the industrial section. Those of the graduate students who are granted the title of fellow in pure chemistry are considered by the Mellon Institute as equal in rank and privileges with the industrial research fellows.

W. A. HAMOR⁸

FREDERIC WARD PUTNAM

THE following minute on the life and services of Professor Putnam was placed upon the records of the Faculty of Arts and Sciences of Harvard University at the meeting of October 26, 1915:

Frederic Ward Putnam, son of Ebenezer and Elizabeth Appleton Putnam, was born in Salem, Massachusetts, April 16, 1839. His ancestors on both sides were early immigrants from England, the first American ancestor being John Putnam, who settled in Salem in 1640. The father, grandfather and great-grandfather of Professor Putnam were all graduates of Harvard College, and the associations of his mother's family had been close with the institution from its beginning.

His early schooling was received in private schools and at home under his father's tuition. At an early age he showed great interest in natural history and had thoughts of devoting himself to scientific pursuits. Promised an appointment at West Point, however, he was preparing himself to adopt a military career, when Louis Agassiz met him at the Museum of the Essex Institute, and, recognizing in him a keen student, persuaded him to take up natural history as his life work. His preparation for the military profession was accordingly abandoned, and he devoted himself at once to the study of birds, being made curator of ornithology in the Essex Institute in 1856. In the following year he was made assistant to Professor Agassiz, and entering the Lawrence Scientific School received the degree of S.B. in 1862. For a number of years after this, he continued his work in the study of animal life, as curator of vertebrates at the Essex Institute, of Ichthyology at the Boston Society of Natural History, and as assistant in the museum of comparative zoology at Harvard University. During these years he had also some experience in museum administration, as he was entrusted with the charge of the Museum of the Essex Institute and of the Museum of the East Indian Marine Society in Salem, and later

³ Assistant to the director of the Mellon Institute of Industrial Research. was made director of the museum of the Peabody Academy of Science in the same city. In 1873 he was chosen to fill the important position of permanent secretary of the American Association for the Advancement of Science, an office which he held for twenty-five years. Professor Putnam's connection with the association lasted through one of the most important periods in its life, and to his energy and administrative ability much of its success was due.

Although it was in the field of natural history that Professor Putnam for many years carried on most of his work, his interest in archeology was early aroused. While attending the meeting of the American Association at Montreal in 1857, he discovered on Mt. Royal a small kitchen-midden. and was thus among the very first in this country to recognize the presence of the remains of prehistoric man. In 1874 Dr. Jeffries Wyman, the first curator of the Peabody Museum of American Archeology and Ethnology, died and Professor Putnam was appointed to take the place. Thus began his connection with the institution of which he was the director for over forty years. In 1886, he was made Peabody professor of American archeology and ethnology, and served as such until 1909, when he joined the group of the emeriti. During the nearly half-century of his connection with the museum, he labored unceasingly to build up its collections, both by purchase and by explorations in the field. He was one of the earliest to realize the need of archeological and anthropological exploration, and to insist that careful fieldnotes and data are equally important with the specimens themselves. The great collections which he gathered and which place the museum in the forefront of the museums of this country, are a witness of his success.

With the appointment to the Peabody professorship, Harvard University became one of the first institutions in the country to offer instruction in the field of anthropology and American archeology. Although always more active in museum and field-work than in teaching, Professor Putnam strove constantly to develop the instruction in his chosen science, from the time when, before any courses were offered, he had several voluntary students working under his direction, to the very last days of his life, when nearly a score of specialized courses were offered by the division of which ne had for so long been the head.

Striking as were the results of his work here at Harvard, his influence was literally nation wide, and he may justly be called one of the fathers of anthropology in America, the others being Brinton, of Pennsylvania, and Powell, of Washington. In 1892, he was made chief of the department of anthropology at the World's Columbian Exposition at Chicago, and not only brought together what was probably the greatest archeological and anthropological exhibit ever gathered in this country up to that time, but collected by the aid of numerous collaborators a vast mass of data in regard to our native peoples which has not yet been fully worked up. The specimens so brought together for the Exposition became the nucleus of the present Field Museum of Natural History, which may thus be regarded as, in its origins, of his making. In 1894 Professor Putnam was made curator of anthropology in the American Museum of Natural History in New York City, and for nearly ten years he applied to its administration and to the building up of its collections the experience he had gained in Cambridge and Chicago. It was again largely through his efforts that the University of California established a department of anthropology in 1903, and he held the position of professor of anthropology and director of the anthropological museum in that institution until his retirement in 1909.

In his long life of scientific work, a great deal of Professor Putnam's attention was necessarily devoted to administrative and editorial duties, but he found time, nevertheless, for the writing of a large number of scientific papers, and the bibliography appended to the Anniversary volume presented to him in 1909 by his associates and students, contains something over four hundred titles. His membership in scientific societies, both at home and abroad, was extensive. In this country he was a member of the National Academy, the American Academy of Arts and Sciences, the American Philosophical Society, and a great many others: outside the United States he was an honorary or corresponding member of the anthropological societies of Great Britain, Paris, Stockholm, Berlin, Rome, Florence and Brussels, of the Royal Society of Edinburgh, and others of minor importance. In 1868 he received the degree of A.M. from Williams College; in 1894 the degree of S.D. from the University of Pennsylvania; and in 1896, the Cross of the Legion of Honor from the French government.

Professor Putnam was twice married: in 1864 to Adelaide Martha Edmands of Cambridge, by whom he had three children, two daughters and one son. After her death, fifteen years later, he married in 1882 Ester Orne Clarke, of Chicago, who, with his three children, survives him.

To his students and associates Professor Putnam endeared himself by his kindliness and sympathy. For every one he had a cordial greeting and a pleasant word. He was ready always to give unstintedly of his time, and so far as he was able, from his pocket, to any one who asked his aid. He had the gift of inspiring those with whom he came in contact with enthusiasm for research, and to few is it given to have so wide an influence. Until the very last years, the great majority of those in this country who were working in the anthropological field had been associated more or less closely with Professor Putnam, either as students or colleagues in the various institutions of which he had been a member. His loss, therefore, is widely felt, not only because he was an able administrator and the last of the three founders of anthropological study in this country, but also because he had won the affections of so many as a teacher and a friend.

SCIENTIFIC NOTES AND NEWS

PROFESSOR M. I. PUPIN, of Columbia University, will give a lecture on "The Problem of Aerial Transmission," at the approaching meeting of the National Academy of Sciences. The lecture will be given at the American Museum of Natural History, New York City, on the evening of November 15.

AT the recent meeting of the Clinical Congress of Surgeons of North America, at Boston, Dr. J. M. T. Finney, of the Johns Hopkins University, was elected president.

DR. RICHARD MILLS PEARCE, professor of research medicine in the University of Pennsylvania, received the degree of doctor of science from Lafayette College on October 20.

THE Geographical Society of Philadelphia presented on November 3 its Elisha Kent Kane medal to Professor Ellsworth Huntington, of Yale University. Dr. Huntington gave a lecture on "Climate, Weather and Daily Life."

According to a cablegram to the daily press from Stockholm it has been decided to award the Nobel Prize in medicine for 1914 to Dr. Robert Barany, of the University of Vienna, for his work in the physiology and pathology of the ear.