These fellowships are to be located at various agricultural colleges in the eastern part of the United States for the purpose of investigating the use of gypsum in crop production and for making a fundamental study of the relation of sulphur to crop nutrition and growth.

The revival of interest in gypsum and other sulphur fertilizers has largely grown out of the remarkable results that agricultural scientists and farmers of Oregon and Washington are obtaining from the use of sulphur sources on alfalfa and clover, and other legumes. In many of the soils of these states a leguminous crop can not be successfully grown without an addition of a sulphur source, and such additions give increases in yield ranging from 25 to 500 per cent.

Two of these are to be used in continuing the fellowships that have already been in operation for considerably more than a year at the University of Chicago and at Iowa State College. The others will be strategically distributed at state agricultural colleges and experiment stations in central and eastern United States.

THE NATIONAL MUSEUM AND DR. JORDAN

ON the occasion of the seventieth birthday of David Starr Jordan, chancellor emeritus of Stanford University, which occurred on January 19, the following letter was addressed to him by Dr. Charles D. Walcott, secretary of the Smithsonian Institution:

On the occasion of your seventieth birthday, permit me, on behalf of the Smithsonian Institution and the National Museum, to offer my congratulations as well as thanks for your faithful cooperation during half a century.

For fully fifty years you have labored for the high ideals expressed by the founder of this institution in the words "increase and diffusion of knowledge among men," and for nearly the same period your work has been in close association with the institution and its staff.

Your work has also been intimately connected with the National Museum since its organization as such, and your scientific papers are among the most valued contributions to the museum's publications from its very first volume to the latest. Your early associations were with Baird, Gill, Brown, Goode and Tarleton Bean, and your name will go down in the museum's history linked with theirs. No wonder we have always regarded you as one of us, and we know that this sentiment is being reciprocated by you.

As a slight token of my appreciation of your services to science and to the museum, may I not ask you to accept the designation as honorary associate in zoology?

I trust that you may be spared for many more years to continue your work.

SCIENTIFIC NOTES AND NEWS

WILLIAM THOMPSON SEDGWICK, professor of biology in the Massachusetts Institute of Technology since 1883, died on January 25, aged sixty-five years.

At a meeting of the Société belge de Médecine of Brussels, Belgium, held on December 27, 1920, Dr. William H. Welch, director of the school of hygiene and public health of the Johns Hopkins University, and Dr. Simon Flexner, the director of the Rockefeller Institute for Medical Research, were made honorary members of that organization.

THE dinner and reception given by the medical profession of Philadelphia to Dr. William W. Keen, at the Bellevue Stratford Hotel, on January 20, in honor of his eighty-fourth birthday, was attended by 600 physicians and friends. Dr. George de Schweinitz was the toastmaster, and the speakers included Dr. William H. Welch, Baltimore; Dr. J. Chalmers DaCosta, Philadelphia, and Mr. David Jayne Hill. Major-General Merritte W. Ireland, surgeon-general, U. S. Army, presented a specially bound volume containing addresses and letters as a tribute to Dr. Keen, and Dr. William J. Taylor, of the College of Physicians, presented a life size bust of Dr. Keen in army uniform, by Samuel Murray. Dr. Keen in responding made an address that will be printed in SCIENCE.

A PORTRAIT of Dr. Samuel W. Lambert, dean emeritus of the college of physicians and surgeons, Columbia University, was presented to the college on January 28. The presentation THE John Fritz gold medal for notable scientific and industrial achievement has been awarded to Sir Robert Hadfield, inventor of manganese steel and leader of the British steel industry. The award of the medal has been authorized unanimously by the sixteen members of the committee representing the national organizations of civil, mechanical, mining, metallurgical and electrical engineers. The medal was established in 1902 in honor of John Fritz, iron-master of Bethlehem, Pa.

THE Honor Society of Agriculture, Gamma Sigma Delta, with chapters in the University of Minnesota, University of Nebraska, University of Missouri, Iowa State College, Oregon Agricultural College, Kansas State College, State College of Utah and Alabama Polytechnic Institute conferred honorary membership for distinguished services to agriculture on Dr. Eugene Davenport, of the University of Illinois; Dr. T. B. Osborn, of Yale University; Dr. H. P. Parmsby, of State College, Pennsylvania, and Dr. L. H. Bailey, of Ithaca, N. Y. The medal was conferred upon Dr Davenport.

THE twenty-fifth anniversary of the publication of the discovery of the roentgen ray by Professor Roentgen has been celebrated with tributes to Roentgen in Germany. He retired last spring from the chair of experimental physics at the University of Munich.

DR. E. O. TEALE has been appointed government geologist of Tanganyika Colony, formerly German East Africa.

PROFESSOR E. B. MATHEWS, of the Johns Hopkins University, has been appointed chairman of the advisory council of the United States Board of Surveys and Maps.

THE \$5,000 prize offered by Mr. Higgins through the *Scientific American* for the best popular essay on the Einstein theories was awarded to the essay submitted by Mr. L. Bolton, of London. It appears in the *Scientific American* for February 5, and will be followed in subsequent issues by a number of the other essays, some in full and others in part.

OFFICERS of the American Anthropological Association have been elected as follows: W. C. Farabee, of the University of Pennsyivania, president; A. V. Kidder, of Phillips Andover Academy, secretary; J. R. Swanton, of the Bureau of Ethnology, treasurer and editor.

THE Missouri Society for Mental Hygiene was organized in St. Louis on January 13, with the following officers: Dr. M. A. Bliss, *president;* Dr. J. F. McFadden, *secretary;* Dr. J. E. W. Wallin, *treasurer*.

. The American Journal of Psychology, established by Dr. G. Stanley Hall in 1887, and since edited by him, has been acquired by members of the department of psychology of Cornell University, and will hereafter be edited by Professor E. B. Titchener.

THE Rockefeller Foundation announces the election of Miss Norma Foster Stoughton, to become assistant secretary of the Rockefeller Foundation, and Miss Margery K. Eggleston, to become assistant secretary of the China Medical Board, a department of the foundation. Miss Stoughton entered the staff of the Rockefeller Foundation in 1916 and has made a special study of hospital administration and service. Miss Eggleston has been since 1914 with the General Education Board, the China Medical Board and the Rockefeller Foundation. In addition to her position with the China Medical Board she has just been appointed assistant secretary of the trustees of the Peking Union Medical College, an institution erected and maintained in Peking by funds of the Rockefeller Foundation.

DR. WILLIAM W. CORT, associate professor of helminthology in the school of hygiene and public health of Johns Hopkins University, has been appointed director of the expedition recently formed by the International Health Board of the Rockefeller Foundation, New York, to study the hookworm larvæ in Trinidad, West Indies. The expedition will leave for Trinidad about May 1 and will be gone four months. Dr. Cort will be assisted by Dr. J. E. Ackert, professor of parasitology of the Kansas State Agricultural College, and by Dr. D. L. Augustine, assistant in medical zoology at the Johns Hopkins University.

DR. LUDWIG SILBERSTEIN, of the research laboratory of the Eastman Kodak Company, delivered a series of fifteen lectures before the faculty and students of the University of Toronto on January 10–22. The first six lectures were devoted to explaining the general procedure of fixing events in space and time, and to developing the presence of special relativity with their consequences and applications to optics and to dynamics of a particle. The next six lectures were devoted to the conceptual as well as the mathematical aspects of general relativity and gravitation theory. The last three lectures were concerning the quantum theory of spectra.

At the meeting of the American Philosophical Society on Friday evening, February 4, Dr. John C. Merriam, president of the Carnegie Institution of Washington, read a paper entitled "Researches on the antiquity of man in California."

THE Aldred lecture was delivered at the Royal Society of Arts on January 12, by Dr. C. S. Myers, director of the psychological laboratory, and lecturer in experimental psychology, University of Cambridge. The subject was "Industrial Fatigue."

THE American Roentgen Ray Society will award \$1,000 to the American author of the best original research in the field of the roentgen ray, radium or radio-activity.

MARY WATSON WHITNEY, professor of astronomy emeritus and from 1889 to 1910 director of the observatory of Vassar College, died on January 20 aged seventy-three years.

DR. LINCOLN WARE RIDDLE, assistant professor of cryptogamic botany and associate curator of the Farlow Herbarium of Cryptogamic botany, died at his home in Cambridge on January 16 in the forty-first year of his age.

PRINCE PETER ALEXEIEVITCH KRAPOTKIN, distinguished as a geographer and for his books on science and natural history, has died at Moscow at the age of seventy-eight years.

M. PAINLEVÉ, professor of mathematics at Paris and former prime minister has returned from China to which he had been sent on a mission concerning Chinese universities and railways. He has obtained from the Chinese government the promise of an annual subvention of 100,000f. for an institute of Chinese higher studies in Paris. The Chinese government has also agreed to the creation, in one of the Chinese universities, of an affiliated branch of the University of Paris, and it will devote to this purpose the sum of 500,000f. annually, on condition that the French government gives the same amount. The Chinese president has further promised to have reproduced the collection of four great classics which contain the essence of Chinese civilization, and to present three copies to France. These volumes run to not less than 5,000,000 pages.

THE British Medical Journal states that the late Dr. A. J. Chalmers, the authority on tropical diseases, who died on his way home on leave in April last, left a valuable collection of medical books mainly on tropical diseases, and including some almost priceless incunabula. The whole of these, with the exception of about sixty volumes, presented to the Royal College of Physicians of London, have been given by Mrs. Chalmers to the Royal Society of Medicine, which has decided that the collection shall be kept together and be known as the "Chalmers Collection." Mrs. Chlamers has presented the society with the sum of £500 for the shelving and furnishing of a room in which the books will be kept as a memorial of her husband. It is hoped that the collection of books on tropical medicine will be added to from time to time, and the room chosen for the Chalmers Library is well adapted for the purpose. This coincides with the reconstruction of the new Section of Tropical Medicine and Parasitology. The section was formed in 1912, but was suspended during the war, and has only this session been formerly constituted. The new section will start with a library of its own-perhaps the finest collection of books on tropical medicine to be found anywhere.

THE third half-yearly report on the progress of civil aviation in England has been issued as a White Paper. According to the abstract in *Nature* it is pointed out that regular air services have now been established from London to Paris. Brussels and Amsterdam, and that passenger, mail and goods traffic is increasing. The total number of aeroplane miles flown in the half-year ending September 30, 1920, is nearly 700,000, whilst the aggregate since May, 1919, exceeds 1,000,000. The number of passengers by air exceeds 30,000, whilst the goods carried weigh little less than 90 tons. In value the imported goods exceed £500,000, whilst the exports and re-exports are about half that amount. As part of the mail services, about 50,000 letters have passed each way between London-Paris, Brussels and Amsterdam with a regularity which is notable. Of the three routes the best shows 94 per cent. of deliveries within three hours of schedule time, and the worst 76 per cent. As part of the organization for further improving these records, it is stated that the wireless direction-finding apparatus installed at Croydon has proved its value, enabling aircraft to correct their course in thick weather. The equipment of aircraft with apparatus for wireless telephony is extending, as it is found to be of considerable assistance to navigation. The fatal accidents are given as in the ratio of 1 per 50,000 miles flown or per 5,000 passengers carried. The international character of flying is brought out in a statement of activities in other countries.

UNIVERSITY AND EDUCATIONAL NEWS

Following the investigations made by Professor S. C. Prescott, instructor in industrial biology of the department of biology and public health of the Institute of Technology, who has just returned from Seattle, where he studied the work of the College of Fisheries of the University of Washington, it has been announced that the administrative committee of the institute is considering the inclusion of a course in the scientific problems of fish culture and problems of the fisheries. Establishment of a college of fisheries similar to that of the University of Washington has also been suggested to Harvard University, by leading men in the fishing industry at Boston.

HERETOFORE Brazil has had no regularly coordinated university though she has had individual faculties vested with the power to confer degrees. The faculties of law and medicine and the polytechnic institute of Rio de Janeiro have now been combined and will be known henceforth as the University of Rio de Janeiro.

DR. JOHN M. THOMAS, since 1908 president of Middlebury College, has accepted the presidency of the Pennsylvania State College.

DR. E. K. MARSHALL, professor of pharmacology in Washington University, has been elected professor of physiology in the Johns Hopkins Medical School, beginning in July. Dr. Marshall received his bachelor's degree from Charleston College, 1908, and the doctorate in philosophy and medicine from the Johns Hopkins University.

AT Yale University the following lecturers in special applications of organic chemistry in the industries have been appointed: Dr. Ralph H. McKee, professor of chemical engineering, Columbia University; Dr. Moses L. Crossley, research chemist, Calco Chemical Co.; Dr. P. A. Levene, biochemist, Rockefeller Institute for Medical Research; Dr. David Wesson, technical manager, The Southern Cotton Oil Co.; Dr. Harry N. Holmes, professor of chemistry, Oberlin College, and Dr. Elmer V. Mc-Collum, professor of chemistry, School of Hygiene, Johns Hopkins University.

DISCUSSION AND CORRESPONDENCE ASTRONOMICAL RESEARCH IN THE SOUTH-

EASTERN STATES

To THE EDITOR OF SCIENCE: IN SCIENCE, December 10, 1920, page 545, I commented upon the interesting fact that the observatory of the University of Virginia, named after the donor, Mr. McCormick of Chicago, is the only active observatory in our southeastern states. My further comment that Barnard and other astronomical enthusiasts, born and grown to manhood in the former slave-holding states, had found their opportunities in the great