the field, to define their true succession, to distinguish their diverse local developments, to comprehend their remarkable metamorphosis due to chemical and dynamical causes, have been some of the chief themes in Alpine geology for the last fifty years. The most skilled Alpine geologists have devoted their energies to the difficulties of the Alpine Trias, and still it is only possible to record a partial success.

To go back to Leopold von Buch, that experienced geologist several times travelled in South Tyrol, the Salzkammergut, Styria, and Carinthia, and published a series of pamphlets which, though short, were closely packed with observations on the stratigraphy. A small map of South Tyrol appeared in 1822 giving a general survey of his results, and it shows how very little information he had gleaned regarding the geological age and relations of the masses of "Alpine Limestone," and the members of the Secondary Alpine rocks generally.

Keferstein compiled a geognostic map of Tyrol and Vorarlberg in 1821; it shows at the north edge of the Alps a small band of Bunter Sandstone striking from Brixlegg to Kitzbichel, reappearing in the Kloster valley of Vorarlberg, and continuing westward from that to Lake Walen. In the southern Alps the Schlern mountain, near Botzen, is surrounded by a horseshoe-shaped outcrop of sandstone, and at the Peitler Kofl a sandstone and conglomerate band begins which follows the Puster valley eastward and ceases at Innichen. The broad tracts of limestone north and south of the Central Alps are simply indicated with one colour on Keferstein's map and designated "Alpine Limestone" (Zechstein).

The coloured geological map of Germany compiled by Buch, and published by Schropp in Berlin (1826), showed no noteworthy advance in the Alps, neither was there much additional insight to be gained from Sedgwick and Murchison's Geological Sketch-map of the eastern Alps (1831). In the latter the extension of the red sandstone is fairly correctly entered in North Tyrol, in the Salzkammergut, in Styria, Carinthia, and Carniola; the zones of limestone on the north and south are still left undivided, although they are treated as "Jura" limestone instead of Zechstein. This map and several geological sections accompanied a treatise on the *Structure of the Eastern Alps*, by the two famous British geologists. Their contribution to Alpine literature was scarcely less powerful in its influence than their works on the Palæozoic rocks of Great Britain. By