

to accomplish in the British area, and which was fulfilled in a manner worthy of the noblest traditions of their countryman, William Smith.

In the summer of 1831 the two friends began their investigations in Wales and the neighbouring districts. Sedgwick had already studied the Transitional formations in the Lake District of Cumberland and Westmoreland between 1822 and 1824, and had disentangled the tectonic structure and stratigraphy of this very complicated district, although his sub-division of the formation had been based, in the absence of fossils, merely upon the lithological features and stratigraphical relations. The Cambridge professor in 1831 renewed his study of the same formations in North Wales, in the neighbourhood of Snowdon, and elucidated the tectonic relations of the rocks with admirable skill. Unfortunately the scarcity of fossils made it still impossible for Sedgwick to establish palæontological sub-divisions. Murchison was more fortunate. While his colleague was engaged in the examination of the oldest group of the Transitional series, Murchison began his investigation of the series in descending order from the upper members to the lower. He examined the exposures of Old Red Sandstone and the rocks immediately below it, which occur on the eastern and southern borders of Wales.

Murchison found fossils in abundance, and in a couple of years was able to lay before the Geological Society a complete palæontological sequence in the upper portion of the Transitional formations. At first Murchison had called these higher members examined by him an "Upper fossiliferous greywacke series"; but in the year 1835, in compliance with the strongly-expressed wish of Elie de Beaumont, he proposed the name "Silurian System" as a special designation for the upper members. And as the older members of the Transitional series examined by Sedgwick in Cumberland and North Wales could not be identified with any of the members in the Silurian system of Murchison, the term of "Cambrian Series" was

and he afterwards continued his researches in Devonshire, Germany, Belgium, and Russia. In 1855 Murchison succeeded De la Beche as Director of the Geological Survey of Great Britain. Murchison was one of the founders of the British Association, twice President of the Geological Society, and for many years President of the Geographical Society; he was also a recipient of the Wollaston medal; in 1866 he was created a baronet. Throughout his career Murchison took a distinguished position in London society. He died on the 22nd October 1871.