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. 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.

THE College of Physicians of Philadelphia announces that the Alvarenga prize for 1915 has been awarded Dr. Joshua E. Sweet, Philadelphia, for his essay entitled "The Surgery of the Pancreas."

M. Paul Painlevé, professor of mathematics in the University of Paris and professor of mechanics in the Paris Polytechnic School, has been made minister of education in the new French cabinet.

The French minister of war has appointed a consulting committee of experts on military aeronautics which includes M. Appell, who occupies one of the chairs of mechanics at the Sorbonne; M. Deslandres, director of the Meudon Observatory, and M. Kling, director of the Municipal Observatory.

Surgeon W. McCov, now in charge of the leprosy investigations at the hospital at Molokai, Hawaii, has been appointed director of the hygienic laboratory of the U. S. Public Health Service, succeeding Dr. John F. Anderson, who recently resigned.

Dr. Sigismund S. Goldwater retired this week from the post of health commissioner of New York City and is succeeded by Dr. Haven Emerson, deputy health commissioner.

Mr. P. Baracchi has resigned as state astronomer of Victoria, and it is said that no appropriation will be made by the government for the Victorian Observatory at Melbourne.

Professor John Ferguson has retired from the regius chair of chemistry in the University of Glasgow, to which he was appointed in 1874.

Professor Pollitzer, of Vienna, the distinguished otologist, has celebrated his eightieth birthday.

Professor Ernst Neumann, formerly director of the pathologic institute in Königsberg, and a well-known authority on diseases of the blood, celebrated the sixtieth anniversary of his doctorate on September 24.

D. J. Guzman has been appointed director of the Institute of Vegetal Pathology in Salvador, Central America, as organized under the ministry of agriculture of that government.

Dr. J. S. Caldwell, plant physiologist of the Alabama Experiment Station, has been appointed to a position as specialist in fruit by-products investigations at the Washington Experiment Station, State College of Washington, Pullman.

Dr. J. N. Rose, research associate of the Carnegie Institution of Washington, has returned from a five months' exploration trip along the east coast of South America, where he made extensive botanical collections, especially of cacti, ferns and mosses. His collection consists of herbarium, formalin and greenhouse material, supplemented by numerous photographs.

Another expedition to Japan and Korea has been undertaken by Associate Professor Frederick Starr, of the University of Chicago, who sailed from Tacoma by the Mexico Maru on October 7. His photographer and helper on the expedition will probably be Hambei Maebashi, of Tokyo. The expedition is planned to cover six months' time, Professor Starr expecting to return to the university in time for the opening of the spring quarter in April, 1916.

Professor Henri T. Hus, of the botanical department of the University of Michigan, has been granted a three years' leave of absence from the university, beginning with the present college year, in order to enable him to accept a position with the United States Rubber Company in Sumatra. Professor Hus will take charge of experimental plant breeding work on the island.

The expedition under Captain Vilkitski in the ice-breakers Taimur and Vaigach, which last year started from Vladivostok to renew the attempt to reach Europe by the Arctic Sea north of Asia, and which wintered in 100° E. longitude off the Taimur peninsula, reached Archangel during September, having thus for the first time accomplished the complete northeast passage in the reverse direction from that followed by the Vegg.

WE learn from *Nature* that the council of the Chemical Society, London, has arranged for three lectures to be delivered at the ordinary scientific meetings during the coming session. The first of these lectures will be delivered on November 18, by Dr. E. J. Russell, who has chosen as his subject, "The Principles of Crop Production." The titles of the two later lectures to be delivered on February 3 and May 18, by Professor W. H. Bragg and Professor F. Gowland Hopkins, respectively, will be announced later.

THE annual commemoration of the benefactors of the Royal College of Physicians of London took place on October 18, when the Harveian Oration was delivered by Dr. Sidney Coupland. The usual dinner was not held.

A GRANITE boulder has been placed on the campus of Cornell University to serve as a memorial of the late Ralph Stockman Tarr, professor of geology and physical geography, 1892–1912. The stone stands almost under one of the windows of the lecture room in McGraw Hall where Professor Tarr met his classes for many years. A bronze memorial tablet will be set into the eastern side of the boulder. The tablet has been designed by Mr. H. S. Gutsell, of the college of architecture. It will bear a portrait bust in low relief and the inscription:

RALPH STOCKMAN TARR 1864-1912 Scientist-Writer-Teacher

This boulder, a relic of the ice age, symbolic of his research in glacial geology and of the enduring value of his work, is placed here as a memorial of their friend and adviser by his students.

NATHAN FREDERICK MERRILL, professor emeritus in the University of Vermont, died on October 26 at the age of sixty-six years. He was for thirty years professor of chemistry in the University of Vermont.

Andrew Ferrari, a chemist known for research work in glass manufacture, died at Hartford, Conn., on October 26, aged seventysix years.

ALICE GERTRUDE McCLOSKEY, A.B. (Cornell, '08), assistant professor of rural education in the college of agriculture, Cornell University, died on October 19.

Dr. John Medley Wood, director of the Natal Herbarium and formerly director of the Natal Botanic Garden, died on August 25, at the age of eighty-six years.

Major A. J. N. Tremearne, an Australian by birth, known for his publications on the anthropology of the African races, was killed in Flanders on September 25.

Professor Schmidt-Rimpler, formerly ordinary professor of ophthalmology, died at Halle, on September 23, aged seventy-seven years.

Dr. Tiefenbacher, emeritus professor of railway engineering in the Vienna School of Technology, has died at the age of seventy-two years.

ACCORDING to Nature the third annual meeting of the Indian Science Congress will be held in Allahabad from January 13-15, 1916, when Sir Sidney Burrard, F.R.S., will be president. The chief sections will be physics, chemistry, zoology, botany, agriculture and ethnology, and the presidents of the respective sections Dr. Simpson, of the Meteorological Department; Dr. Sudborough, of the Research Institute, Bangalore; Dr. Woodland, of Allahabad; Dr. Howard, of Pusa; Mr. Coventry, of Pusa; and Mr. Burn. It is hoped that the local committee will persuade Dr. Bose to give a public lecture on his own researches. The local secretaries for this year are Dr. Hill, of Muir College, and Mr. P. S. Macmahon, of the Canning College, Lucknow, to the latter of whom all communications should be addressed. The congress is under the general control of the Asiatic Society of Bengal.

Leading Philadelphia physicians are working out a plan to make Philadelphia a great center of advanced research and study in medicine. More than one hundred physicians have joined the Cooperative Association for Post-graduate Teaching of Medicine, which is the temporary organization to bring about this advance in Philadelphia's medical life. Dr. David Reisman, 1715 Spruce Street, is chairman, and Dr. George P. Mueller, 1729 Pine Street, is temporary secretary. Dr. J. M. Anders is chairman of the executive committee, on which are the following physicians: W. M. L. Coplin, F. X. Dercum, P. B. Hawke, Edward Martin, Charles K. Mills, George P. Muller, R. M.

Pearce, David Reisman, W. L. Rodman and George E. de Schweinitz. The subcommittee on roster includes Ward Brinton, R. Max Goepp, F. C. Hammond, John A. Kolmer, R. V. Patterson, C. M. Purnell, W. J. Taylor, T. H. Weisenburg, A. D. Whiting and Samuel Woody. A central bureau with a permanent secretary is to be established. The preliminary work to be done includes tabulating the lecture courses, laboratory hours, hospital and dispensary hours and getting the cooperation of all medical schools and hospitals in the city so their doors will be open to the post-graduate student.

At the annual meeting of the National Association of Audubon Societies held recently in the American Museum of Natural History there was an exhibition of motion pictures by Mr. Herbert K. Job, who was sent by the association on a tour of inspection of the bird reservations in Florida and Louisiana.

In a report of the clay-working industry of the United States in 1914 by Jefferson Middleton, issued by the United States Geological Survey, the value of the clay products of this country in 1914 are given as \$164,-986,983—brick and tile \$129,588,822 and pottery \$35,398,161. This was a considerable decrease compared with 1913, but as compared with the value for the last twenty years it shows a great growth in the industries. Compared with 1908 there was an increase of \$31,-789,221. In only four years—1909, 1910, 1912 and 1913—has the total value of clay products exceeded that of 1914. Considered by the average for five-year periods, which is perhaps the fairest comparison, as unusual conditions may occur in a single year, the average annual value of the clay products of the United States was: 1895–1899, \$72,233,056; 1900–1904, \$118,-135,826; 1905–1909, \$153,838,231, and 1910– 1914, \$170,287,909. It will be seen that the value of the clay products of the country has considerably more than doubled in the last twenty years. With the revival of business, which is clearly indicated, the great clayworking industries, with the inherent superiority of their products for many uses, are bound to come into their own, the halt of 1914 being but a temporary setback which will be more than overcome in the near future. Clay products are made in every state. Of the territories, Alaska and Hawaii reported none. The value of clay products ranged in 1914 from \$5,974 in Porto Rico to \$37,166,768 in Ohio. Ohio reported over one fifth of the value of clay products in 1914 and has been the leading state since figures on this subject were first compiled by the Geological Survey in 1894. It is likely to maintain this position, as its output has always greatly exceeded that of the second state, Pennsylvania, and in 1914 this excess was \$15,319,772, or over 70 per cent. Pennsylvania's output in 1914 was valued at \$21,846,996, or over one eighth of the total for the United States. New Jersey ranked third in 1914, with products valued at \$16,-484,652. Illinois was fourth, with products valued at \$13,318,953, and New York was fifth, with products valued at \$9,078,933. Indiana was sixth; Iowa was seventh, exchanging places with Missouri, which was eighth; West Virginia was ninth, exchanging places with California, which was tenth. The first ten states reported wares valued at \$128,253,688, or 72.74 per cent. of the total. The first five states reported wares valued at \$97,896,302, or nearly 60 per cent. of the total.

UNIVERSITY AND EDUCATIONAL NEWS

MR. James J. Hill has presented \$125,000 to Harvard University to be added to the principal of the professorship in the Harvard graduate school of business administration, which bears his name. The James J. Hill professorship of transportation was founded by a gift of \$125,000, announced last commencement day, the donors including John Pierpont Morgan, Thomas W. Lamont, Robert Bacon and Howard Elliott.

THE General Education Board announces that \$100,000 has been given to Carlton College, Northfield, Minn., toward a fund of \$400,000; \$50,000 to Hobart College, Geneva, N. Y., toward a fund of \$200,000; \$200,000 to Lafayette College, Easton, Pa., toward a fund of \$1,000,000, and \$25,000 to Kalamazoo Col-