MEMORIAL OF EDWARD BENNETT MATHEWS

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Edward Bennett Mathews died on February 4, 1944, after a short period of failing health. He was born August 16, 1869, in Portland, Maine. His early training he received in the public school at Portland and from private instruction. In the fall of 1887 he entered Colby College and graduated with the bachelor's degree in 1891. In the fall of that year he became a student at The Johns Hopkins University and received his doctor's degree in 1894. During the field seasons from 1891 to 1894 he served with the U. S. Geological Survey under R. C. van Hise in the Marquette-Menominee area and under Whitman Cross in the Pikes Peak area. The same party made a survey of the San Juan Range, and a detailed investigation of the Cripple Creek mining district.

After graduation he was appointed instructor of Mineralogy and Petrography at The Johns Hopkins University and served the institution for almost fifty years with undiminished loyalty. In 1895 he was promoted to the rank of associate, to associate professor in 1899, and he became professor in 1904. He succeeded W. B. Clark as chairman of the department in 1917. He retired in 1939 at the age of 70 with the title professor emeritus.

After the organization of the Maryland Geological survey in 1896 he became assistant state geologist and succeeded W. B. Clark as director, serving the State until his retirement in 1943. In the first publication of the survey he is represented with an article on "Bibliography and Cartography of Maryland" to be followed by many others. Not all of these publications are geological but every one represents a labor of love in service to the public. Under his guidance the survey published many of the well known green volumes and many topographic and geologic maps of the State. Of the twenty-two Maryland counties, seventeen are covered by geologic maps and the topographic maps cover the entire State. This map work has been of immense value to many. As assistant state geologist he mapped the vicinity of Baltimore and large portions of the adjacent counties, mostly traveling on foot and in a buggy. His interpretations were later incorporated in the published county maps. He knew the State well and could refer to many localities and their geologic situation at a moment's notice. He served on many committees and boards and they all took advantage of the large store of information which he had accumulated, not only on geology but also on education, administration, history, and geography, and nobody who sought advice left empty-handed.
Edward Bennett Mathews
1869–1944
In 1919, Dr. Mathews became chairman of the committee on Natural Resources of the Maryland Council of Defense. He was chairman of the Division of Geology and Geography of the National Research Council from 1919 to 1922, and of the Advisory Council of the U. S. Board of Surveys and Maps from 1920–26. He belonged to the Board as long as he was in the service of the State. In 1923, he represented the National Academy of Sciences and the National Research Council at the International Research Council at Brussels and took part in the meetings of the 13th International Geological Congress where he was elected vice president. A year later, he was elected president of the Association of American State Geologists. He participated also in the International Geological Congresses at Madrid and in South Africa and was treasurer of the 16th Congress held at Washington, D. C. In 1928, he was appointed the Maryland representative on the location of the boundary line along the Potomac River between Virginia and Maryland. In 1930, he attended the French Centennial celebration of the Geological Society of France. In 1931, he became a member of the committee on States Relations of the National Research Council and of the committee on batholiths, as well as a member of the special committee for the preparation and making of an atlas in connection with the memorial volume by the George Washington Bicentennial Commission. In 1932, he became chairman of the special committee on the coal industry in Maryland, in addition to other duties in connection with the directorship of the State Weather Service, membership in the Maryland Development Commission and the Water Resource Commission. In many of these bodies he retained membership up to his resignation.

His services to the University were many, some recognizable on boards and committees, but mostly invisible. He rendered the greatest service to the institution by instilling loyalty in others and by his unselfish and lavish generosity and kindness that he bestowed on all. There are endless numbers of books that he donated to the library, many of which he bought because he saw the need but did not feel that the University could buy them. He was so much a part of the department that his personal property merged with the departmental equipment and rarely, if ever, would he lay claim to it. His devotion, loyalty, and service were unlimited.

As a scientist, Dr. Mathews emphasized fundamental facts and principles. He was more interested in the general picture and the background than in a technical contribution. He was a geologist and not a mineralogist or petrographer, a philosopher and not a technician. Few men ever possessed his knowledge of geologic literature and could, like Dr. Mathews, find a citation, a paper, or a reference on such short notice
from the library. Elaborate equipment could not bribe him and an old microscope in the hands of the right man would, in his opinion, go infinitely further than technical skill and apparatus without ingenuity.

Dr. Mathews belonged to many learned societies. He contributed much effort to the treasurership of the Geological Society of America, serving since 1917. Under his watchful guidance the capital of the Society grew five-fold, a fact which was forgotten with the receipt of the Penrose bequest. He also held membership in the Mineralogical Society, the Washington Academy of Sciences, the American Academy of Arts and Sciences, the American Association for the Advancement of Science, the Society of Economic Geologists, the American Institute of Mining Engineers, the American Geographical Society, the Association of American State Geologists (President 1920–1923), and the Maryland Historical Society.

Dr. Mathews will be missed by his friends and associates, his kindness and warmth will be missing in a much larger community, and the profession has lost a member whose wide interest and perspective and general knowledge was acquired in a lifetime of hard work and thought.

Bibliography

The granites and derived gneisses of the Pikes Peak folio. Dissertation, 1–84 (1894).
Notes on some flattened garnets from North Carolina: Johns Hopkins University Circ., 15, 8 (1895).
Bibliography and cartography of Maryland, including publications relating to the physiography, geology, and mineral resources: Md. Geol. Surv., 1, 229–401 (1897).
Review of “Tables for the determination of minerals by physical properties ascertainable with the aid of a few field instruments, based on the system of Prof. Dr. Weisbach,” by Persifor Frazer: Science, 5, 624–625 (1897).
The building decorative stones of Maryland (with Merrill, G. P.): Md. Geol. Surv., 2, 47–123 (1898).
An account of the character and distribution of Maryland building stones: Md. Geol. Surv., 2, 125–241 (1898).
The maps and map makers of Maryland: Md. Geol. Surv., 2, 337–488 (1898).
The first geological excursion along the Chesapeake, in 1608; Johns Hopkins University, Circ., 18, 14–15 (1898).
Maryland. [A state supplement for Rand-McNally’s Grammar school geography,] New York, 1–9 (1898?).
The granitic rocks of the Pikes Peak quadrangle: Jour. Geol., 8, 214–240.
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Quantitative classification of igneous rocks: abstract, Am. Geol., 31, 399-400 (1903).
The practical working of the quantitative classification: abstract, Science, n.s., 17, 668-669 (1903).
The structure of the Piedmont Plateau as shown in Maryland: Am. Jour. Sci., ser., 4, 17, 141-159 (1904).
The physical features of Maryland (with Clark, W. B.): Md. Geol. Surv., 6, 29-251 (1906).
What makes a volcano? World Today, 10, 597-603 (1906).
The counties of Maryland, their origin, boundaries and election districts: Md. Geol. Surv., 6, 419-572 (1906).
Anticlinal domes in the Piedmont of Maryland: Johns Hopkins University, Circ., n.s., no. 7, 27-32 (1907).
History of the boundary dispute between the Baltimores and the Penns resulting in the original Mason and Dixon line: Md. Geol., Surv., 7, 103-203 (1908).
Manuscripts and publications relating to the Mason and Dixon line and other lines in Pennsylvania, Maryland and the Virginias (with Burchard, E. L.): Md. Geol., Surv., 7, 205-403 (1908).
The general conditions of southern economic life: The South in the Building of the Nation, 5, 1-12 (1909).
State and local agencies for the promotion of agriculture and mining: The South in the Building of the Nation, 5, 551-562 (1909).
The cement and gypsum industry of the South: The South in the Building of the Nation, 6, 202-206 (1909).
Minor mineral industries in the South: The South in the Building of the Nation, 6, 243-252 (1909).
The natural resources of the South and the future: The South in the Building of the Nation, 6, 635-642 (1909).
Relation of scientific to practical work in state surveys: Econ. Geol., 6, 181-187 (1911).
Discussion of "Index-Ellipsoid in petrographic-microscopic work" by Fred E. Wright: Geol. Soc. Am., Bull., 24, 681-682 (1913).

The university and the state bureaus: The Johns Hopkins Alumni Mag., 3, 102–114 (1915).

The university in its new home. Foreword: Johns Hopkins University, Circ., 35, n.s., no. 10, 5–9 (1916).


The use of average analyses in defining igneous rocks: Johns Hopkins University, Circ., 36, n.s., no. 3, 12–17 (1917).


The surface and underground water resources of Maryland, including Delaware and the District of Columbia (with Clark, W. B., and Berry, E. W.): Md. Geol. Surv., 10, 171–542 (1918).


Geological notes of Squirrel Island or what the records of the rocks tell of the island’s history: Lewistown Jour., 111, Mag. Sect. (1921).


Origin, distribution, and uses of clay, with special reference to the fire clays of western Maryland: Md. Geol. Surv., 11, 291–336 (1922).


Progress in structural geology: Johns Hopkins University, Studies in Geology, 8, 137–161 (1927).

Report on the location of the boundary line along the Potomac River between Virginia and Maryland in accordance with the award of 1877. Baltimore, 48 pp. (1928).


Report on the marking of the boundary line along the Potomac River in accordance with the award of 1877 (with Nelson, W. A.): Balt., 33 pp. (1930).


University Finance: *Gamma Alpha Record*, 22, 151–160 (1933).

Map of Maryland showing geological formations. Scale 1:380,160 or 6 miles to an inch: *Md. Geol. Surv.* (1933).


