A distinction was made between cases in which the twin-axes are parallel or at right angles, and those in which they are inclined to one another obliquely. In the former the result of the combination is itself a twin operation, while in the latter it is a rotation, the direction of which depends on the order in which the operations are applied; it is in some cases combined with an inversion .--Dr. J. W. Evans: A Modification of the Kohlrausch Method of determining Refractive Indices. The observing instrument is a microscope placed vertically and fitted with a Bertrand lens. An immersion theodolite stage of the Klein type is used, so that the substance under investigation may be rotated beneath a liquid of higher refractive index about two axes, the first at right angles to the optical axis of the instrument, and the second at right angles to the first and to the plane surface of the object. This is observed through the natural surface of the liquid and rotated in either direction until the position of total reflection is reached. By rotation of the object about the second axis the refractive indices in all directions parallel to its plane surface may be determined, and the values of the principal refractive indices thus obtained.-A. Holmes and Dr. H. F. Harwood: The Basalts of the Brito-Arctic Province. The basalts from Hare Island, which were collected by Thomas Reid in 1855, include six varieties, of which four are free from olivine and carry silica among the amygdale minerals, and the remaining two contain olivine and are without free silica. All the rocks are rich in titaniferous magnetite, and analyses indicate that their most noteworthy feature is the unusual abundance of titania. The analyses cannot be closely matched except by those of basalts from Scoresby Sound, Iceland, the Faröe Islands, and the west of Scotland. This paper is the first of a series in which the authors hope to describe rocks from all the important localities within the province.-Miss N. Hosalie exhibited models of crystals constructed by herself.

## OBITUARY.

## BEDFORD McNEILL

A.R.S.M., M.INST.M.M., ASSOC.MEMB.INST.C.E., TREASURER GEOL SOC. LOND., ETC.

Br the death of Mr. Bedford McNeill, at the comparatively early age of 55, the mining world has lost one of its most distinguished men. Mr. McNeill took his diploma at the Royal School of Mines in 1880, and after considerable experience in various parts of Europe and America became famous as the compiler of "the Telegraphic Code" that bears his name. He gave his time freely to the service of scientific societies, and besides being a Fellow of the Institute of Chemistry and a Member of the Iron and Steel Institute, he was President of the Institution of Mining and Metallurgy 1913-14, and Treasurer of the Geological Society from 1912 until the time of his death.