Messages of tribute were read from Lord Balfour, President John Grier Hibben, of Princeton University; Dr. Julian Morgenstern, president of the Hebrew Union College, Cincinnati; Chancellor E. L. Lindley, of the University of Kansas; Chancellor E. A. Burnett, of the University of Nebraska; Judge Benjamin N. Cardozo, President David Kinley, of the University of Illinois; Professor A. A. Michelson; President James Rowland Angell, of Yale University; President C. C. Little, of the University of Michigan; President Wallace W. Atwood, of Clark University, and others.

It was announced at the celebration by Mr. Bernstein that the greetings received from the various men of science and other leaders of thought will be bound into a special album which will be presented to Professor Einstein.

Each of the Jewish signatories of the album contributed \$100 toward the acquisition of land in Palestine by the Jewish National Fund, a project in which Dr. Einstein is interested.

Mr. Hoover wrote:

Professor Einstein ranks high among the foremost scientists of all time, who have enriched mankind by their invaluable contributions to thought and human progress. Every important scientific achievement is a step forward in the direction of better universal understanding and good-will. It is very fitting that distinguished educators and other public-spirited Americans are paying this tribute to Professor Einstein.

Lord Balfour, formerly Prime Minister of England, sent the following cable message:

I congratulate the organizers of the Einstein celebration upon the honor they are conferring on a great investigator. He profoundly modified scientific conceptions of the material universe. His name will be remembered through the ages as among the greatest of those who have sought pure knowledge for its own sake and have found it.

THE AMERICAN PHILOSOPHICAL SOCIETY

At the annual meeting of the American Philosophical Society, held in Philadelphia from April 18 to 20 officers were elected as follows:

President

Francis X. Dercum, Philadelphia

Vice-presidents

William W. Campbell, University of California James H. Breasted, University of Chicago Elihu Thomson, General Electric Company

Secretaries

Arthur W. Goodspeed, University of Pennsylvania John A. Miller, Philadelphia

Curator

Albert P. Brubaker, Jefferson Medical College

Treasurer

Eli K. Price, Philadelphia

Councilors

(To serve for three years)

Charles B. Davenport, Carnegie Institution William H. Hobbs, University of Michigan Emory B. Johnson, University of Pennsylvania Harlow Shapley, Harvard College Observatory

Members

(Residents of the United States)

William F. Albright, Jerusalem, Palestine
Harley H. Bartlett, University of Michigan
George Henry Chase, Harvard University
James Pyle Wickersham Crawford, Philadelphia, Pa.
William Darrach, College of Physicians and Surgeons, Columbia University
C. J. Davisson, Bell Telephone Laboratories
Charles Hall Grandgent, Harvard University
John L. Haney, Central High School, Philadelphia
E. Newton Harvey, Princeton University
Edwin P. Hubble, Mount Wilson Observatory
William Jackson Humphreys, U. S. Weather Bureau
Solomon Lefschetz, Princeton University
James Howard McGregor, Columbia University

Michael I. Rostovtzeff, Yale University Frank W. Taussig, Harvard University Owen D. Young, New York, N. Y.

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SCIENTIFIC NOTES AND NEWS

THE gold medal of the Linnean Society of London has been awarded to Professor Hugo de Vries, of Lunteren, Holland.

IN connection with the meeting of the American Chemical Society at Columbus, Ohio, a dinner will be given on the evening of May 2 in appreciation of the work of Dr. William McPherson, professor of chemistry in the Ohio State University.

THE sixty-fifth birthday of Dr. Harvey Cushing, professor of surgery at the Harvard Medical School and surgeon-in-chief of the Peter Bent Brigham Hospital, Boston, was celebrated on April 8. For this occasion a birthday book was compiled by his students. It differs from previous "Festschrifts" in that only those who could legitimately call themselves pupils have been included. Eighty-two articles are contributed by them to the volume, which contains 1,110 pages, forming the April issue of the *Archives* SCIENCE

of Surgery, so that the papers will be recorded in current medical literature. On April 6 the book was presented to Dr. Cushing in the presence of his pupils and family in the laboratory of surgical research of the Harvard Medical School.

THE King of Italy has conferred the decoration of Officer of the Crown of Italy upon Dr. Raymond Pearl, director of the Institute for Biological Research of the Johns Hopkins University.

To commemorate the discovery by President Hoover of Pawhuska limestone, a monument of the limestone will be erected by the Geological Survey of Oklahoma and will be dedicated to him.

EX-PRESIDENT COOLIDGE has accepted an invitation to become a member of the board of trustees of the National Geographic Society.

AT a meeting of the Franklin Institute of Philadelphia, on April 17, the Board of City Trusts presented a John Scott medal and premium to Dr. Lee de Forest, a member of the institute, for his development of the audion. At the same meeting Dr. W. F. G. Swann, director of the Bartol Research Foundation of the institute, gave a report on the year's activities of the institute.

DR. WILLIAM H. ROBEY, clinical professor of medicine at the Harvard Medical School, has been elected a fellow from Massachusetts of the American College of Physicians.

In the presence of the king the University of Oslo commemorated on March 6 the one-hundredth anniversary of the death of the Norwegian mathematician Abel. Several foreign mathematicians were given honorary degrees, including Mr. Godfrey Harold Hardy, Savilian professor of geometry at the University of Oxford, and M. Paul Painlevé, member of the French government and professor of analytical mechanics at the University of Paris.

DR. W. V. BINGHAM, of the Personnel Research Federation, New York City, and Professor M. S. Viteles, of the University of Pennsylvania, have been elected honorary correspondents of the British National Institute of Industrial Psychology.

SIR ST. CLAIR THOMSON has been elected a foreign correspondent of the Paris Academy of Medicine.

PROFESSOR ARTHUR SMITHELLS has been elected president of the British Institute of Chemistry.

DR. EUGENE L. OPIE, director of the department of pathology of the University of Pennsylvania and of the laboratory of the Henry Phipps Institute, Philadelphia, has been elected a member of the board of scientific directors of the Rockefeller Institute for Medical Research.

WE learn from the Journal of the Washington Academy of Sciences that the emeritus professors of the George Washington University were entertained at a luncheon in their honor by President Clovd Heck Marvin on March 26 at the Cosmos Club. Included in the company were the following men of science: James Howard Gore, mathematician and astronomer: Harry Crècy Yarrow, formerly curator of the Division of Reptiles of the U.S. National Museum, for thirty years acting assistant surgeon of the U.S. Army; Daniel Kerfoot Shute, ex-president of the Medical Society of the District and of the Society of Ophthalmologists and Otologists of Washington; William Kennedy Butler, physician; Charles Edward Munroe, inventor of smokeless powder, chief explosives chemist of the U.S. Bureau of Mines: Charles Williamson Richardson, ex-president of the Medical Society of the District; George Perkins Merrill, curator of the department of geology of the U.S. National Museum, and Sterling Ruffin, physician.

THE Alice Freeman Palmer Memorial Fellowship of the American Association of University Women has been awarded to Emma Perry Carr, professor of chemistry at Mount Holyoke College. Professor Carr, with Dr. Victor Henri, will complete a monograph on absorption spectra. The Margaret E. Maltby Fellowship has been awarded to Dorothy Richardson, who is working in experimental embryology for the degree of doctor of philosophy at Yale University,

THE appointment of Mr. Charles J. Rhoads, of Philadelphia, as commissioner of the Indian Bureau, has been confirmed by the Senate.

JAMES O. CLARKE, of the U. S. Department of Agriculture, has been promoted to the position of chief of the central district of the Food, Drug and Insecticide Administration, with headquarters at Chicago, to fill the vacancy created by the resignation of E. H. Goodnow.

SAMUEL T. WOODRING, who has served as chief ranger of the Yellowstone National Park for more than seven years, has been appointed superintendent of the new Grand Teton National Park.

DR. D. SINITSEN, of the zoological division of the U. S. Department of Agriculture, will make his headquarters at the University of California branch of the College of Agriculture at Davis, where, in cooperation with Dr. Robert Jay, he is making an investigation on the liver fluke.

A. B. McMANUS, senior engineer (nautical) of the Hydrographic Office, has been appointed a delegate to the Fourth Pan-Pacific Science Congress to be held at Batavia, Java, in May. He will leave by way of San Francisco and return by way of Europe. At the congress Mr. McManus will represent the Hydrographic Office on the committee dealing with general oceanographical subjects, such as configuration of the ocean bottom, bathymetric charting, tides, currents, ocean temperatures, etc. Captain Richard A. Warner, Medical Corps, U. S. Navy, now on duty as a member of the U. S. Naval Mission to Brazil, has been designated as a delegate in the division of hygiene, microbiology and pathology, and also to the Second Pan-American Congress on Tuberculosis, which will be held at Rio de Janeiro on June 30.

DR. P. S. KUPALOV, of the Institute of Experimental Medicine, of Leningrad, a colleague of Professor Ivan P. Pavlov, will be associated with the department of physiology and biochemistry of the Ithaca division of the Cornell University Medical College during the months of July, August and September. He will cooperate in an investigation of conditioned reflexes, which has been financed by the Heckscher Research Foundation. He will also conduct a seminar on conditioned reflexes during the summer session. Dr. Kupalov holds a fellowship of the International Education Board and is at present working in the laboratory of Professor A. V. Hill.

DR. GUSTAV KAFKA, professor of psychology in the University of Dresden, has accepted an invitation to become visiting professor of psychology at the Johns Hopkins University for the winter semester of 1929– 1930.

Six foreign psychologists, Professors Robert H. Thouless, Wolfgang Köhler, James Drever, L. Wynn Jones, F. Roels and F. Aveling, will give a series of lectures in the Universities of Michigan, Wisconsin, Minnesota, Iowa, Missouri and Pittsburgh during the coming summer session. Each visitor will spend one week in each of the institutions, thus covering the circuit in six weeks. The lectures will center about the subject, "Points of View in Psychology." These men are coming to this country primarily for the purpose of attending the International Congress of Psychology in September.

LYNDON L. HARGRAVE, of the Museum of Northern Arizona, Flagstaff, and A. E. Douglass, director of the Steward Observatory of the University of Arizona, have returned from a field trip to the ruins of Coconino and Navajo Counties, where they selected sites for later exploration.

DR. HAROLD C. BINGHAM, of Yale University, will conduct this summer a joint expedition undertaken by Yale University and the Carnegie Institution of Washington, to study the mountain gorillas of the Albert National Park, recently set apart by the Belgian government as a wild life sanctuary.

PROFESSOR HUBERT LYMAN CLARK, of Harvard University, accompanied by Mrs. Clark, sailed from San Francisco on March 29, on his way to Australia via Japan and Java. He is a delegate from Harvard University and from the American Society of Naturalists to the Fourth Pan-Pacific Scientific Congress which meets at Batavia from May 16 to June 5. Immediately after the close of the congress he goes to Australia, where he will begin as a research associate of the Carnegie Institution of Washington an investigation into the echinoderm fauna. The Museum of Comparative Zoology at Harvard University and the Australian National Research Council are cooperating with the Carnegie Institution in the promotion of this research. Dr. Clark expects to return to Cambridge about February 1, 1930.

IN connection with the investigation of exotic plants in the United States, Professor John W. Harshberger, of the University of Pennsylvania, will visit Australia and New Zealand this summer.

E. P. KILLIP, associate curator in the U. S. National Herbarium, A. O. Smith and W. J. Dennis have left for northern Peru and the upper Amazon, where they expect to spend seven months in explorations.

DR. ZAPPI, of La Plata, and V. Morera, instructor in biological chemistry at Buenos Aires, are members of a group of professors and scientific men who plan to visit some of the technical and teaching centers and institutions of the United States.

DR. ROBERT A. MILLIKAN, of the California Institute of Technology, has accepted an invitation from Dr. Thomas S. Baker, president of the Carnegie Institute of Technology, to give the commencement address at the institute on June 11.

"THE Air and its Ways" and "Fogs and Clouds" were the subjects of Sigma Xi lectures given by Dr. W. J. Humphreys at the University of North Carolina on April 12 and 13.

PROFESSOR G. A. MILLER, of the University of Illinois, lectured recently on the history of mathematics at the University of Michigan, under the auspices of the Michigan section of the Mathematical Association of America.

Dr. E. J. KRAUS, of the department of botany of the University of Chicago, spoke before the Kansas State Agricultural College chapter of Gamma Sigma Delta, the honor society of agriculture, on April 5. His subject was "The Relation between Plant Physiology and Agriculture."

DR. H. M. JOHNSON, senior fellow of the Mellon Institute of Industrial Research and director of the APRIL 26, 1929]

Simmons Investigation of Sleep, lectured on March 27 at the University of Missouri, under the auspices of Alpha Pi Zeta, on "The Persistence of Sorcery in Modern Science" and on "The Measurement of Sleep."

DR. JOHN C. SLATER, assistant professor of physics at Harvard University, delivered a series of lectures in the department of physics of the University of Kentucky during the week of April 8 to 12, inclusive. The entire series of lectures was on the subject of "Wave Mechanics."

DR. PAUL R. HEYL, of the Bureau of Standards, Washington, delivered on April 6 an address before the Royal Canadian Institute, Toronto, on "Weighing the Earth."

DR. ARTHUR S. LOEVENHART, professor of pharmacology and toxicology at the University of Wisconsin, died on April 20, in his fiftieth year.

DR. THOMAS F. SCOTT, of Aberdeen, who was for many years connected with the Scottish Fishery Board and who is known for his investigations on marine crustacea, died on February 28 in his eighty-ninth year.

Nature announces the death of the Right Honorable Lord Avebury, on March 26, at the age of seventy years, and of Lord Montagu of Beaulieu, on March 30, at the age of sixty-two years. Lord Avebury was a trustee and also the honorary treasurer of the British Science Guild, and Lord Montagu was president of the guild in 1920-22.

THE death is also announced of the British surgeon Sir A. A. Bowlby, at the age of seventy-three years, and of Sir Henry Rew, the statistician and agricultural expert, at the age of seventy years.

THE Journal of the American Medical Association reports that a tricentennial service in honor of William Harvey was conducted in the Nakayama Culture Institute in Tokyo in December. Original copies of the "De motu cordis et sanguinis in animalibus," published at Frankfort-on-the-Main in 1628, and "Exercitationes de generatione animalium," 1651, were exhibited in the hall of the institute. The memorial lectures were "Recollections of Harvey," by Dr. H. Uagai, professor in the Tokyo Imperial University, and "The Works of Harvey," by Dr. Y. Teruoka, director of the Ohara Institute. Robert Koch's birthday was also celebrated by Baron Dr. Kitasato and his friends at the Jiji Hall, Tokyo. The memorial lectures were delivered by Dr. S. Uyematsu, professor in the Keio Medical College, on "Feelings and Effects Received from Koch" and by Dr. M. Miyajima on "The Friendship between Koch and Kitasato."

An International Meteorological Congress will meet at Havana in 1930. The chief subject to be discussed will be plans for defense against tropical hurricanes.

THE twenty-fourth annual meeting of the American Association of Museums will be held in Philadelphia on May 22, 23 and 24, at the same time and place as the meeting of the American Federation of Arts. Headquarters will be at the Bellevue-Stratford Hotel.

THE American Association for the Study of Allergy will hold its next annual meeting in Portland, Oregon, on Monday and Tuesday, July 8 and 9, at the time of the meeting of the American Medical Association. Further information may be obtained from the secretary, Warren T. Vaughan, Medical Arts Building, Richmond, Virginia.

THE twenty-first annual meeting of the Poultry Science Association will be held from August 20 to 23 at the Alabama Polytechnic Institute at Auburn. Professor J. E. Ivey, head of the poultry department, is chairman of the program committee.

THE fifth annual meeting of the Pennsylvania Academy with a full program was held at Pennsylvania State College during the Easter vacation. Officers for the coming year were elected as follows: *President*, Dr. Robert T. Hance, of the University of Pittsburgh; *Vice-president*, Dr. D. S. Hartline, Bloomsburg State College; *Secretary*, Dr. T. L. Guyton, Pennsylvania Department of Agriculture; *Treasurer*, Dr. H. W. Thurston, Pennsylvania State College; *Editor*, Dr. R. W. Stone, Pennsylvania State Geological Survey. Bloomsburg was chosen as the place for the next meeting.

THE spring meeting of the American Society of Mechanical Engineers will be held at Salt Lake City from July 1 to 4. A party leaves New York on June 17, stops in Chicago for a sightseeing tour and then proceeds to Colorado and the Rocky Mountain National Park. Three days are spent there and five at Grand Canyon, Zion National Park and Bryce Canyon, before going on to Salt Lake City. From there the group continues northward to West Yellowstone, Butte and Great Falls, Montana, where there will be an opportunity to visit the copper mines. The last of the parks to be visited is Glacier, in western Montana. It abuts the Canadian boundary, where Waterton Lakes Park joins the Glacier National Park.

SENATOR JAMES COUZENS, of Michigan, has created a trust fund of \$10,000,000 "to be used to promote the health, welfare, happiness and development of the children of Michigan, primarily—and elsewhere in the world." A clause in the trust instrument stipulates that the principal and income must be disbursed in its entirety inside of twenty-five years. The instrument also provides that should expenditures in any fiscal year fall below this amount the unexpended portion must be spent the succeeding year.

THE Rockefeller Foundation has offered, through Princess Helen, mother of King Michael, to establish a national hygienic institute in Bucharest to combat social diseases. The offer was made contingent upon the Roumanian government bearing half the expense.

SIGMA XI research grants made in varying sums from \$100 to \$1,000 are now available for 1929-30 for workers in all fields of science, pure and applied. Aid may be given in the form of a fellowship, to purchase apparatus, to help in publication or to pay assistants. There are no restrictions as to the university or the country in which the holder is permitted to work. Application blanks may be obtained from Dean Edward Ellery, national secretary of Sigma Xi, Union College, Schenectady, New York, and should be filed before May 10.

A NATIONAL aeronautic meeting to commemorate the second anniversary of Lindbergh's transatlantic flight will be held in St. Louis from May 27 to 30. The major part of the program is taken up with the third National Aeronautic Division of the American Society of Mechanical Engineers. The remainder of the program consists of an airplane show, May 30 being given over to the finals of the Gardner Cup Air Races. Citizens of St. Louis have financed the Gardner Cup Air Races; the airplane show which will be held without cost to exhibitors; the raising of a fund to make twelve recognition gifts to be presented at the meeting to those who are most deserving of reward for services rendered to aeronautics in the last two years, and the founding of an engraved gold medal to be called the "Spirit of St. Louis," with which medal the society in the future can reward "outstanding services in aeronautics." The meeting will have sixteen sessions, with forty-two papers, divided into general and technical sessions.

GIFTS of \$84,757.45 to Columbia University, chiefly for research at the Medical Center, are announced. The Rockefeller Foundation gave \$50,000 for research in medical mycology. The Chemical Foundation, Inc., made three contributions. One of \$10,000 represented the second payment on its five-year pledge of \$20,000 annually for research in the department of biological chemistry. Another of \$1,563.18 is to meet the cost of construction changes in that department. The third, of \$1,075, is the first quarterly payment on a pledge of \$11,900 to cover three years of research in bacteriology. From an anonymous donor came \$5,000 for the special tuberculosis fund of the department of the practice of medicine. The General Education Board contributed \$4,500 as the fourth quarterly share of its grant of \$18,000 for the department of tropical medicine. The International Committee for the Study of Infantile Paralysis added \$2,500 to the Bacteriology-Milbank Infantile Paralysis Fund.

ACCORDING to a statement made public by the U.S. Geological Survey, as a result of the season's work in Alaska about 700 square miles of hitherto unexplored territory was mapped geologically and topographically, and 350 square miles, previously mapped in an exploratory way, was remapped and corrected. This work gave a clue to the position and courses of the rivers that drain many thousands of square miles of one of America's great mountain ranges, and to routes of approach to other unexplored areas. The results of this exploration have been issued as a bulletin of the survey, by Stephen R. Capps, in which the geography and geology of the Skwentna River country are described. The report is accompanied by a map on a scale of about four miles to the inch, on which the drainage and the distribution of the rock formations are shown.

UNIVERSITY AND EDUCATIONAL NOTES

Two appropriation bills for maintenance and new buildings for the Pennsylvania State College were passed by the General Assembly in its closing sessions. They amount to \$6,311,000 and include \$2,-250,000 for buildings. The general college appropriation measure, in addition to the building item, would provide \$300,000 for agricultural research; \$650,000 for agricultural and home economics extension; \$711,000 for a deficit, and \$2,350,000 for general college maintenance. A separate bill would provide \$50,000 for oil research.

E. A. CUDAHY, of Chicago, has given \$300,000 to Loyola College for a library building on the campus facing Lake Michigan.

F. L. CARLISLE AND COMPANY, of New York, has made a gift of \$100,000 to St. Lawrence University, Canton, New York, payable at the rate of \$20,000 a year for five years to be used by the university to promote the teaching of forestry, although its use is not restricted to the formal teaching of that subject in the school.

THE botanical library of the late Frederick LeRoy Sargent, amounting to more than 1,500 volumes and pamphlets, has been given by Professor George Howard Parker to the Gray Herbarium of Harvard University.

DR. GEORGE A. WORKS, dean of the Graduate Library School of the University of Chicago, has been