MEMORIAL OF ALBERT HOMER PURDUE.

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Albert Homer Purdue, late State Geologist of Tennessee, was born March 29, 1861, in Warrick County, Indiana, near Yankeetown—a small village in the loess-covered hills bordering the Ohio River—an hour's ride by trolley east from Evansville. While the people of the town came, as a rule, from Yankeeland, one of Mr. Purdue's grandfathers had been an early settler in western middle Tennessee. His early education was obtained at Yankeetown and later at the Indiana State Normal School at Terre Haute, from which he graduated in 1886. In 1886-1887 Mr. Purdue taught at Sullivan, Indiana. In 1887-1888 he was superintendent of public schools at West Plains, Missouri. In 1887, at Indianapolis, Indiana, he married Miss Bertha Lee Burdick, who died of consumption a year later. From 1889 to 1891 he was assistant superintendent of the United States Indian School at Albuquerque, New Mexico. Part of his duties were the selection of children from the reservation for the school and the rounding up of boys who had run away—a line of work that led to many interesting experiences. From 1891 to 1894 he was at Stanford University, from which he obtained the degree of A. B. in 1893. While there he made geologic studies on the San Francisco Peninsula, and during 1892-1893 was an assistant geologist for the Arkansas Geological Survey with the writer, studying the southern part of the Ouachita uplift. This association with Purdue in the field during the summer and fall of 1892 was one of the pleasantest epochs in the writer's life. We were living on the country, in a region little settled at that time, and Purdue's vivid description of his week's experience, when we got together at the end of each week, gave an air of romance and adventure to the whole undertaking. This work and that in the Coast Range Mountains of California, both under the eye of Branner and with his counsel, Purdue counted as among the most valuable training experiences he could have had, as he could not help getting somewhat of Branner's broad point of view and critical study of details. In 1894, after a year of graduate work at Stanford, he became a candidate for the elective position of State Geologist of Indiana; but his long absence



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from the State had put him out of touch with the political personnel of the Republican party and he failed to get the nomination. Perhaps he would have succeeded if he had listened to the demands of those who wished the promise of places which they were not prepared to fill. The winter following he was principal of the high school at Rensselaer, Indiana. Then came a year of graduate work as a Fellow at the University of Chicago.

His professional career began in 1896, when he was elected Professor of Geology at the University of Arkansas, his position after 1902 being that of Professor of Geology and Mining. Here his executive ability and judgment were early recognized, and as time went on more and more of the administrative committee work of the university fell on his shoulders. He was chairman of the Committee on Student Affairs and of the Classification Committee, which had in charge the arrangement of courses, etc. In 1898 he married Miss Ida Pace, of Harrison, Arkansas, at that time Associate Professor of English at the university-a woman of unusual mental and social attainments, who comes of a family distinguished in the life of Arkansas. In 1895, again in 1901, and from then on Mr. Purdue was a field assistant on the United States Geological Survey, devoting his summers to field-work. With the Survey he had the reputation of being one of the very few teaching geologists whom that organization could count on to carry out a program not only in the field but in the office preparation of his reports. At the time of the St. Louis Exposition he was made Superintendent of Mines and Metallurgy for the State. In 1907 Mr. Purdue was made State Geologist ex officio of the Arkansas Survey. Though having at his disposal only very meager funds, Purdue was able to prepare or have prepared a number of highly creditable reports, including one on the slates of the State, by himself; one by Prof. W. N. Gladson on the water powers of the State, and one by Prof. A. A. Steel on mining methods in the coal fields of the State.

As a teacher, Purdue brought to his work the results of his normal-school preparation, and the training received under Branner and J. P. Smith at Stanford, and Salisbury, Chamberlain and others at Chicago, together with his own rather varied experience along that line. He was not a believer in the lecture method of instruction, but rather in the students working out their results under the stimulus of actual contact with the problems in the field and laboratory, and in this knowledge being reinforced by repeated review and by application to new and practical problems. He had little regard for the student who would not work and he would bar such students as much as possible from his classes. The great energy he put into his teaching in both the classroom and field wonderfully impressed his students and assistants, so

that he constantly inspired them to obtain greater results and attain higher ideals. When he left the University of Arkansas the students presented him a silver loving cup as a token of the respect they held for him as a teacher. His students speak of his class-work being as good as any course in logic, as he led them to analyze their data and taught them how to draw proper conclusions therefrom; so that, aside from those who decided to take up geology as a profession, his old students, scattered all over the United States, look back to the work in his classes as one of the most profitable experiences of their university life. Among his students who were led into adopting geology as a life work may be named Miser and Mesler, of the United States Geological Survey; Carl Smith, Munn, McCreary, Hutchinson, and others, who, after more or less time spent with the national organization, have gone into consulting or professional work in the oil industry.

Purdue had great faith in the constructive ability of the boy brought up on the farm, in which class most of his students fell, and in a talk a few years ago he explained the reason for that ability as due to the constant association in labor of father and son on the farm, the son getting the advantage of the father's example and counsel as they worked together in the fields or gardens, and thus acquiring ideals of industry, efficiency and initiative commonly lacking in the city- or town-bred boy.

In 1912 Mr. Purdue was elected State Geologist of Tennessee, which position he filled with honor to himself and the State until his death, on December 12, 1917. Of his success as State Geologist of Tennessee the best testimony is the steady stream of high-grade publications that flowed from his office. Equally convincing from another direction is the fact that during the session of the last State legislature his work and its value to the State received unstinted praise, and the enlarged appropriation for the work of the Survey went through practically without question or opposition.

Purdue had for thirty years suffered at times from intestinal trouble that had proved more and more of a handicap as time went on. Last spring, after a winter of unusual demand, he suffered a sudden attack of this old trouble, which for a time undermined his health and threatened to require an immediate operation. A number of trips to the field and for rest led to his regaining somewhat his old vigor, though not entirely.

The last week of November he made an automobile trip into east Tennessee for the purpose of studying the manganese deposits of that region. He became so ill that he stored his car and returned to Nashville by railroad. He was taken immediately to a local hospital and, after a few days, underwent an operation, with the hope of having his health restored. The morning of the operation he dictated for publication in the Resources of Tennessee a paper giving the results of his recent investigation of manganese. Then he walked into the operating room as calmly as if he were going into his office for a day's work. At first everything indicated a speedy recovery, but complications arose and he died a week later from uremic poison.

Mr. Purdue was quiet and unassuming—a man who disliked display, who sought always to keep his own personality and achievements in the background, yet a man who made friends that stuck, because he could prove himself a true friend under all circumstances; a man whose judgment was sought by many; a man whose influence was always for sanity, for uplift, for scientific accuracy, even in the simple things of life. I still remember that when we were working together in the mountains of Arkansas, it was my method to fall into the ways of the people with whom we were living, especially in adopting the vernacular of the region—a habit to which Purdue always objected and for which he often chided me. He would insist that, as educated men, we had no right not to give the mountain people a glimpse of correct English. This same regard for the Queen's English is seen in the painstaking care with which he edited all of the manuscripts published by him as State Geologist.

As a field geologist, Purdue was tireless, painstaking and thorough, and the same energy and careful attention characterized all of the preparation of his reports. This desire for high quality and accuracy doubtless reduced somewhat the number and length of papers prepared by him, but his work made up in quality what it lacked in volume.

While he was at the University of Arkansas he spent the summer months in the field in that State—most of the time in camp with a party of from one to three of his students—and wrote his reports at odd moments during the school year. Although his field-work was varied, it consisted mainly of detailed areal mapping for the United States Geological Survey in a number of quadrangles in the northwestern and west-central parts of the State. Whenever funds were appropriated by the Arkansas legislature for the State Survey he made it count as much as possible by co-operating with the United States Geological Survey. Most of his geologic work in Tennessee was administrative, but he found time to make numerous short field trips into different parts of the State. Much of the work carried on under his administration as State Geologist in that State was done in co-operation with the United States Geological Survey and the United States Soil Survey.

Among his more important papers are the Winslow and Eureka Springs-Harrison folios and the De Queen-Caddo Gap and Hot Springs folios, awaiting publication; the slate deposits of Arkansas, besides a large number of shorter publications issued by the United States Geological Survey, State Surveys of Arkansas and Tennessee, and many others published in magazines or elsewhere. Considering the large amount of administrative work in the University of Arkansas that fell to his lot, this is a rather remarkable showing of scientific results for a teaching professor occupying practically the whole bench of geology.

Mr. Purdue was a member of the American Institute of Mining Engineers, the Indiana Academy of Sciences, the National Geographic Society, and the Seismological Society of America. He was a Fellow of the American Association for the Advancement of Science, the Geological Society of America, and the Geological Society of London, He often attended the meetings of State Geologists, of the Conservation Congress, and of the Southern Commercial Congress. While at the University of Arkansas he was made a teacher member of the Kappa Alpha fraternity. In 1907 he was elected to the Stanford chapter of Sigma Xi. The commencement following his resignation as Professor of Geology at the University of Arkansas that institution conferred on him the degree of LL.D. There was no recognition that he prized more highly than his election, in 1911, to the Council of the Geological Society of America. He was President of the Tennessee Academy of Sciences at the time of his death and was already considering possible subjects for the next annual address.

As a citizen, Mr. Purdue was always public-spirited, entering in large degree into the life and activities of the place of his home and of the State at large. In Nashville, besides his interest in the Commercial Club, he was active in other civic and social clubs, including the Rotary, Freolac, Tennessee Historical Society, Nashville Engineering Society, Reynolds Lodge, Knights of Pythias, Phœnix Lodge, Free and Accepted Masons, and was a generous subscriber to the work of various organizations. His home, with two boys now of college age, was always a place for real Southern hospitality, for Purdue had a large sense of humor and a live personal interest in the welfare of all his friends, and a wife whose intellectual attainments and personal charms not only added to the welcome of the home but were a constant inspiration to the man.

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