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-