NOTES AND NEWS

MANGANOTANTALITE FROM PORTLAND, CONNECTICUT

W. G. FOYE, *Middletown, Conn.*

On October 2nd the writer visited the Collins Hill Quarry, Portland, Connecticut, with a class in geology. Mr. Wilkes, who now operates the quarry, asked him to identify a new mineral which he had found. The writer was unable to recognize the mineral and Mr. Wilkes kindly gave it to him for further investigation.

The mineral was imbedded in orthoclase feldspar near a larger crystal of columbite. It was reddish brown in color and showed two cleavages at right angles; one cleavage was fairly perfect and the second was much less perfect. The rectangular outlines of the crystal indicated that it was probably orthorhombic in crystal form. Its hardness was about 5.

The mineral gave a strong reaction for manganese in a soda bead but was infusible and insoluble. Tests for the commoner acid radicals were negative.

Optical tests showed that it was pleochroic in reddish brown to yellow; was biaxial and optically positive. As the writer had no liquids in his laboratory sufficiently high to determine the index of refraction of the mineral, he gave it to Professor Esper S. Larsen, Jr., of Harvard University for further optical tests.

Professor Larsen reported that the refractive indices were as follows: $\alpha=2.15$, $\beta=2.17$, $\gamma=2.25$, approximately. The angle 2V was medium in value and $\rho<\nu$ strong.

The mineral is probably manganotantalite, high in tantalum. It adds a new mineral to the list of twenty-seven already reported from the Collins Hill Quarry.

LARGE TOPAZ CRYSTAL FROM MAINE

W. D. NEVEL, *Andover, Maine.*

From the region known as Mt. Apatite in the town of Auburn, Maine, there have been found in times past minerals of rare beauty and considerable value. From there came the rich crystals of purple apatite closely resembling in color those royal amethysts of Siberia. Tourmalines possessing the much coveted shade of blue-green were also found there and about that time a huge cavity of cavern-like proportions was opened that contained many fine, large crystals of deep smoky quartz. These glossy crystals were in many cases attached to the planes of pure white quartz making a pleasing contrast. This find helped substantially in making the locality popular with mineral collectors.

Forty-three and three-fourths carats is the weight of what is undoubtedly the largest blue topaz gem from New England or any locality east of Texas. The crystal that produced it was found in a tourmaline cavity at Mt. Apatite many years ago by Mr. John Seaver Towne who operated there for tourmaline and feldspar. Later it was sold to Mr. L. B. Merrill of Paris, Maine, who was at that time operating at Mt. Mica for tourmaline and in whose possession it remained in its crystal state about twenty years when, in 1928, having been again purchased it was turned over to a New York lapidary and beautifully cut in the cushion style yielding a perfect stone with vivid reflections of pale blue. Late in that year it was acquired by the U. S. National Museum of Washington for their gem collection.

Dr. Karl Hermann Scheumann of Berlin has been called to a professorship of mineralogy and petrography at the University of Leipzig.

Readers of THE AMERICAN MINERALOGIST are urged to submit scientific articles and notes of mineralogical interest to the Editor for publication in the Journal. More material is necessary if the Journal is to appear regularly and maintain its present size.

REVIEWS

ANLEITUNG ZUR CHEMISCHEN GESTEINSANALYSE. J. JAKOB. VII+81 pages with 3 illustrations. Gebrueder Borntraeger, *Berlin*, 1928. Price 7 R. M.

This "Büchlein" attempts to instruct the student within the compass of 79 pages in the making of the chemical analysis of rocks, by which igneous ones are mostly meant. The student is assumed to have some knowledge of general quantitative analytical procedure or to work under the supervision of an instructor. The methods, in general, follow those of Hillebrand and of the reviewer, but there are many complexities and variations in the details, and some of these differences are wide and unexpected. Some of the descriptions are ultra-detailed, while in other cases an important determination is treated with unsatisfactory brevity. One page, for instance, is devoted to the method for determining the amount of FeO, while two pages are given to that for Li_2O. The reviewer differs with the author as to many particulars, such as: the possible use of porcelain crucibles for the Na_2CO_3 fusion; the advocacy of the old and very inaccurate Cooke method for FeO instead of the rapid and accurate Pratt method; the use of H_2SO_4 instead of HCl in several processes; the inordinate quantities of hydrofluoric acid that are recommended; the non-use of molten pyrosulphate for bringing the Al_2O_3, etc. precipitate into solution; and the details of many other procedures too numerous to be mentioned here. The author advocates the determination of several constituents in aliquot parts of a filtrate, whereby the accuracy is impaired. This is, also, unnecessary as the amount of the rock-powder is, or should be, sufficient to make some of the author's material-saving procedures uncalled for, although they may be advisable or necessary in the analysis of a mineral when the amount of material available may be only one or two grams. Much stress is placed on accuracy, but the attainment of this is, in many cases, rendered difficult by the elaborate and complicated precautions that are taken to ensure it. The book, on the whole, is distinctly disappointing and, for a modern textbook, does not compare favorably with the earlier ones by Dittrich and by Jannasch.

The reviewer takes this opportunity to deplore the very unsatisfactory and inadequate way in which the quantitative analysis of the silicates, including rocks and minerals, is treated in the standard manuals of quantitative analysis, such as those of Fresenius and Treadwell-Hall.

HENRY S. WASHINGTON

DONNÉES NUMÉRIQUES DE CRISTALLOGRAPHIE ET DE MINÉRALOGIE. L. J. SPENCER. VIII+56 pages. Price bound 50 Fr. A section of VOL. VI of the TABLES ANNUELLES DE CONSTANTES ET DONNÉES NUMÉRIQUES (1923–1924). Editor, M. Ch. Marie. Gauthier-Villars et Cie., 55 Quai des Grands-Augustins, *Paris;* McGraw-Hill Book Co., *New York*, 1928.