

schistose structure, the planes of which lie parallel with the direction of movement.

Here then is the explanation of the apparent conformable sequence of the younger schists which so deceived Murchison and other geologists. These rocks are not altered sedimentary deposits, following regularly upon the limestones, as they appeared to be. They are now true schists, but they have been made by mechanical movements out of rocks that have been squeezed up from lower depths to the east. Some portions of them are undoubtedly metamorphosed Archæan gneiss, some are parts of the Cambrian sandstone, and of the Silurian quartzites, shales, dolomites, and limestones, while some may be crushed granites and other rocks of earlier date than the Silurian strata. It remains for future investigation to ascertain whether or not they may include the *transformed representatives of sedimentary deposits that came after the Durness limestones.*

Though Murchison and those who followed him were mistaken in regarding these overlying schists as altered Silurian sediments, the great fact for which they contended, that in the north-west Highlands we have evidence of a gigantic metamorphism later than the Silurian period, is now established upon irrefragable evidence. The vast dislocations, upthrusts and shearing of the rocks, the transformation of the old gneiss into the younger overlying gneiss, of Cambrian sandstone into mica-schist, of Silurian quartzites, limestones, and diabases into quartz-schists, calcareous and chloritic schists, and the crushing together of all these rocks into many varieties of crystalline schistose rocks, took place long after the Lower Silurian limestones of Durness had been formed (see Section I. on the Geological Map).

How far eastwards into the Highlands these re-formed rocks extend has not yet been determined. When we pro-