MEMORIAL OF WILLIAM ARTHUR TARR

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William Arthur Tarr, mineralogist, geologist, inspiring teacher, died July 28, 1939, after an illness of long duration. He was fifty-eight years old.

Dr. Tarr was born at New Cambria, Missouri, on March 29, 1881, the son of John W. and Ida Elizabeth (Hill) Tarr. He took his undergraduate college work at the Oklahoma Agricultural and Mechanical College, receiving the Bachelor of Science degree in 1904. Having acquired a definite interest in geology, especially on the economic side, he entered the University of Arizona and was granted in 1908 the degree of Bachelor of Science in Mining Engineering. During the following year he was instructor in geology at that University. He entered the University of Chicago in 1909 as a graduate student and research assistant and completed the residence requirement for the doctorate in the spring of 1911. The degree of Doctor of Philosophy was conferred in 1916. In 1927 Oklahoma A. and M. conferred upon him the honorary degree of Doctor of Science. He had been married in 1905 to Coralynn Gertrude Neumann of Hillsdale, Oklahoma.

Dr. and Mrs. Tarr moved to Columbia, Missouri, in 1911, he having received an appointment as instructor in geology and mineralogy at the University of Missouri. He was promoted rapidly to assistant professor, associate professor, and in 1919 attained full rank. In addition to his regular teaching duties he served for several seasons as geologist in the Missouri Bureau of Geology and Mines, was consulting geologist for various petroleum companies, and taught in the summer sessions of the University of Chicago and the University of Missouri. He was a fellow of the Mineralogical Society of America, councilor from 1925 to 1929, vice-president in 1934; a fellow of the Geological Society of America and the American Association for the Advancement of Science. He held membership in the Mineralogical Society of Great Britain and Ireland, the American Association of Petroleum Geologists, and the Society of Sedimentary and Economic Mineralogists. He was a member of the Kappa Sigma social fraternity and of four scholarship and professional fraternities, Phi Kappa Phi, Sigma Xi, Gamma Alpha, and Sigma Gamma Epsilon. In the last named organization he was for nearly twenty years a member of the grand council, serving as national editor.

Dr. Tarr was a tireless investigator and his attention was given to a broad range of subjects. He has made many important contributions to

mineralogy, general geology, and economic geology, as the appended bibliography shows. One of his strongest interests, and the one for which he is perhaps best known, was the origin and nature of stylolites and various types of concretionary structures in sedimentary rocks. His interest was aroused early in the lead-zinc and contiguous barite deposits

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of Missouri. He was always a firm believer in the magmatic origin of these deposits. He was thus on the side of the minority among students of ore deposits, but he was an able champion of the magmatic hypothesis. He wrote on the coarser structures of igneous and sedimentary rocks, on physiography, on the origin and paragenesis of minerals, on the effect of heat on granite and other building stones. I think he wrote nothing on paleontology. He professed to know nothing about it. And yet on more than one occasion I have seen him on his knees, diligently and enthusiastically working with hammer and chisel to uncover invertebrate fossils. I mention this merely to emphasize the omnivorous and insatiable curiosity of this scientist. This broad interest never betrayed him into superficiality, however.

I would like to add a few words of personal tribute to him as a teacher and field companion. Some of my happiest recollections are of my early associations with him, first as a graduate student working under him, later as an instructor in the same department with him. He was a severe taskmaster during class or laboratory periods, always demanding our best effort. He never nagged or stormed when we slumped in our work, but led us back into good work habits, either by good humored "kidding" or by a dignified but effective rebuke. I well remember one day when the class in advanced mineralogy seemed completely awash. Dr. Tarr quietly picked up his books and notes, rose from his desk and said with a smile, "Gentlemen, I'm too busy to undertake a fruitless discussion with a class so totally uninformed. Let me know when you wish to meet with me again." I think we never again went to him unprepared.

He never tolerated inexact or vague expressions. All of his older students will remember his characteristic stock phrase during class discussion,—"Meaning by that?" The constant reiteration of that disconcerting question drilled into us the necessity of explicit and definite statements.

In the field he was an inspiring leader. He permitted no "grouching" on the part of himself or any members of the party. Drenching rains, muddy roads, flat tires, wind-flattened tents, weariness, all brought a laugh from him and therefore, eventually, from us. He maintained no austere dignity in the field, but joined in our spare time amusements and horseplay. We were camped one spring in the southeast Missouri lead district and for a week or two occupied a vacant bunk house at one of the mines. A large, bare steampipe ran the length of the building through each room and under each bed. I still shudder at the shock of the rude awakening we experienced every morning at six o'clock as he pounded vigorously on that pipe with his geological hammer, and his fiendish laughter as we suddenly hit the floor. That experience made me quite philosophical, two years later, regarding a top sergeant's early morning whistle and a rude command "to rise and shine." One of his more subtle practical jokes was perpetrated during the exploration of a large cave near the Missouri River. He directed his carbide light high upon the walls of the cave and showed us a blue-green material gleaming in a cavity, and vaguely said something about a rare mineral. Several of us made the rather difficult climb, racing to obtain possession of this rarity. When we reached our objective we found it to be candle grease left by a previous explorer. He was delighted at our chagrin.

His colleagues in science, his associates in the societies, and his former students mourn the untimely passing of Dr. Tarr, a friend, a very

human companion, a skilled teacher, and a scientist whose work was not completed. Their sympathies go out to Mrs. Tarr who was a constant and inspiring companion and co-worker with him in field and laboratory.

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