

plete absence of true Carboniferous plant-types indicate that the Gondwana Coal-measures are younger than the Carboniferous epoch, and, on the other hand, the superincumbent strata of the Gondwana system contain Triassic plant-remains, hence the *Glossopteris* series in which the coal-seams occur are thought to be of Permian or possibly Permo-Triassic age.

A system resembling the Gondwana system of Southern India is present in South Australia, in South and East Africa, and in Brazil; littoral and fluviatile sandstones, conglomerates, shales, and locally well-developed Coal-measures form in all those localities the concluding group in the Palæozoic succession.

The similarity in the character of the deposits has suggested to geologists the idea that these areas may at that epoch have been connected with one another as the broken coast-line of some southern ancient continent, and this whole region of Permian coal-bearing deposits is sometimes referred to collectively for convenience as "Gondwana Land." Quite recently, a *Glossopteris* was found in the Russian Permian formation, and this discovery affords an important link in the comparison between the Russian facies and the facies of Gondwana Land. In South Africa, the Gondwana system consists of conglomerates, clays, and sandstones, and in these Permian species of *Glossopteris* have also been identified. This system rests unconformably upon Carboniferous rocks and is itself unconformably succeeded by shales, which pass upwards into the Karroo beds. The identification by Amalitzky of Permian *Anthracosias* at the base of the Karroo beds has led to the general assumption that the main body of the Karroo beds is of Triassic age.

The intimate connection of the Permian system with the Trias in the Southern Hemisphere, in India, and in Russia, appeared to confirm the views of Conybeare, who in 1832 had associated the Magnesian Limestone with the Red Conglomerates and the Bunter Sandstone as a united *Poikilitic* group. Brongniart applied the name *Poikilitic* only to the Bunter Sandstones; Buckland, in his ideal section of the earth's crust, combined the Permian and Triassic succession and termed it "Poikilitic System." Marcou (1859), John Phillips (1871), and the English Committee of the International Congress of Geologists in London (1888), supported the union of the Dyas and Trias into one group, to be placed in the