

the flood of data in the literature confusing, and he is right! Last year's AGI "Short Course" convinced me that no one person has a complete current knowledge of feldspars, and this may not be possible. I understand that the chain gang from the recent AGI "course" feel the same. It is clear that modern mineralogists must from necessity work cooperatively with a wide range of specialists to untangle their mutual problems. Joint research makes significant progress more probable, and I hope that my bibliography properly reflects this fact. What I have accomplished has been due largely to the fortunate availability of Pecora, Thompson, Yoder, Roseboom, Skinner, Appleman, and Wright, and I can predict that this will be the pattern for me in the future. I hope that Dave Wones is successful in bringing me up-to-date with experimental mineralogy involving controlled partial pressures of volatiles in our current joint work on feldspars, micas, amphiboles and pyroxenes. In the future awards of all types, including this one, might very well be made to a group of researchers. I presume that my award was meant to honor my associates as well as me. I thank them, and we thank you.

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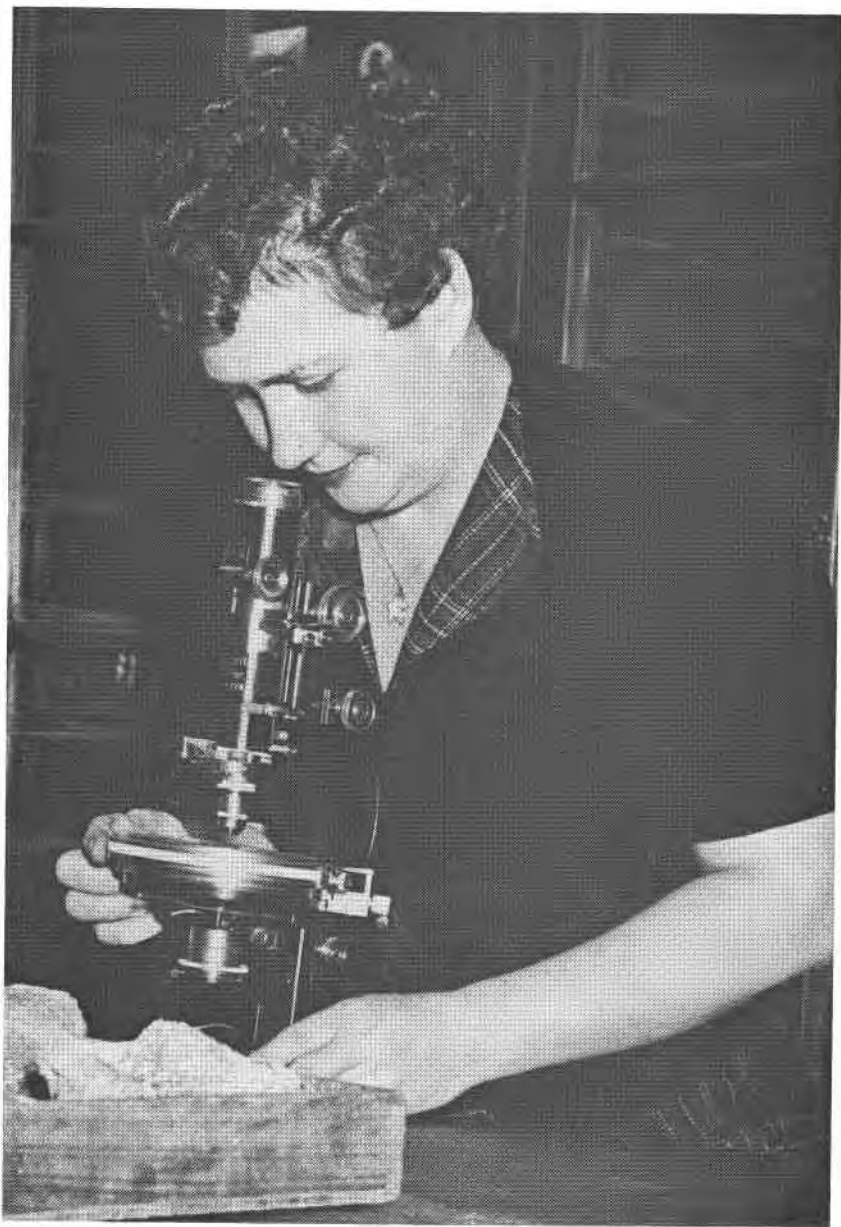
MEMORIAL OF JEWELL JEANNETTE GLASS

ANNA JESPERSEN, *U. S. Geological Survey (Ret.)*

Jewell Jeannette Glass was born at Daleville, Lauderdale County, Mississippi, on December 24, 1888, the daughter of Levi Lafayette Glass and Julia Ann Vance Glass; she died in Washington, D. C., on January 28, 1966. Interment was at Laurel, Mississippi.

Jewell came to Washington, D. C., in 1918 to accept a War Department Civil Service position. After spending some years in that department and in the Department of Agriculture, in 1930 she joined the professional staff of the U. S. Geological Survey. In the meantime she had earned an A.B. degree (1926) and an M.A. degree (1929) from George Washington University. Her education was continued in a teaching fellowship at the University of North Carolina (1929-30), a teaching fellowship at the University of Minnesota (summer 1930), graduate studies at Johns Hopkins University (1932-33), and special courses at George Washington and the U. S. Geological Survey.

Jewell began her career with the U. S. Geological Survey as an Aid In Mineralogy. From there she progressed through Junior, Assistant, Associate, and full Mineralogist and ended her career as a Geologist, with specialties in Petrology and Mineralogy. She pursued her various scien-



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tific projects with joy and enthusiasm and was probably never happier than when teaching or helping aspiring young scientists on their way. One of her valuable by-products of which I was keenly aware was her untiring efforts in preparing mineral collections for many elementary schools and very young individuals whose unusual interest in the mineral world around them had come to her attention.

Her genial and cooperative spirit and her love for her fellow men is further reflected in the preponderance of dual authorship of her many published works; a great part of her work is hidden in contributions to reports not published by herself. Examples of her important contributions to both pure science and to development of mineral resources include her studies of beryllium minerals, her discovery of the manganese mineral pyroxmangite in Idaho, and her study of bastnaesite from California, which contributed to the discovery of the greatest known deposit of this rare-earth mineral in the world.

Miss Glass was an instructor in Determinative Mineralogy in the Department of Agriculture Graduate School from 1937 to 1941. In her post-retirement years, after 1960, she was a member of the George Washington University faculty, where she taught Mineralogy. Her generous service to members of the public contributed substantially to the good will and reputation of the Geological Survey, and her patient and friendly teaching of laboratory personnel and students has enriched the United States and several foreign countries with competently trained investigators. These qualities and accomplishments won her the Department of Interior Meritorious Service Award in 1961.

Miss Glass was a Fellow of the Mineralogical Society of America and the Geological Society of America. She was a member of the Geological Society of Washington, the Petrologists' Club of Washington, the Virginia Academy of Sciences, the American Geophysical Union, Washington Academy of Sciences, Crystallographic Society of America, and the Mineralogical Society of Great Britain. She was a member of the national professional sorority Phi Delta Gamma and of the District of Columbia chapter of Sigma Xi. She joined the Potomac Appalachian Trail Club in 1930 and for most of the years since then she was an active participant in hiking and other trail activities.

Jewell enjoyed travel, and especially as it related to her profession. She attended the XVII International Geological Congress in the U.S.S.R. in 1937; the XIX in North Africa in 1952; the XX in Mexico in 1956; the XXI in Scandinavia in 1960; and the XXII in India in 1964. With leisure time available after this last congress, she envisioned a trip around the world. However, an illness that necessitated hospitalization of several months in New Zealand and several more months in Washing-

ton, D. C., brought to an end her life of appreciation for the outdoors and of devotion to her profession.

BIBLIOGRAPHY OF JEWELL JEANNETTE GLASS

- (with E. P. HENDERSON) Additional notes on laumontite and thomsonite from Table Mountain, Colorado. *Amer. Mineral.* **18**, 402-406 (1933).
- Rare chemical constituents of Amelia (Virginia) pegmatite dikes, and their mineral sources. *Trans. Amer. Geophys. Union 15th Annu. Meeting* (1934).
- Standardization of index liquids. *Amer. Mineral.* **19**, 459-465 (1934).
- The pegmatite minerals from near Amelia, Virginia. *Amer. Mineral.* **20**, 741-768 (1935).
- (with E. P. HENDERSON) Pyroxmangite, new locality: Identity of sobralite and pyroxmangite. *Amer. Mineral.* **21**, 273-294 (1936).
- Extraordinary topaz-replacement body in the Brewer mine, South Carolina. *Trans. Amer. Geophys. Union 18th Annu. Meeting* (1937).
- (with J. T. PARDEE AND R. E. STEVENS) Massive low-fluor topaz from the Brewer mine, South Carolina. *Amer. Mineral.* **22**, 1058-1064 (1937).
- (with J. J. FAHEY) Graftonite from Greenwood, Maine. *Amer. Mineral.* **22**, 1035-1039 (1937).
- (with G. W. STOSE) Garnet crystals in cavities in metamorphosed Triassic conglomerate in York County, Pennsylvania. *Amer. Mineral.* **23**, 430-435 (1938).
- (with W. T. SCHALLER) Inesite. *Amer. Mineral.* **24**, 26-39 (1939).
- (with E. N. GODDARD) Deposits of radioactive cerite near Jamestown, Colorado. *Amer. Mineral.* **25**, 381-404 (1940).
- (with H. D. MISER) Fluorescent sodalite and hackmanite from Magnet Cove, Arkansas. *Amer. Mineral.* **26**, 437-445 (1941).
- (with CARL FRIES, JR., AND W. T. SCHALLER) Bixbyite and pseudobrookite from the tin-bearing rhyolite of the Black Range, New Mexico. *Amer. Mineral.* **27**, 305-322 (1942).
- (with W. T. SCHALLER) Occurrence of pink zoisite (thulite) in the United States. *Amer. Mineral.* **27**, 519-524 (1942).
- (with J. P. Marble) Some new data on thortveitite. *Amer. Mineral.* **27**, 696-698 (1942).
- (with A. H. KOSCHMANN AND J. S. VHAY) Tin deposits of Irish Creek, Virginia. *U. S. Geol. Surv. Bull.* **936K**, 271-296 (1942).
- Helvite, a product of magmatic emanations at Iron Mountain, Sierra and Socorro Counties, New Mexico. *Trans. Amer. Geophys. Union 24th Annu. Meeting* (1943).
- (with R. H. JAHNS AND R. E. STEVENS) Helvite and danalite from New Mexico and the helvite group. *Amer. Mineral.* **29**, 163-191 (1944).
- (with R. H. JAHNS) Beryllium and tungsten deposits of the Iron Mountain District, Sierra and Socorro Counties, New Mexico. *U. S. Geol. Surv. Bull.* **945-C** (1944).
- (with R. G. SMALLEY) Bastnäsite. *Amer. Mineral.* **30**, 601-615 (1945).
- (with J. S. VHAY) A new locality for ludlamite. *Amer. Mineral.* **34**, 335-336 (1949).
- (with J. W. ADAMS) Genthelvite crystal from El Paso County, Colorado. *Amer. Mineral.* **38**, 858-860 (1953).
- (with D. F. HEWETT) Two uranium-bearing pegmatite bodies in San Bernardino County, California. *Amer. Mineral.* **38**, 1040-1050 (1953).
- (with M. H. STAATZ AND K. J. MURATA) Variation of composition and physical properties of tourmaline with its position in the pegmatite. *Amer. Mineral.* **40**, 789-804 (1955).
- (with H. T. EVANS, M. K. CARRON, AND H. J. ROSE) On cerite from Mountain Pass, San Bernardino County, California. *Amer. Mineral.* **41**, 665 (1956).
- (with R. B. GUILLOU) A reconnaissance survey of the beach sands of Puerto Rico. *U. S. Geol. Surv. Bull.* **1042-I**, 273-305 (1957).

- (with K. J. MURATA, H. J. ROSE, AND M. K. CARRON) Systematic variation of rare earth elements in cerium earth minerals. *Geochim. Cosmochim. Acta* **11**, 141-161 (1957).
- (with H. J. ROSE AND EDWIN OVER) Notes on the mineralogy of an yttrium-bearing pegmatite body near Lake George, Park County, Colorado. *Amer Mineral.* **43**, 991-994 (1958).
- (with H. T. EVANS, M. K. CARRON, AND F. A. HILDEBRAND) Cerite from Mountain Pass, San Bernardino County, California. *Amer Mineral.* **43**, 460-475 (1958).
- (with A. H. KOSCHMANN AND J. S. VHAJ) Minerals of the cassiterite-bearing veins at Irish Creek, Virginia, and their paragenetic relations. *Econ. Geol.* **53**, 65-84 (1958).
- (with A. C. VLISIDIS AND N. C. PEARRE) Chromian antigorite from the Woods mine, Lancaster County, Pennsylvania. *Amer. Mineral.* **44**, 651-656 (1959).
- (with S. K. ROY AND E. P. HENDERSON) The Walters meteorite. *Fieldiana-Geol.*, **10**, 539-550 (1962).

Editor's note: Jewell Glass always devoted a deep and unselfish interest to the affairs of the Mineralogical Society of America. And now the Society has been informed that it is the residuary legatee of her estate, in an unrestricted bequest.

with

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MEMORIAL OF CHARLES DAVIS JEFFRIES

THOMAS F. BATES, *Science Adviser, Department of the Interior and* LEON J. JOHNSON, *Department of Agronomy, The Pennsylvania State University.*

Charles Davis Jeffries, Professor Emeritus of Soil Technology and a pioneer in the application of mineralogical principles and methods to the study of soils, died December 23, 1965. He retired July 1, 1961 from the staff of The Pennsylvania State University where he had served as a member of the faculty for forty-two years.

Dr. Jeffries was born April 19, 1896 in Uniontown, Pennsylvania. He received the B.S. degree in 1919, and the M.S. in 1922 in Agricultural and Biological Chemistry from The Pennsylvania State College. After receiving his B.S., he worked for eight years in the Institute of Animal Nutrition at Penn State on a program determining the nutritional value of animal feeds by use of the Armsby animal respiration calorimeter located at this institution. In 1927 he transferred to the Department of Agronomy where his interests soon became focused on the mineralogy of soils and the interrelationships of their composition and texture with genesis and fertility. With the new interests came the realization that further training in Mineralogy was needed. Consequently, with the encouragement and support of his close friend and colleague, Arthur P. Honess, Professor of Mineralogy at Penn State, in 1934 he again assumed the role of graduate student, this time at the University of Wisconsin.