

Puffs Ravine to the Seis Alp, and in the Gader Valley; by this means he ascertained that the "Seis Strata" begin with alternating dark-red and white sandstone, pass upward into red calcareous, micaceous, and thin-bedded shales with *Myacites Fassaensis*, and these are succeeded by a complex of grey calcareous beds resembling "Wellenkalk," containing *Posidonomya Clarai*.

The succession of strata, as Emmerich recognised it, may be shortly tabulated—

7. *Dolomite.*
6. *Fossiliferous St. Cassian Strata*, which build up the Seis Alp, and nearer Schlern at the Cipit Stream yield numerous fossils.
5. *Wengen Strata with Halobia Lommeli.*
4. *Unfossiliferous Complex.*
  - (f.) Calcareous rock resembling Wellenkalk.
  - (e.) Dark limestone and siliceous concretions.
  - (d.) Light grey shaly limestone.
  - (c.) Dark bituminous limestone.
  - (b.) Dolomite.
  - (a.) Limestone with irregular bedding surfaces.
3. *Limestone with Posidonomya Clarai.*
2. *Shales with Myacites Fassaensis.*
1. *Seis Sandstone.*

Emmerich's succession was taken as the model by all subsequent stratigraphers, and became rapidly recognised as the normal section of the South Tyrol Trias. Thus the interest aroused by the St. Cassian fossils had culminated in providing the first clue to the particular character of the difficulties which had to be faced in Alpine geology. The Alpine equivalents of the Bunter or lower Trias had been clearly elucidated, the Muschelkalk had been identified; and the Wengen-Cassian group above it had demonstrated the actual presence of a fauna and a lithological succession different from that presented in the Muschelkalk or succeeding horizons in any known extra-Alpine area. The principle of local developments of rock of contemporaneous origin, but containing distinctive faunal assemblages, was now appreciated, and geologists had also more hope of being able to fix the relative age of masses of "Alpine Limestone" according to their stratigraphical position below or above the fossiliferous Wengen-Cassian group