

OBITUARY

JAMES PERRIN SMITH

DR. JAMES PERRIN SMITH, professor emeritus of paleontology at Stanford University, died suddenly at his home in Palo Alto, California, January 1, 1931.

Dr. Smith was born at the home place on Saluda River, near Cokesbury, Abbeyville County, South Carolina, November 27, 1864. He was the son of the Reverend James Francis and Julia (Forster) Smith. His parents were highly cultured, and realizing the value of an education they were anxious that their children should have every opportunity possible of securing a thorough one. The public schools in the vicinity of Cokesbury were very poor, and on account of this James Perrin was taught at home. His parents moved to Spartanburg, South Carolina, while he was still quite young, so that he might have the advantages of the schools there. He entered the preparatory school of Wofford College and from 1876 to 1879 was under the tutorship of Charles Forster Smith, an elder brother. In the fall of 1880 he entered Wofford College and in 1884 was graduated with the A.B. degree. He then entered Vanderbilt University, where he was a student from 1884 to 1887, receiving the M.A. degree in 1886.

Following his work at Vanderbilt he taught for two years in the Nashville, Tennessee, high school. In 1888 Smith was appointed assistant chemist and geologist for the Arkansas Geological Survey, which had been but recently organized.

At that time it was the custom to go to Germany for advanced scientific work, and so Smith entered the University of Göttingen to study paleontology under Professor von Koenen and mineralogy under Professor Liebisch. He received the degree of doctor of philosophy in paleontology in 1892. In the spring of 1892 he spent a short time in Munich under the instruction of Professor von Zittel. During his two years at Göttingen Dr. Smith was devoting all his spare time to the study of the ammonites, a group in which he had become very much interested. Having finished his work at Göttingen he returned to the United States.

Stanford University had opened in the fall of 1891, and Dr. John Casper Branner had been appointed head of the department of geology. In 1892 he selected Dr. Smith as his associate, with the title of professor of paleontology and mineralogy. For a number of years Dr. Smith gave courses in historical geology, paleontology, mineralogy, crystallography and petrography. In 1905, however, he was made professor of paleontology and was relieved of his work in mineralogy, crystallography and petrography. On taking up his work at Stanford Dr. Smith

continued his study of the ammonites, making collecting trips and studying the stratigraphy of various parts of the western United States.

He also became interested in California geology and in time was regarded as an authority on the subject. In 1916 he supervised the compilation of a geological map of California and to accompany it prepared a report descriptive of the geologic formations of the state. These were published by the California State Mining Bureau.

The writer has known Dr. Smith for the past thirty-five years, first as a teacher in the classroom and in the field and later as a very personal friend and associate. As a teacher he was held in the very highest regard by all his students and associates. He had the faculty of getting from each one the very best results that were possible. He was first and always a teacher. Other monuments may be erected in his honor, but his chief monument will be the affectionate memory of the students who during his thirty-seven years of teaching profited by his instruction and association. The influence of Dr. Smith on his students was by no means confined to the classroom. In fact, his habit of meeting students in groups in front of the Geology building and telling stories and discussing various problems with them has had a very marked influence on the lives of many persons. He was never too busy to listen to students when they had real problems to discuss with him and they were sure of a sympathetic audience and good sound advice.

The very deep regard in which Dr. Smith was held by his former students was shown when, on his retirement as executive head of the geology department at Stanford University in 1922, the graduates of the department presented him with ten thousand dollars. This was one of the most unusual tributes ever paid to any teacher.

Dr. Smith had a very high standing as a scientist and while his specialty was invertebrate paleontology, at the same time he had a thorough knowledge of the other phases of geology. He early became interested in the ammonites and devoted his whole life to a study of this group of fossils and was recognized internationally as an authority on it. He was especially interested in working out the evolutionary stages of the various forms and in studying them from a biological as well as geological standpoint.

From 1895 to 1906 Dr. Smith held the title of assistant geologist on the U. S. Geological Survey and from 1906 to 1924 the title of geologist. In this partial relation he devoted his spare time from university duties to the collecting and study of ammon-

ites. From this there resulted a notable series of publications. In 1902 his paper on the "Carboniferous Ammonoids of America," 205 pages and 29 plates, was published by the U. S. Geological Survey as Monograph 42. This was followed in 1905 by his paper, with Alpheus Hyatt, entitled "Triassic Cephalopod Genera of America," U. S. Geological Survey Professional Paper 40. It contained 394 pages and 85 plates. In 1914 his paper, "Middle Triassic Marine Invertebrate Faunas of North America," appeared as Professional Paper 83, U. S. Geological Survey, 254 pages and 99 plates, and in 1927 "The Upper Triassic Marine Invertebrate Faunas of North America" was published by the U. S. Geological Survey as Professional Paper 141, with 363 pages and 121 plates. Still another paper, "The Lower Triassic Ammonoids of North America," was completed at the time of his death and will be published by the U. S. Geological Survey.

While the above are Dr. Smith's largest papers and perhaps the most important ones, he published more than fifty others. The high character of his scientific work was recognized by the best scientists of the country when in 1925 he was elected to membership in the National Academy of Sciences and on April 24, 1928, was awarded the Mary Clark Thompson Gold Medal for his research in geology and paleontology.

Dr. Smith was married August 19, 1896, to Miss Frances Norris Rand, of Manitowoc, Wisconsin. They had four children, Mary, Forster, Howard and Charles. The daughter and two sons have graduated from Stanford, and the youngest is still in the university.

In addition to his other work Dr. Smith served on various university committees and in many ways was a very important influence not only in determining the policy of the geology department but of the university as a whole. He belonged to but few scientific societies. He was, however, a very loyal member of the Le Conte Club and attended practically all the

meetings. He was much interested in sports of various kinds and as a college student was pitcher for his college baseball team. In later years he became very fond of fishing as a diversion in summer vacations.

Dr. Smith was one of the most kind and lovable men it has ever been my privilege to know. He was uniformly courteous, exceedingly modest and unassuming and possessed the very highest sense of honor. This last was well shown in his scientific work, where he insisted full credit should be given each one for any work done. He gave very freely, however, of his own material to his advanced students.

While we mourn deeply his loss we have the very great satisfaction of having had the privilege of knowing him and of being associated with him for so many years.

SOLON SHEDD

STANFORD UNIVERSITY

RECENT DEATHS

DR. ALBERT PAUL WEISS, professor of psychology at the Ohio State University, died on April 3, at the age of fifty-one years.

DR. OTTO WALLACH, emeritus professor of chemistry in the University of Bonn, died on March 1, at the age of eighty-four years. Dr. Wallach was awarded a Nobel prize in 1910 for his work on terpenes.

The death is announced of Dr. Johannes Reinke, professor of botany at Kiel.

PROFESSOR D. HEPBURN, of the department of anatomy of the Cardiff Medical School, University of Wales, died on March 10, at the age of seventy-two years.

Nature reports the death of Henry Harries, long connected with the British Meteorological Office, on February 8, at the age of seventy-nine years, and of Professor Carl Emil Hansen Ostenfeld, professor of botany and director of the botanical garden in the University of Copenhagen, on January 16, aged fifty-eight years.

SCIENTIFIC EVENTS

GEOPHYSICAL SURVEYS

A SPECIAL exhibition of apparatus and equipment used in geophysical surveys has been opened in the Science Museum, South Kensington. The exhibits, as described in the London *Times*, have been specially selected to illustrate the development of all the important methods used to locate mineral deposits by the use of sensitive physical apparatus, and the display, though preceded by a smaller exhibition in Stockholm last year, is the first attempt to assemble on a large scale instruments up to the most modern

examples. Details of field operations and the technique of the various methods are illustrated by photographs and diagrams, and examples are shown in maps and large scale plans of the results obtained by geophysical surveys in various parts of the world.

The exhibition begins by illustrating general magnetic principles, through specimens of William Gilbert's "terrella" or circular loadstone of date about 1600, specimens of which are lent by the Royal Society. The sixteenth-century sundial compass, and the wooden-bowled mariner's compass of the mid-sev-