

The testimonial:

THIS TESTIMONIAL
IS PRESENTED TO
DEXTER SIMPSON KIMBALL
DEAN OF THE
COLLEGE OF ENGINEERING
CORNELL UNIVERSITY
WHO ON MARCH 8TH, 1929,
DELIVERED THE FIFTH ANNUAL
STEINMETZ MEMORIAL LECTURE
ON
MODERN ENGINEERING ECONOMICS

THE PACIFIC DIVISION OF THE AMERICAN ASSOCIATION FOR THE ADVANCE- MENT OF SCIENCE

THE thirteenth annual meeting of the Pacific Division of the American Association for the Advancement of Science is to be held at the University of California on its Berkeley campus from June 19 to 22, according to the announcement of the executive committee. Seventeen of the thirty-one societies associated with the Pacific Division have arranged sectional programs, in addition to the general program of the association.

The Pacific Division prize, an award of \$100, is announced for an important scientific contribution reported at this meeting. This is the first time that this prize, announced at the Pomona College meeting last summer, will have been awarded.

Officers of the Pacific Division of the American Association for the Advancement of Science are: *President*, Walter S. Adams, Mount Wilson Observatory, Pasadena; *vice-president*, Ernest G. Martin, Stanford University; *secretary-treasurer*, Arthur G. Vestal, Stanford University; *executive committee*, S. J. Barnett, Roy E. Clausen, L. B. Loeb and J. H. Moore, University of California; J. O. Snyder, Stanford; O. F. Stafford, University of Oregon, and Bernard Benfield, consulting engineer, San Francisco.

The Southwestern Division of the American Association for the Advancement of Science will hold its session jointly with the Pacific session, this being the fourth meeting of this kind.

Professor T. D. Beekwith is chairman of the general committee on arrangements, appointed by President W. W. Campbell, of the University of California. Subcommittees on local affairs, reception and entertainment and excursions have been appointed.

SCIENTIFIC NOTES AND NEWS

THE presentation of the John Fritz medal recently awarded to President Hoover will be made officially at a dinner at the White House on April 15. The

medal represents the highest award of the four great national engineering societies in mining, mechanical, electrical and civil engineering. It was awarded to President Hoover not in recognition of any single achievement but on the basis of his entire record.

DR. ARISTIDES AGRAMONTE, of Havana, the only surviving member of the yellow fever commission to Cuba, is one of those on whom congress has conferred a gold medal, carrying the award of merit and an annual pension, "for past service far above and beyond the call of duty."

THE American Institute of Mechanical Engineers has joined with the American Society of Electrical Engineers in recommending to the Institution of Civil Engineers of Great Britain that the Kelvin medal be awarded to Professor Arthur E. Kennelly, of Harvard Engineering School, for his research in fields so widely explored by the late Lord Kelvin. The award, which is given every three years, was created in 1902 to commemorate Lord Kelvin's researches in ocean telegraphy and electrical measuring devices. The Institution of Civil Engineers of Great Britain accords the American engineering societies the privilege of nominating persons to receive the award.

MANCHESTER UNIVERSITY proposes to confer an honorary degree of doctor of science upon Sir Ronald Ross in recognition of his work in the prevention of malaria. It is proposed that the degree shall be conferred at the university's commemoration of Founder's Day on May 15, which is two days after his seventy-second birthday.

THE degree of doctor of science will be conferred by the University of Dublin in July on Dr. Francis William Aston, F.R.S., of Trinity College, Cambridge.

DR. ADOLF SCHMIDT, formerly director of the meteorological magnetic observatory at Potsdam, and Dr. Hans Spemann, professor of zoology in the University of Freiburg (im Breisgau), have been elected corresponding members of the Prussian Academy of Sciences, and Dr. Edwin Schroedinger, professor of theoretical physics, has been elected to membership.

DR. MAX VON LAUE, professor of theoretical physics in the University of Berlin, and Dr. Arnold Sommerfeld, professor of theoretical physics in the University of Munich, have been elected honorary members of the Leningrad Academy of Sciences.

SEVEN members of the new Italian Academy in the section of mathematics and physical sciences have been appointed by the king of Italy as follows: Professor Filippo Bottazzi, who for many years occupied

the chair of physiology at the University of Naples and was during the war a member of the Inter-Allied Food Commission; Professor Giotto Dainelli, professor of geology and physical geography at Florence; Professor Enrico Fermi, who four years ago, when only twenty-four years of age, was appointed to the chair of pure physics in the University of Rome; Professor Nicola Parravona, dean of the faculty of science and professor of chemistry; Professor Pietro Romualdo Pirotta, professor of plant physiology, and Professor Francesco Severi, professor of calculus, all of the University of Rome, and Professor Gian Carlo Vallaurio, president of the School of Naval Wireless Telegraphy.

A PRIZE of two hundred and fifty dollars offered by the Scientific Apparatus Makers of America for the best paper on instruments, other than optical instruments, to appear in the *Journal* of the Optical Society of America and Review of Scientific Instruments during 1928, has been awarded to Mr. N. E. Bonn, of the Leeds & Northrup Company of Philadelphia, for his paper on "An Improved Rosa Curve Tracer," which appeared in the September, 1928, issue. The committee of award consisted of Professor P. I. Wold, of Union College; Dr. Saul Dushman, of the General Electric Research Laboratory, and Professor L. W. McKeehan, of Yale University. A similar prize is offered for 1929.

MERRITT LYNDON FERNALD, Fisher professor of natural history (botany) at Harvard University, has been made a member of the Société Linnéenne de Lyon.

DR. OLIVER KAMM, of the research department of Parke, Davis and Company, has been elected president of the Michigan Academy of Sciences.

DR. LEONOR MICHAELIS, of the Medical School of the Johns Hopkins University, has been appointed to the staff, with the title of member, of the Rockefeller Institute for Medical Research, New York.

H. F. MURWIN, agent in charge of the work of the Bureau of Plant Industry of the U. S. Department of Agriculture on tobacco and plant nutrition in the Connecticut valley, has been appointed director of the Harrow Experiment Station at Harrow, Ontario, where he will take up his work about May 1.

JOHN B. REED, of the bureau of chemistry of the U. S. Department of Agriculture, has been appointed chemist to the District Health Department at a salary of \$4,600 a year by the District Commissioners to take the place of Dr. A. V. Fuller, who died recently.

DR. HERBERT F. BERGMAN, professor of botany at the University of Hawaii since 1919, has resigned to accept a position as senior pathologist with the Bureau of Plant Industry, beginning on June 1.

DR. W. H. PIERRE, formerly of the department of agronomy of the Alabama Experiment Station, has become associate agronomist at the West Virginia Agricultural Experiment Station. Dr. Pierre will devote practically all his time to research in soils.

R. L. ADAMS, professor of farm management and agricultural economist in the experiment station at the University of California, has been appointed to the board of directors of the Federal Land Bank at Berkeley.

RALPH NEUMULLER has resigned from the United Electric Light and Power Company, effective on April 1, to become director of the new Westinghouse Lighting Institute, to be located in the Grand Central Palace, New York City, which it is expected will be opened in the early summer.

RALPH P. PERKINS has resigned his fellowship at Northwestern University to accept a position as research chemist with the Dow Chemical Co., Midland, Michigan.

DR. GORDON F. HULL, professor of physics at Dartmouth College, who is on leave of absence for the year 1928-29, worked at the University of Cambridge till the middle of December and planned to spend the following six months at the Universities of Göttingen and Berlin.

HOWEL WILLIAMS, Commonwealth fellow from England who has been studying at the University of California for the past two years, has returned from a three months' trip to Tahiti and the Society Islands where he studied the extinct volcanoes of the district.

DR. LEE S. CRANDALL has returned to New York after an expedition to New Guinea made under the auspices of the New York Zoological Society for the collection of birds.

THE Medical Society of the District of Columbia invited Dr. William Allen White, superintendent of St. Elizabeth's Hospital, to give the annual lecture of the Kober Foundation, at Georgetown University on March 25. His subject was "The Social Significance of Mental Disease."

THE fifth Ludvig Hektoen lecture of the Billings Foundation of the Institute of Medicine of Chicago was given at the City Club on March 29 by Dr. Homer F. Swift, of the Rockefeller Institute for Medical Research, New York, on "Rheumatic Fever."

THE HONORABLE RAY LYMAN WILBUR, secretary of the interior and president of Stanford University (on leave), will be the speaker at the commencement exercises of Goucher College on June 3.

A JOINT meeting of the Sigma Xi Alumni Association of the University of Pittsburgh and the Physical Society of Pittsburgh was addressed by Dr. F. K. Richtmyer, of Cornell University, on March 14. The subject of the address was "Secondary Phenomena in X-ray Spectra."

HERBERT W. RAND, professor of zoology at Harvard University, lectured on March 15 at Iowa State College on "Evolution, Past and Future."

ON March 23 Dr. A. S. Eve, professor of physics in McGill University, delivered an address before the Royal Canadian Institute on "Physical methods used in the search for ore and oil."

AT a joint meeting of the American section of the Société de Chimie Industrielle, with the American Chemical Society (N. Y. section) the Society of Chemical Industry and the American Electrochemical Society, which was held in the Chemists' Club, on April 5, Dr. Felix d'Herelle, of the Pasteur Institute, now at Yale University, spoke on "Bacteriophage and Bacteriophagy"; and Dr. Camille Dreyfus, president of the Celanese Company of America, on "Celanese."

SPECIAL addresses at the sixty-first annual meeting of the Kansas Academy of Science, held at the Kansas State Agricultural College at Manhattan, will be given by Major Haig Shekerjian, of the Chemical Warfare Service, on "Chemical Warfare," at 7:30 P. M., April 25, and by Dr. Herbert M. Evans, of the University of California, on "Vitamin E" at a noon luncheon and on "The Function of the Anterior Hypophysis" at 3:30 P. M., April 26.

THE Board of Regents of the University of the Philippines has established a Baker memorial professorship in the College of Agriculture in memory of Charles Fuller Baker, who was dean of the college from 1917 until his death in July, 1927. It provides for the services of a man from abroad who shall be in residence in the college for at least eight months and who will teach five hours a week.

PROFESSOR ROBERT M. WENLEY, head of the department of philosophy at the University of Michigan since 1896, died on March 29 at the age of sixty-seven years.

Nature reports that Mrs. Arabella B. Fisher (née Buckley), secretary for eleven years to Sir Charles Lyell, the geologist, and author of several popular

works on general science, died on February 9, aged eighty-eight years.

COMMANDER GIOVANNI RONCAGLI, honorary secretary general to the Royal Geographical Society of Italy, died on February 1, aged seventy-two years.

THE United States Civil Service Commission states that the position of chief engineer of the metallurgical division, Bureau of Mines, is vacant and that in view of the importance of this position in the field of metallurgical research the method of competition will be as follows: Instead of the usual form of civil service examination, the qualifications of candidates will be passed upon by a special board of examiners, composed of Dr. A. C. Fieldner, chief engineer, Experiment Stations Division, Bureau of Mines; Dr. F. G. Cottrell, chief of the Fixed Nitrogen Research Laboratory, Department of Agriculture; Zay Jeffries, consultant, Aluminum Company of America and General Electric Company; Dr. John Johnston, director of the Department of Research and Technology, U. S. Steel Corporation, and Dr. A. S. Ernest, examiner of the United States Civil Service Commission, who will act as chairman of the committee. For the purposes of this examination, all of these men will be examiners of the Civil Service Commission. The entrance salary is \$5,600 a year. Formal applications will be received by the Civil Service Commission until May 8.

THE Research Committee of the National Geographic Society has made a grant of \$5,000 for the continuation of the study of old beams and timbers in the Indian pueblos of the southwest. This work has been in charge of Dr. Albert E. Douglass, of the University of Arizona.

THE non-magnetic yacht *Carnegie* reported her arrival at Papeete, Tahiti, March 13. Conditions throughout the passage from Callao, Peru, were excellent. On February 16 the soundings obtained showed depths from 2,700 meters to 5,400 meters and back to 4,100 meters over a distance of 50 miles; the ocean-deep thus revealed was named "Bauer Deep." Two uncharted submarine ridges were also discovered and rapid slopes off Tatakoto and Amanu Islands were determined. On March 8 five hours were spent ashore on Amanu Island. The bottom-sample obtained at 2,100 meters on March 10 (latitude 17°6' south, longitude 141°9' west) contained a few fragments of black lava with no trace of ooze, indicating recent volcanic origin. The work done on this passage included: 63 determinations of magnetic declination and 17 of magnetic intensity and inclination; 17 ocean-stations, at 15 of which bottom-samples were obtained; 206 soundings; 35 pilot-balloon flights, one of which was followed to a height of over 6 miles;

9 determinations of evaporation; 4 series of atmospheric-electric observations by eye-readings, each throughout 24 hours, and 23 complete 24-hour photographic electrograms of potential gradient. The vessel left Papeete on March 20 for Apia, Western Samoa, where she is due about the end of the month. She will also make a short stop at Pago Pago, American Samoa.

THE annual report of the council of the Institution of Chemical Engineers, London, shows an increase in both membership and income. According to a notice in the London *Times*, the council, it is stated, has continued to emphasize the need for more fundamental education in chemical engineering in universities and colleges, and welcomes the announcement of courses in chemical engineering, which have been arranged at King's College, London University. Gratification is also expressed that, as a result of the institution's efforts in this direction, classes are being organized by the London County Council at the Hackney Institute. The appointments bureau of the institution is reported to have had a particularly successful year. The growing demand for chemical engineers is evidenced, it is stated, by the difficulty of filling the large number of junior posts available. It has been decided to establish awards of medals in connection with the work of the institution. The first award of the Osborne Reynolds medal for the most meritorious contribution to the progress of the institution during the year has been made to Sir Alexander Gibb. Two awards of the Moulton medal to commemorate the name of the late Lord Moulton will be made for papers on chemical engineering subjects. The senior medal in gold will not be confined to members of the institution, but for the junior award only graduates and students of the institution will be eligible.

ACCORDING to the British *Geographical Journal*, the Tidal Institute at the University of Liverpool and the Liverpool Observatory, Bidston, were amalgamated to form the Liverpool Observatory and Tidal Institute. It is controlled by a joint committee of the Mersey Docks and Harbour Board and of Liverpool University. Professor J. Proudman is the director, with Dr. A. T. Doodson as assistant director. This amalgamation is planned to enable the work done by both institutions in the past to be greatly extended. All communications concerning meteorological and geophysical observations, analyses and predictions of tides, etc., should be addressed to The Director, The Observatory, Birkenhead.

THE Institute of Chemistry of Great Britain and Ireland has awarded the Meldola medal for 1928 to Dr. J. A. V. Butler and the Sir Edward Frankland medal and prize to Cyril Fryer.

THE former Secretary of Agriculture, William M. Jardine, in a report to the House, stated that it is feasible to adopt a ten-year cooperative program for the control of predatory animals within the United States. He recommended the adoption, whenever the financial policy of the government will permit, of a ten-year control plan, calling for annual appropriations of \$782,500 for control of stock-killing wild animals and \$596,200 for control of rodents, during the proposed ten-year period. This would mean annual appropriations of \$1,378,700 during the ten years. The annual toll taken by the stock-killing animals in the United States is estimated anywhere from \$20,000,000 to \$30,000,000, most of which is from depredations of coyotes. Some idea of the destructiveness of rodents may be gained from the fact that in Idaho, according to 4,037 signed statements by farmers, there would have been an annual loss of \$2,087,742 from ground squirrels in farm crops on 638,971 acres if nothing had been done toward control. Midland County, Texas, alone, it is stated, records a loss of \$95,000 this year from reduced cotton yield caused by rabbits. A conservative estimate of annual loss because of rat depredations in the United States would exceed \$200,000,000. Secretary Jardine said that the proposed annual appropriation of \$1,378,700 under the proposed ten-year period would be an increase of \$812,066 over funds now available.

UNIVERSITY AND EDUCATIONAL NOTES

LEGISLATIVE appropriations for the support of Kansas State Agricultural College for the two years beginning July 1, 1929, amount to \$2,607,000. The appropriations include \$40,000 for new equipment for scientific laboratories, \$10,000 for continuing the soil survey, \$10,000 for animal abortion investigations, \$12,000 for soil experimental fields, \$106,500 for branch experiment stations, \$10,000 for a study of shipping fever among live stock and \$6,000 for remodeling experimental greenhouses.

EDWARD S. HARKNESS has given \$1,000,000 to the Near East College Association. The gift is conditional on the completion of the fund of \$15,000,000 by July 1, and with other conditional gifts amounting to \$530,000 leaves \$2,500,000 to be raised.

THE school of nursing of Western Reserve University, Cleveland, has received the endowment made five years ago by Mrs. Chester C. Bolton, which now amounts to \$1,500,000.

DR. CHARLES SUMNER HOWE, president of the Case School of Applied Science since 1903 and previously