development associations, the lumber and wood-using industries, nature, outdoor and recreation groups and women's clubs.

THE LASKER FOUNDATION FOR MEDICAL RESEARCH

AT the meeting of the board of trustees of the University of Chicago held January 12, a communication from Mr. and Mrs. Albert D. Lasker was presented, in which are set forth the particulars by which is created the Lasker Foundation for Medical Research. The fund thus contributed to the university adds another large endowment for research in medicine, an endowment which provides the means for investigation of notable significance.

Added to the resources of the Douglas Smith foundation, of the Mr. and Mrs. Frank G. Logan fellowships, of the Seymour Coman fellowships (all of which funds are designed to encourage research in various branches of medical science and in the prevention, cause and cure of disease), the new foundation greatly increases facilities and opportunities for medical research.

The Lasker Foundation (established by Albert D. and Flora W. Lasker) consists of $1,000,000, "the net income of which shall be used for the promotion of medical education and research at the University of Chicago." Already a liberal portion of the founding fund has been transferred to the university and the remainder will be paid with interest during the next three years. The offer to pay interest during the period of deferred payment enables the university to begin at once with the full amount of income from the fund the beneficent inquiries and to seek the hoped-for results which are contemplated by the creators of the foundation.

The donors' letter says in part:

> We express the desire that the income from this fund be used in the first place to support research into the causes, nature, prevention and cure of degenerative diseases. In the event, however, that in the opinion of the advisory board—which we shall subsequently mention—and the board of trustees of the university, the income of this fund can be used most effectively for medical education and research in other and further directions, the university shall be authorized to make such changes in the use and purposes of the income derived from said foundation. The general direction of the income shall be determined by an advisory committee, to be appointed by the trustees of the university. It is understood as part of this offer and agreement, and any agreement based thereon, that the publication of researches conducted wholly or partially through the support of this foundation shall, if possible, in the title recite the fact that said research has been supported by the Lasker foundation for medical research.

STANDARD MATHEMATICAL SYMBOLS

APPROVAL of mathematical symbols as American standards has completed the first step in a program of unification of the scientific and engineering symbols and abbreviations used in engineering and industry, under the auspices of the American Engineering Standards Committee. The confusion resulting from variations in symbols used in different publications, reports and tables, led to the initiation of a project of unification by the standards committee early in 1923. The work has been progressing since that time, with 14 national organizations participating.

The approved mathematical symbols include those for arithmetic and algebra, elementary geometry, analytic geometry, trigonometric and hyperbolic functions, calculus, special functions and vector analysis. The effort was made to select from symbols already in use those which are most clearly understood and least likely to lead to confusion with other symbols.

Professor E. V. Huntington, of Harvard University, representing the American Mathematical Society, was chairman of the mathematical symbols subcommittee. This subcommittee is part of the sectional committee on scientific and engineering symbols and abbreviations, of which Dr. J. Franklin Meyer, of the U. S. Bureau of Standards, is chairman. The sectional committee includes other subcommittees on symbols for hydraulics, symbols for heat and thermodynamics, symbols for aeronautics, navigation and topographical symbols, electrotechnical symbols (including radio), symbols for photometry and illumination and symbols for mechanics, structural engineering and testing materials.

THE WEEK ON AGRICULTURE AT THE INSTITUTE OF CHEMISTRY

THE week of July 23, 1928, at the American Chemical Society Institute in Evanston will be devoted to a discussion of the ways chemistry can help agriculture by developing markets for its products other than for food and clothing. To date the twelve speakers listed below have accepted the invitation of the society to take part in the institute sessions during the week of July 23.

W. E. EMLEY: Bureau of Standards, Washington, D. C. He has charge of the work supported by the Department of Commerce on the industrial utilization of farm wastes. He has made a careful and extensive survey of this entire field as to the past and the future.

G. J. ESSELEN, JR.: Skinner, Sherman and Esselen, Boston, Mass. An expert on cellulose. He will discuss cellulose in modern industry and the influence of cellulose on civilization.

H. T. HERRICKS: Color and Farm Waste Division, Department of Agriculture, Washington, D. C. He will dis-

cuss the processes by which moulds are being used to convert corn sugar into valuable materials such as citric acid. It will perhaps soon be possible to go from corn to glucose and then to citric acid more readily than to go from cull lemons to citric acid according to present practice.

H. G. KNIGHT: The new chief of the Bureau of Chemistry and Soils of the Department of Agriculture, Washington. He will take a leading part throughout the week. He will pay special attention to future possible developments of agricultural chemistry along new lines.

C. S. MINER: Miner Laboratories, Chicago. Under his direction furfural has been changed from a chemical curiosity found only in museums to an important industrial chemical sold in tank cars for a few cents a pound. Its largest use is in artificial resins. He will tell how this development took place, but more especially how other similar advances may be made.

A. S. RICHARDSON: Procter and Gamble, Ivorydale, Ohio. His subject will be hydrogenation, the process by which an oil like cotton seed oil is made to unite with hydrogen gas to form a solid fat suitable for cooking.

G. A. RICHTER: Brown Company, Berlin, N. H. On the preparation of pure cellulose from wood. This material can be used in place of cotton cellulose for almost all purposes.

G. M. ROMMEL: New York. An expert agricultural economist, retained by the Department of Agriculture for special studies on farm wastes with special reference to the preparation of cellulose from them.

H. J. SCONCE: Cornstalks Products Co., 42 Broadway, New York, and Danville. The preparation of useful products from farm wastes.

O. R. SWEENEY: Iowa State College. An authority on the preparation of hundreds of useful products from corn stalks and cobs. He is also working with the Department of Commerce on this problem.

A. W. SCHORGER: Burgess Laboratories, Madison, Wis. A leading authority on the chemistry and utilization of cellulose.

R. W. THATCHER: President, Massachusetts Agricultural College. Formerly dean of department of agriculture, University of Minnesota; formerly director of New York Experiment Station. He will present the broader aspects of the subject with special reference to future possibilities.

CHARLES D. HURD,
Executive Secretary.

AWARD OF THE WILLARD GIBBS MEDAL TO PROFESSOR W. D. HARKINS

PROFESSOR WILLIAM D. HARKINS, of the University of Chicago, received on May 25 the Willard Gibbs gold medal, awarded annually by the Chicago section of the American Chemical Society to a chemist whose work in either pure or applied chemistry has received international recognition. The ceremony took place at a national dinner gathering of scientists at the Palmer House.

Professor Harkins delivered an address on "Surface Structure and Atom Building." Professor S. C. Lind, director of the school of chemistry of the University of Minnesota, made the presentation address, discussing "Harkins the Scientist." Professor G. L. Clark, of the University of Illinois, a former student of Professor Harkins, spoke on "Harkins the Teacher and the Man." S. L. Redman, chairman of the Chicago section, discussed "The Willard Gibbs Medal."

Other speakers were: Professor Arthur H. Compton, of the University of Chicago; Dr. Leo Hendrik Baekeland, honorary professor of chemical engineering in Columbia University and former president of the American Chemical Society, New York; Dr. Harrison E. Howe, of the National Research Council, editor of *Industrial and Engineering Chemistry,* Washington; President Max Mason, president of the University of Chicago, and Professor S. W. Parr, of the University of Illinois, president of the American Chemical Society.

Previous Willard Gibbs medallists have been: Svante Arrhenius, T. W. Richards, L. H. Baekeland, Ira Remsen, Arthur A. Noyes, Willis R. Whitney, E. W. Morley, W. A. Noyes, W. M. Burton, F. G. Cottrell, Madame Curie, J. Stieglitz, G. N. Lewis, M. Gomberg, Sir James Irvine and J. J. Abel.

The 1928 jury which made the award was composed of: Dr. A. D. Little, Boston; Professor F. C. Whitmore, director of the institute of chemistry of the American Chemical Society; Professor J. F. Norris, Massachusetts Institute of Technology; L. M. Tolman, Hammond, Ind.; E. W. Washburn, U. S. Bureau of Standards, Washington; Professor Edward Bartow, University of Iowa; W. Lee Lewis, Chicago; Professor William McPherson, Ohio State University; Professor Julius Stieglitz, University of Chicago; Professor Roger Adams and Professor S. W. Parr, University of Illinois, and Professor Moses Gomberg, University of Michigan.

SCIENTIFIC NOTES AND NEWS

AT a dinner on May 23 the Holley medal of the American Society of Mechanical Engineers was presented to Dr. Elmer A. Sperry for his invention of the gyroscope compass.

ORVILLE WRIGHT, pioneer aviator, would be awarded the distinguished flying cross, the highest award for American aeronautical achievement, under a bill introduced in congress by Representative James, of Michigan.

FOR outstanding service to his profession, Dr. Charles H. LaWall, dean of the Philadelphia College of Pharmacy and Science, was awarded the Rem-