

Zürich botanist, Oswald Heer,¹ has made his name famous by the admirable comparative researches which he carried out on the flora of Oeningen and other North Alpine localities. His first palæontological works reach as far back as 1847. His masterpiece appeared between 1855 and 1859, the *Tertiary Flora of Switzerland*, in two volumes, wherein no less than nine hundred species, for the most part new species, are described; one hundred and fifty-five plates illustrated the work.

His scholarly mind and wide knowledge of his subject enabled Heer to reconstruct in the ablest manner the different floras of the Tertiary epoch, to compare them with those of other Tertiary districts and of the present, and to discover by this means what had been the temperature and other climatic conditions during the growth of the successive Tertiary floras. The results of these important researches were afterwards published in the form of a popular scientific work, *The Primeval World of Switzerland* (1864), and roused great interest in a wide circle of readers. Another fundamental work by O. Heer treats the fossil flora of the Arctic regions. It consists of several independent treatises written in different languages; the whole work comprises seven quarto volumes, which were published between 1869 and 1884. The *Flora Arctica* forms not only an important contribution to the systematic knowledge of fossil floras, but is a work of the highest geological value on account of its inferences regarding the earlier climates of Arctic regions.

Heer advocates the view of a gradual approach of fossil floras to living creation, and a progressive differentiation and perfecting of all organised forms. He thinks the innate tendency of the organic world towards higher evolution was implanted in it by the Creator, and that evolution takes place in accordance with immutable laws. In his opinion, the variations of species and genera were not accomplished, as Darwin supposes, by means of slow modifications in the

¹ Oswald Heer, born 31st August 1809, at Niederutzwyl in Canton St. Gallen, the son of the Protestant pastor, studied Theology in Halle, and graduated, but in 1834 accepted a university tutorship at Zürich University; in 1852 was appointed Professor in the same University, and afterwards held also a Professorship in the Polytechnic Academy of Zürich. In 1852 he spent eight months in Madeira on account of lung weakness; in 1870 the old weakness broke out afresh, and on 27th September 1883 he died in Zürich.