

NOTES AND NEWS

A NEW MICROCLINE LOCALITY IN MAINE

EDWARD S. C. SMITH, *Union College.*

Although the Island of Mount Desert, Maine, has been the object of geological investigations for many years and by many observers, the occurrence of green microcline in moderate abundance at an easily accessible place has passed unnoticed up to the present time so far as the writer is aware. The only reference found in the literature of Maine geology and mineralogy is in Charles H. Hitchcock's *Preliminary Report upon the Natural History and Geology of the State of Maine*. On page 200 of this report Hitchcock refers to a granite which contains "green feldspar" near Sea Wall Point, without doubt the same locality as the one presently to be described.

About three miles southeast of Southwest Harbor, Mount Desert Island, the roadway passes close to the shore for several hundred yards where an exposure of bed rock and a coarse pebble beach combine to form a natural bulwark that is known locally as the "Sea Wall." The area of rock exposed is roughly about ten thousand square feet and appears to be a granite dike of medium to fine grain whose constituents are chiefly quartz, orthoclase feldspar and biotite. Stringers of garnets are here and there developed, and disposed irregularly through the entire mass are veins of quartz and green microcline, the textures of which tend to be rather coarser than the main part of the rock. Some of the larger microcline crystals measure 2 cm. but the average is between 0.5 and 1 cm. The usual forms of prism, pinacoids and macrodomes are to be observed.

It seems likely that much, if not all, of the quartz and microcline has resulted from secondary deposition and probably in part through replacement, but more study is necessary before a positive statement can be made.

BOOK REVIEWS

SYSTEMATIC CRYSTALLOGRAPHY. T. V. BARKER, xi+112 pp., 2 plates, 76 text-figs. Thos. Murby and Co., London, 1930. Price 7s. 6d.

This is a companion volume to the author's GRAPHICAL AND TABULAR METHODS IN CRYSTALLOGRAPHY which appeared in 1922.

The purpose of the work may be set forth in the words of the author:

"Based on an open-minded study of thousands of crystalline substances, it seeks to present the *principles* of a Systematic Crystallography by which the surface of a crystal may be (1) unambiguously described in terms of a standard set of axes and parameters derivable from the form development; (2) classified morphologically according to its angular values; and (3) identified on any future occasion by the simple process of measurement, geometrical analysis and reference to tables."

This book is a praiseworthy attempt toward a true determinative geometrical crystallography, which had its inspiration in Fedorov's *Das Krystallreich* (published by the Russian Academy of Science in 1920). The author discusses a new *Lexicon of the Crystal Kingdom* which he hopes may eventually be produced by the cooperation of interested crystallographers; for the immediate future he contemplates a determinative supplement to Groth's *Chemische Krystallographie*.

Exception may be taken to one statement made by the author. On page thirty-two he says "at the present time in consideration of the fact that the symmetry class in the great majority of cases is not known, it seems better not to press the symmetry criterion too far." In a recent statistical study of the 7,224 crystalline compounds described in Groth's *Chemische Krystallographie*, the reviewer found that 5,588, or about 77 per cent, have been assigned to a particular symmetry class.

The three appendices are (1) Table of Natural Cotangents and Tangents, (2) Useful Trigonometrical Formulae, and (3) Table of Multiple Tangents. These useful appendices are identical with those found in the companion volume.

This book will prove particularly useful to crystallographers who are interested in crystals produced in the laboratory as distinguished from crystals found as minerals.

A. F. ROGERS

CRYSTALLOGRAPHY, MINERALOGY AND CRYSTAL STRUCTURE BY X-RAY METHODS: (Numerical Data.) L. J. SPENCER AND M. MATHIEU. Section from VOLUME VII OF ANNUAL TABLES OF CONSTANTS AND NUMERICAL DATA (YEARS 1925-1926). Price, paper cover, 60 Frs.; cloth bound, 70.

Publishers, Gauthier-Villars and Cie, 55 quai des Grands Augustins, Paris.

The importance of these complete tables to the investigator is fully appreciated when his attention is called to the fact that their preparation requires the careful examination and systematic classification of data collected from more than 550 scientific journals. The section of special interest to mineralogists comprises sixty-eight pages and is devoted to crystallography, mineralogy and crystal structure as revealed by X-ray investigations. For the years 1925-1926 new crystallographic data (compiled by L. J. Spencer) was found for 206 minerals, including new forms on fifty-eight minerals. Considerable space is also devoted to the crystallography of both inorganic and organic substances. Original references are given in all cases as footnotes.

The portion devoted to crystal structure (compiled by M. Mathieu) lists for each substance: the crystal system and Bravais lattice; the length of the cell edges; the angles between cell edges; density (calculated and experimental); number of molecules in unit cell; and the space group according to Schoenflies and Astbury.

W. F. H.

PROCEEDINGS OF SOCIETIES

PHILADELPHIA MINERALOGICAL SOCIETY

Academy of Natural Sciences of Philadelphia, January 8, 1931

A stated meeting of the Philadelphia Mineralogical Society was held on the above date with the President, Mr. Toothaker, in chair. The death of Dr. Henry Leffmann, (1847-1930) an honorary member, was announced and a tribute to his memory was read by the secretary. Dr. Leffmann served as president of the society for two years, 1917-1919.