

3.—To found or provide scholarships for deserving boys and young men in this country, and for graduates or undergraduates of colleges, and to assist them in attending any educational institution in this country or abroad.

4.—To assist in or to found, equip and provide for the maintenance of institutions or associations for the advancement of learning in this country.

5.—To assist, build, equip and maintain gymnasias, clubs and recreation centers in this country for the training of boys and young men.

6.—To assist, and to receive, hold, administer and dispose of property to or for the benefit of any university, college, school or other institution for the advancement of learning or of any branch or department thereof, or for the benefit of any hospital or of any branch or department thereof.

Mr. Hayden placed no restrictions upon the use of the principal of his estate, but he did request that the greater part of the principle be so conserved that the benefits of the foundation might be extended to future generations.

"In the disposition of income and such principal as need be," he wrote, "preference shall be given to the furtherance of the foregoing objects within the City of New York and the City of Boston, but nothing contained herein shall be construed to prevent the aiding of such activities anywhere else in this country."

THE WASHINGTON AWARD

THE Washington Award Commission has voted to confer the 1937 award on Dr. Frederick Gardner Cottrell, of Washington, D. C., who was formerly director of the U. S. Bureau of Mines and director of the Fixed Nitrogen Laboratory of the U. S. Department of Agriculture. Dr. Cottrell is known for his work in helium production, in nitrogen fixation, for his processes of cleansing gases of dust and dirt by electrical precipitation and for research in petroleum technology. The award has been made for his "social vision in dedicating to the perpetuation of research the rewards of his achievements in science and engineering." He is the fourteenth American engineer to receive the award since it was founded in 1916 by John Watson Alvord, of Chicago.

The annual Washington Award, an honor conferred "on a brother engineer by his fellows for accomplishments which pre-eminently promote the happiness, comfort and well-being of humanity," is administered by the Western Society of Engineers in cooperation with the American Society of Civil Engineers, the American Institute of Mining and Metallurgical Engineers, the American Society of Mechanical Engineers and the American Institute of Electrical Engineers. The tangible symbol of the award is a bronze plaque mounted in marble. This will be presented

formally to Dr. Cottrell at a dinner on February 23.

Those who have received the Washington Award since its foundation are as follows:

1919—Herbert C. Hoover, "for his preeminent services in behalf of the public welfare."

1922—Robert W. Hunt, "for his pioneer work in the development of the steel industry and for a life devoted to the advancement of the engineering profession."

1923—Arthur N. Talbot, "for his life work as student and teacher, investigator and writer and for his enduring contribution to the science of engineering."

1925—Jonas Waldo Smith, "for the rare combination of vision, technical skill, administrative ability and courageous leadership in engineering."

1926—John Watson Alvord, "for his pioneer work in developing the fundamental principles of public utility valuation and his marked contributions to sanitary science."

1927—Orville Wright, "for fundamental scientific research and resultant successful airplane flight."

1928—Michael Idvorsky Pupin, "for devotion to scientific research leading to inventions which have materially aided the development of long-distance telephony and radio broadcasting."

1929—Bion Joseph Arnold, "for pioneering work in the engineering and economics of electrical transportation."

1930—Mortimer E. Cooley, "for vision and constructive leadership in the education of the engineer."

1931—Ralph Modjeska, "for his contribution to transportation through superior skill and courage in bridge design and construction."

1932—William David Coolidge, "for his scientific spirit and achievement in developing ductile tungsten and the modern x-ray tube."

1935—Ambrose Swasey, "for his distinguished contributions as a builder of instruments, institutions and men."

1936—Charles Franklin Kettering, "for his high achievements in guiding industrial research toward the greater comfort, happiness and safety of mankind in the home and on the highway."

THE AMERICAN SOCIETY OF CIVIL ENGINEERS

New officers of the American Society of Civil Engineers who take office at the eighty-fourth annual meeting of the society being held in New York from January 20 to 23 are as follows:

Louis C. Hill, consulting civil engineer, of Los Angeles, Calif., *president*, succeeding Dr. Daniel W. Mead, professor emeritus, hydraulic and sanitary engineering, University of Wisconsin; Commander Lyle F. Bellinger, U. S. Navy (retired), *vice-president*, succeeding Colonel D. H. Sawyer, Washington, D. C.; Roy C. Gowdy, Denver, *vice-president*, succeeding Professor Henry E. Riggs, University of Michigan. New directors are: Colonel William J. Shea and Enoch R. Needles, New York;

Arthur W. Dean, Boston, Mass.; Dean Roland P. Davis, College of Engineering, West Virginia University; T. Keith Legaré, Columbia, S. C., and Thomas E. Stanton, Jr., Sacramento, Calif.

Medals will be presented for distinguished work in the field of civil engineering as follows:

Dr. Arthur Newell Talbot, professor emeritus of engineering at the University of Illinois, the John Fritz Medal.

Dr. Daniel W. Mead, of Madison, Wis., the Norman Medal, for a report on the St. Lawrence water-power development.

Wilbur M. Wilson, research professor at the University

of Illinois, the J. James R. Croes Prize, for the second best report.

A. V. Karpov, of the Aluminum Company of America, Pittsburgh, and R. L. Templin, chief test engineer of the same company, the Thomas Fitch Rowland Prize, for a report on construction work.

Paul Baumann, chief engineer of the Los Angeles County Flood Control district, the James Laurie Prize, for a report on sheetpile bulkheads.

Clinton Morse, of Balboa Heights, Canal Zone, the Collingwood Prize, for a report on engineering work.

Honorary membership will be conferred on Alex Dow, of Detroit; G. H. Duggen, of Montreal; Robert Hoffmann, of Cleveland; J. B. Lippincott, of Los Angeles, and J. A. L. Waddell, of New York.

SCIENTIFIC NOTES AND NEWS

FOLLOWING the Harvard Tercenary the French Government conferred membership in the Legion of Honor with the rank of commander on President James Bryant Conant. Professor George D. Birkhoff, Professor Julian L. Coolidge, Professor James B. Munn and Jerome D. Green, director of the tercentenary, have been promoted from the rank of chevalier to that of officer of the legion. The rank of chevalier has been conferred on Professors Bliss Perry, Edward B. Hill, Edward W. Forbes, Roger Bigelow Merriman, Ralph Barton Perry, Edward A. Whitney, Kenneth J. Conant and George Harold Edgell.

DR. CUSTIS LEE HALL, assistant professor of orthopedic surgery in the George Washington University School of Medicine, Washington, D. C., was presented on January 4 with the first Citizens' Service Award for 1936. The cup, which will be awarded annually to the citizen who is considered to have rendered the most unselfish service to the whole community, is provided by the *Washington Times*; the recipient is selected by a representative citizens' committee. Dr. Hall was chosen for his work among crippled children and adults.

THE \$1,000 prize and bronze medal of Eli Lilly and Company was presented on December 29 at the Indianapolis meeting of the Society of American Bacteriologists to Dr. Harry Eagle, of the Johns Hopkins Hospital, for research on immunity to various diseases, notably syphilis. The prize is awarded by a committee of the Society of American Bacteriologists, the American Association of Immunologists and the American Society for Experimental Pathology.

DR. LEROY M. S. MINER, dean of the Harvard Dental School and president of the American Dental Association, received a medallion "in recognition of outstanding service of benefit to dentistry during the past year" at the annual convention of the dental

fraternity, Alpha Omega, held in Boston from December 29 to 31.

GEORGE DAVID OBERLE has been awarded the annual research prize of the Kansas State College Chapter of the Society of Sigma Xi for his work on "The Influence of Leaf to Fruit Ratios on the Photosynthetic Activity of York and Livland Apple Leaves." This prize is awarded annually by the society to a graduate student at Kansas State College who makes the most significant scientific contribution during the year.

THE Melchett Medal of the Institute of Fuel, London, has been awarded to Dr. Franz Fischer, director of the Kaiser Wilhelm Institute for Coal Research.

JAMES G. K. MCCLURE, JR., of Asheville, N. C., has been elected president of the American Forestry Association, succeeding Dr. Henry S. Graves, dean of the Yale Forest School and formerly chief of the Forest Service, who retired on December 31. At the same time the association announced the election of four new directors: Karl T. Frederick, of New York, president of the New York State Conservation Council, to serve for five years; Joseph H. Pratt, of Washington, D. C., formerly president of the Southern Forestry Congress, to serve for two years; Wilbur K. Thomas, of Philadelphia, executive secretary of the Carl Schurz Memorial Foundation, to serve for two years; and Wallace W. Atwood, president of Clark University and formerly president of the National Parks Association, to serve for one year. Dr. Graves was elected to serve as a director for a period of five years, and Dr. John C. Merriam, president of the Carnegie Institution of Washington, was reelected to serve for a five-year period.

DR. RAYMOND W. WAGGONER, associate professor of neurology at the University of Michigan Medical School, who was recently made director of the State Psychopathic Hospital, has been promoted to a pro-