

the "Conodonts" in the Cambrian glauconitic sands and the fish remains in the Old Red Sandstone of Livland. F. Schmidt wrote a monograph of the Silurian Trilobites in this area, and afterwards contributed a masterly exposition of the Silurian rocks in the Baltic area, dividing them into a palæontological sequence which is unsurpassed in the accuracy of its detail (1881-94). Several important memoirs by Stache have demonstrated the presence of Silurian deposits in the Alps, with much wider extension than had previously been surmised.

*C. Devonian System.*—While the controversy about the Cambrian and Silurian systems was still engaging the attention of British geologists, the Continental geologists were applying themselves with vigour to the elucidation of the "Transitional Rocks" in accordance with the new insight which Murchison's writings had shed upon the Palæozoic succession. Friedrich Roemer endeavoured to arrive at some clearer comprehension of the stratigraphical relations in the Harz mountains by a strict palæontological method. In 1843 he published a monograph on the fossils of the Harz mountains. Beginning his observations at the north-western area of the Harz, he explained the Iberg limestone, the Rammelsberg shales, and succeeding strata as Devonian; the Harzburg and Osterode greenstone, together with the surrounding strata and the limestone mass of Elbingerode, as Upper Silurian; the adjoining strata on the east and as far as Andreasberg as Lower Silurian; and the whole of the mountain-system farther east as Cambrian.

Roemer added in subsequent memoirs several valuable contributions to the palæontological data of the Harz, and verified his general statement of the stratigraphy by further details.

As early as 1837, Beyrich had published a number of observations on the fossils of the Eifel, Paffrath, and Nassau limestone. He pointed out their differences from those of the Carboniferous limestone, and showed that the larger portion of the greywacke in the Rhine provinces is older than the limestone of the Eifel and in Nassau, but that above the Nassau limestone there is a thick development of greywackes and slates with *Posidonomya Becheri*, whose fossils agree with those of the Upper quartz schists in the Liège province.

The Palæozoic formations of the Rhineland were made the subject of an important monograph by Ferdinand Roemer in 1844. This geologist divided the "Transitional Series" into