidating the coal-bearing Mesozoic deposits in Lower and Upper Austria. Up to that time these deposits had been collectively termed "Gresten beds," and assigned to the Lower Lias. Lipold and his colleagues in the survey, Hertle and Stelzner, showed, however, that although coal-seams occur in the Liassic "Gresten beds," the coal-seams at Lunz, Lilienfeld, Scheibbs, Gaming, Gössling, etc., occurred in a complex of strata whose fauna and flora were undoubtedly Triassic. Lipold gave the name of *Lunz series* to the sandy and shaly coal-bearing complex, and Stur, who worked out the flora of this series, identified it with that of the "Lettenkohle" in Franconia and Swabia. In the lower portion of the "Lunz series" *Posidonomya Wengensis* (a Wengen-Cassian type) and *Ammonites floridus* were identified; Hertle proposed to differentiate this horizon as *Reingraben shales*. The limestone beds below these shales were found to be rich in *Halobia Lomeli* and *Ammonites Aon*, and were distinguished as *Gössling strata*.

The diversified deposits of the Gössling, Reingraben, and Lunz groups pass gradually upward into purer limestone and dolomite beds, which received the local name of *Opponitz-limestone*, and were found to contain the characteristic Lamelli-branch fauna of the upper or "Torer" horizons of the Raibl strata at Raibl. The continuity of the palæontological sequence in these horizons of Trias in the north-eastern Alps was the more important, as the succession of the strata containing them was held to be undisturbed, and therefore the order of the consecutive palæontological types in this locality was regarded as a safe standard for comparison in determining the age of the same faunas when they appeared in partial development in the scattered patches of fossiliferous deposits elsewhere.

Between the years 1865 and 1869, Laube published an admirably illustrated monograph of the St. Cassian fauna, and his identifications and nomenclature of the fossils corrected many errors which had been made by Münster and Klipstein. Laube emphasised the peculiar character of the St. Cassian fauna, pointed out the great difference between it and the much more highly-developed fauna of the Hallstatt limestones, and the strong resemblance between the St. Cassian and Raibl faunas.

In the summer of 1866, E. Mojsisovics von Mojsvár began his Triassic studies, which he has continued for more than thirty