extensive district of regional metamorphism in the north-west of Scotland had meantime been brilliantly elucidated by Professor Lapworth. Messrs. Peach and Horne, together with other members of the Geological Survey, were continuing the work of mapping and research in the new light that had been thrown on the problem by Lapworth's demonstration of the great crust-movements of overthrust, and the associated metamorphism of portions of the Cambro-Silurian deposits. It was securely determined in that district of regional metamorphism that there was fundamental gneiss at the base of the whole sedimentary succession, and also metamorphic gneiss representing sedimentary rocks of the oldest Palæozoic epochs which had been locally altered during the gigantic crust-movements. The altered and unaltered deposits dovetailed into one another with complicated stratigraphical relations.

The conclusive results of the work done in the north-west Highlands of Scotland were of the highest importance for the general questions in dispute regarding the causes and processes of metamorphism. In more recent years, Mr. Barrow has shown the presence of eruptive bosses of gneiss as well as of granite, and has traced numerous veins of pegmatite passing from these bosses into the group of crystalline schists.

The last fifteen years of the nineteenth century witnessed very great advances in our knowledge of rock-deformation and metamorphism. It has been found that there is no geological epoch whose sedimentary deposits have been wholly safeguarded from metamorphic changes, and as this broad fact has come to be realised, it has proved most unsettling and has necessitated a revision of the stratigraphy of many districts in the light of the new possibilities. The newer researches scarcely recognise any theory; they are directed rather to the empirical method of obtaining all possible information regarding microscopic and field evidences of the passage from metamorphic to igneous rocks, and from metamorphic to sedimentary rocks. The present views held by the leading German petrographers, Rosenbusch and Zirkel, may be in conclusion shortly indicated, as they will give a fair representation of the existing progressive and conservative tendencies regarding the difficult questions of pressure-metamorphism.

Rosenbusch has strongly advocated the origin of the crystalline schists through dynamo-metamorphic agencies. In a