

Insurance as a Social Science and as a Mathematical Problem"; the third in Kansas City by James Pierpont on the topic, "Some Modern Views of Space"; the fourth in Philadelphia by H. B. Williams on "Mathematics and the Biological Sciences"; the fifth in Nashville by E. W. Brown on "Resonance in the Solar System"; the sixth in New York City by G. H. Hardy on "An Introduction to the Theory of Numbers"; the seventh in Des Moines by Irving Fisher on "The Application of Mathematics to the Social Sciences"; the eighth, entitled "Reminiscences of Gibbs by a Student and Colleague," by E. B. Wilson in Cleveland; the ninth by P. W. Bridgman in New Orleans on "Statistical Mechanics and the Second Law of Thermodynamics"; the tenth in Atlantic City by R. C. Tolman on "Thermodynamics and Relativity," and the eleventh, entitled "An Elementary Proof of the Theorem Concerning the Equivalence of Mass and Energy," was delivered by Albert Einstein in Pittsburgh. The twelfth lecture was given in St. Louis in December, 1935, by Vannevar Bush on the subject "Mechanical Analysis."

It is the custom of the society to invite the lecturer to print in the *Bulletin* of the American Mathematical Society if he so wishes. Pupin printed elsewhere, a large part of what he had to say appearing in *Scribner's Magazine*; the others have printed in the *Bulletin* and occasionally in addition elsewhere. For example, Professor Tolman's address was printed simultaneously in *SCIENCE*. The number of people who attend the lectures varies greatly and depends on the nature of the lecture and on the place where it is given. It is not intended that the lectures be popular in the ordinary sense of the term, but that the educated public, including scientists in other fields, should gain from them further insight into the rôle of mathematics.

MEDAL AWARDS OF THE SOCIETY OF CHEMICAL INDUSTRY

THE American section of the Society of Chemical Industry has announced the award of the Chemical Industry Medal for 1936 to Dr. Walter S. Landis, vice-

president of the American Cyanamid Company, New York, "for valuable application of research to the chemistry and economics of the fertilizer industries," and of the William H. Perkin Medal for 1937 to Thomas Midgley, Jr., vice-president of the Ethyl Gasoline Corporation, New York, and of Kinetic Chemicals, Inc., Detroit, "for distinguished work in applied chemistry, including the development of anti-knock motor fuels and safe refrigerants."

Dr. Landis was a pioneer in the application of chemistry to the production of concentrated fertilizers, and has played an important rôle in that industry for thirty years. He was probably the first to produce argon in large commercial quantities.

Mr. Midgley's work resulted in the creation of the entire Ethyl gasoline industry with all that this implies—use of higher compression engines, greater flexibility of automobile operation and other advances. Tetraethyl lead in motor fuels adds forty times as much horsepower annually as that which will be supplied by Boulder Dam. Mr. Midgley's more recent discovery of non-toxic refrigerants promises to be equally fundamental in refrigeration and air conditioning.

Dr. Landis will receive the Chemical Industry Medal, founded in 1920 as an "annual tribute to distinction in applied chemistry," formerly called the Grasselli Medal, at a joint meeting of the Society of Chemical Industry and the American Chemical Society on November 6 at the Chemists' Club, New York. He will speak on "Concentrated Fertilizer."

Mr. Midgley will be presented with the Perkin Medal on January 8, 1937. The Perkin Medal was founded in 1906 in commemoration of the fiftieth anniversary of the coal tar color industry, the first medal being awarded to Sir William H. Perkin, discoverer of aniline dyes. The medalist is chosen by a committee representing the American Section of the Society of Chemical Industry, the American Chemical Society, the Electrochemical Society, the American Institute of Chemical Engineers and the Société de Chimie Industrielle.

SCIENTIFIC NOTES AND NEWS

At a meeting of the General Committee of the British Association on September 11, Sir Edward Poulton, from 1893 to 1933 Hope professor of zoology at the University of Oxford, was elected president for the year 1937. The meeting will be held at Nottingham from September 1 to 8. The present general officers were reappointed and five vacancies on the council were filled by the appointment of Dr. F. W. Aston, Professor Debenham, Professor T. G. Hill, Campbell

Smith and J. S. Wilson. The meeting at Cambridge in 1938 will be held from August 17 to 24. The question of a meeting in Australia is under consideration.

DR. CHARLES GORDON HEYD, professor of surgery at Columbia University and consulting surgeon of the Woman's Hospital of New York City, vice-president of the American Medical Association, has been elected president of the association. He succeeds the late Dr.