(2) "An X-ray examination of substituted edingtonites." By Dr. W. H. Taylor (communicated by the General Secretary).

In all zeolitic substitution products previously examined by X-ray methods, monovalent kations such as silver replace other monovalent kations such as sodium. In the substituted edingtonites discussed in this paper two monovalent kations (thallium or potassium) replace each divalent barium ion of the natural material. The paper describes the results of an attempt to determine the precise location of the substituted kations within the aluminosilicate framework.

(3) "Some unusual gem spinels from Ceylon." By Mr. B. W. Anderson and Mr. C. J. Payne.

Specimens of an unusual type of blue-green spinel have been found in parcels of cut stones from Ceylon. These attracted attention by reason of their abnormally high refractive index and specific gravity. The values of these constants agreed almost exactly with those to be expected for spinels in which zinc had to some extent replaced magnesium. This supposition has been confirmed by means of spectrum analysis.

## ANNOUNCEMENTS.

The Council of the Royal Society has announced the award of one of the Royal Medals to Alfred Harker, M.A., Hon. LL.D. Edinburgh, F.R.S., Emeritus Reader in Petrology in the University of Cambridge, for his distinguished work in petrology. Dr. Harker was one of the first workers to apply the methods of modern physics and chemistry to petrological problems, and it is interesting to recall that one of his earliest papers, on the Shap granite, was written in collaboration with the late Professor J. E. Marr, who also received a Royal Medal in 1930. This joint paper must be regarded as one of the foundation-stones of petrogenic theory. It is probable that Dr. Harker's most important contributions to knowledge, among many, are his field work and memoirs on the igneous rocks of Skye and the Small Isles, the starting point of the recent developments in the study of the Tertiary igneous centres of Scotland, and his book, The Natural History of Igneous Rocks, which must ever remain one of the classics of petrology. His latest publication, entitled Metamorphism, is in effect an amplification of a luminous Presidential address to the Geological Society of London and is a masterly summary of a highly complex subject, distinguished like all his writings by a broad philosophical outlook.