PROCEEDINGS OF SOCIETIES

MINERALOGICAL SOCIETY OF GREAT BRITAIN AND IRELAND

MINERALOGICAL SOCIETY, *June 9.*—SIR JOHN S. FLETT, President, in the chair.

MR. G. E. L. CARTER: *On an occurrence of vanadiferous nodules on the coast of South Devon.* The author describes an occurrence of vanadiferous nodules in the red marls that underlie the Budleigh Salterton pebble beds on the coast of South Devon. These nodules consist of siliceous and argillaceous material impregnated with vanadium oxide and calcium carbonate. A typical nodule examined at the Imperial Institute showed a roughly concentric structure, ill-defined black shells alternating with shells of light-coloured material. Radiating black bands stood out as ribs on the surface of the nodule. Analyses by Miss Hilda Bennett showed that the black portion of the nodule contained 13.96 per cent of vanadium oxide, estimated as pentoxide. The light-coloured portion of the nodule contained only 1.91 per cent of vanadium oxide, and was relatively richer in calcareous and siliceous matter than the blacker and more vanadiferous portion. The occurrence deserves investigation from the economic point of view, as vanadium minerals are of sparse distribution. A preliminary optical and *X*-ray examination by Mr. F. A. Bannister of the darker material of the nodules suggests the presence of a vanadiferous chlorite.

MR. MAX H. HEY: *Studies on the Zeolites. Part II.* Thomsonite (including faroelite) and gonnardite. An analytical, optical and *X*-ray study of a considerable number of thomsonite specimens has led to the conclusion that thomsonite and faroelite form a continuous isomorphous series. The true symmetry of thomsonite is shown to be didigonal polar (C_{2v}). The unit cell is shown to contain $(Ca, Na)_6 (Al, Si)_{20}O_{40} \cdot 12H_2O$. The mean refractive index ranges from 1.517 to 1.535, falling with increase in the Si/Al ratio. Apparatus has been designed and applied to measure the vapour pressure of thomsonite at various temperatures and degrees of dehydration, and it appears very probable that a dimorphous high-temperature form exists, the transition being readily reversible. Gonnardite is probably identical with the high temperature dimorphous form of thomsonite (meta-thomsonite) and is therefore to be regarded as a separate species.

MR. ARTHUR RUSSELL: *An account of British Mineral collectors and dealers in the 17th, 18th and 19th centuries.* A second installment:—John Woodward (1665–1728), and Charles Francis Greville (1749–1809).

DR. L. J. SPENCER: *Hoba (South-West Africa), the largest known meteorite.* The large mass of meteoric iron discovered in 1920 on Hoba West farm, 12 miles west of Grootfontein measures about 10 x 9 feet on its flat upper surface, and is estimated to weigh 60 metric tons. It belongs to the group of nickel-rich ataxites. Chemical analysis by Mr. H. H. Hey shows: Fe 83.44, Ni 16.24 per cent, with small amounts of cobalt, copper, sulphur, phosphorus, and carbon. Photomicrographs (×820) by Dr. J. M. Robertson show a minute plessite-like structure.

DR. L. J. SPENCER: *Twelfth List of new mineral names.* Since the publication in 1928 of the eleventh list of this series (the first was in 1897) 120 names have been

collected from the current literature. In addition to the bibliographical reference, a brief description of the essential characters of the mineral and derivation of the name are given.

DR. J. DRUGMAN: *On different habits of fluorite crystals.* In fluorite the cube is usually the predominating form. Crystals of other habits—octahedral, rhombic-dodecahedral, and triakis-octahedral—are described. The temperature during the growth of the crystal has perhaps influenced its habit.

BOOK REVIEW

THE WORKING OF SEMI-PRECIOUS STONES, J. H. HOWARD. 37 pages, 12 figures, and 18 plates. Rocks and Minerals, Peekskill, N. Y. $1.00.

This little booklet should furnish collectors with the inspiration for cutting and polishing some of our more common gem minerals. The author, an amateur lapidary, presents in detail the method used for cutting and polishing cabochon surfaces in such a simple and direct manner that one is convinced that the art is not so difficult as to be beyond the ability of the ordinary layman. One chapter is devoted to faceted cuts and another to the sawing of minerals. Complete directions are given for the construction of the necessary apparatus, the cost of which the author states should not exceed $45.00.

C. B. SLAWSON

NEW MINERAL NAMES

Nicolayite

NAME: In honor of Rev. C. G. Nicolay, early mineral collector in Western Australia. Formerly called thorogummite.

CHEMICAL PROPERTIES: A hydrous silicate of lead, thorium and uranium, differing from maitlandite in the state of oxidation of the uranium, $2(Pb, Ca)O \cdot 3ThO_2 \cdot 4UO_3 \cdot 8SiO_2 \cdot 21H_2O$. Analysis: UO_3 37.33, UO_2 *nil*, ThO_2 24.46, SiO_2 15.30, Ce_2O_3 .12, Yt_2O_3 .32, PbO 7.78, MnO *nil*, CaO 1.62, MgO .16, H_2O+ 8.37, H_2O- 4.19, $(Ta, Cb)_2O_5$ .40; total 100.05.

PHYSICAL AND OPTICAL PROPERTIES: Color yellow, luster vitreous. Amorphous. $n = 1.617$. $G = 4.13$.

OCCURRENCE: Like maitlandite.

W. F. FOSHAG

Montasite

H. L. KIRKMAN: Some notes on Crocidolite and Amosite Occurrences in the Union. *Trans. Geol. Soc. S. Africa*, **33**, 17, 1931.

A registered name for asbestos fiber from the Montana mine, Pietersburg-Lydenburg district, South Africa.

W. F. F.