DR. WILLIAM GARNETT, secretary and educational adviser to the London Technical Education Board, 1893–1904, educational adviser to the London County Council, 1904–15, previously principal and professor of mathematics of the Durham College of Science, died on November 1, aged eighty-one years.

Nature reports the death of Thomas Gray, professor of technical chemistry at the Royal Technical College, Glasgow, an authority on fuels, on September 26, aged sixty-three years, and of Sir Bernard Mallet, registrar-general from 1909 until 1920, and president since 1929 of the Eugenics Society and a past president of the Royal Statistical Society, on October 28, aged seventy-three years.

SALOMON REINACH, director of the National Museum of Antiquities at St. Germain-en-Laye, France, died on November 4, at the age of seventy-four years.

MEMORIALS

THE Minnesota State Historical Society has placed a bronze tablet on the home, at Le Sueur, Minnesota, of Dr. William W. Mayo, who was born in England in 1819. The tablet was unveiled on November 23. It is inscribed: "In this house from 1858 to 1863 lived Dr. William W. Mayo, father of Dr. William J. Mayo and Dr. Charles H. Mayo and the physician who cared for the defenders of New Ulm after the Indian massacre of 1862." Governor Floyd B. Olson, officials of the historical and medical societies and the two sons of Dr. Mayo took part in the commemoration.

A RED oak sapling was planted on November 10 in memory of Dr. George F. Kunz, civic leader and gem expert, on the Central Park West lawn of the American Museum of Natural History. The ceremony took place under the auspices of the New York Bird and Tree Club, of which he was honorary president. The speakers included Dr. Roy Waldo Miner, curator; Dr. C. Stuart Gager, director of the Brooklyn Botanic Garden, and Dr. Elmer D. Merrill, director of the New York Botanical Garden.

The Wistar Institute News reports that the "Life and Letters of Professor Joseph Leidy," who was fifth professor of anatomy at the University of Pennsylvania and who died in 1891, is to be completed at the institute during the coming winter. The death of Dr. Joseph Leidy, II, nephew of Joseph Leidy, early in the summer of 1932, left unfinished the book upon which he had been working for many years. Dr. Leidy, II, left to Dr. Charles S. Dolley, formerly professor in the University of Pennsylvania, now a resident of Nassau, N. P., the materials for completing this work. Mrs. Joseph Leidy, II, is now transferring to The Wistar Institute all the manuscripts, letters of many distinguished naturalists of Professor Leidy's time and many other documents, drawings, etc. The book will be published by The Wistar Institute Press.

AT University College, London, the Bayliss-Starling Memorial Scholarship (in physiology or biochemistry) has been founded by old students, friends and admirers, in commemoration of Professor Sir William Maddock Bayliss and Professor Ernest Henry Starling. The annual value of the scholarship is about £120, with exemption from tuition fees; it is tenable at University College, London.

A MONUMENT was unveiled in Brussels to Ernest Solvay, the eminent chemist, philanthropist and publicist, on October 16, in the presence of the King of the Belgians and the Duke of Brabant. Solvay was born at Rebecq in Brabant on April 16, 1838, and died in Brussels on May 26, 1922. The foundation of his success in chemical industry was his discovery of the ammonia-soda process.

SCIENTIFIC EVENTS

THE ANNUAL SESSION OF GERMAN SCIENTIFIC MEN AND PHYSICIANS

THE Berlin correspondent of the *Journal* of the American Medical Association writes that the annual session of the Gesellschaft Deutscher Naturforscher und Aerzte was held this year in Wiesbaden and Mainz, with an attendance of 2,600. The insignia showed a bust of Goethe, with the question asked by Faust: "Wo fass' ich dich, unendliche Natur?" The addresses of welcome were characterized by a warm patriotic tone, expressed satisfaction at the liberation of the Rhine countries, and contained many references to the great sacrifices that the population of this region had been obliged to make.

Professor Aschoff, the chairman, called attention to the reorganization of the society, which has brought about a simplification of the program. He emphasized the need of these conventions, which now, owing to the changed conditions resulting from the creation of numerous societies of specialists, had assumed a new task; namely, that of supplying a comprehensive survey of the whole field. All attempts to separate the physicians from other scientific men were unavailing.

The medical section convened on the afternoon of the first day. The address of Professor Müssemeier, of Berlin, on anthrax, was presented in honor of the memory of Robert Koch. Dr. Müssemeier discussed new important measures for the prevention of the

transmission of anthrax to Germany. Professor Hörlein, of Elberfeld, spoke on the need of close cooperation between medicine and chemistry to-day, for at present the action of autogenous substances has become an important field of research, in which the medical man can not dispense with the chemist nor the chemist with the medical man. The great success in the fields of vitamins, hormones, liver therapy and also chemotherapy is due to this cooperation in research activities. The meteorologist Geiger, of Munich, spoke on the idea of a "microclimate"; that is to say, the climatologic relationships within a small space; for example, on the ground within a wooded tract or at the edge of a forest, or in the living rooms of a dwelling.

On the second day, at a combined assembly, the results of research on pneumococci and pneumococcus diseases were discussed by Gundel, of Heidelberg; Lauche, of Bonn, and St. Engel, of Dortmund. In the afternoon, Boas, of Berlin, and von Redwitz, of Bonn, discussed the treatment of gastric and duodenal ulcers. Then the Zurich physiologist Hess presented his views on sleep and hypnotics.

The German Chemical Society held in Mainz a joint session with a number of sections of the association, which was devoted to the consideration of hormones. B. Zondek, of Berlin, and A. Butenandt, of Göttingen, who have played an important part in establishing the basis of our knowledge of the sex hormones, gave a survey of our previous knowledge and the results of recent research.

The third day was devoted to the second combined session in Wiesbaden. Freundlich, astronomer of Potsdam, spoke with reference to the structure of the universe. Lange, of Breslau, then discussed the close relations between the development of twins and the development of personality.

As the third speaker, Litt, professor of pedagogy and philosophy in Leipzig, dealt with "Education in Relation to the Natural Sciences." The Zurich psychiatrist, Bleuler, spoke on memory as the fundamental basis of life and the psyche. The clinicians Thannhauser, of Freiburg, and G. von Bergmann, of Berlin, presented papers on the chemical performance of the normal liver in relation to the processes of intermediate metabolism, and on the functional pathology of liver diseases. On the fourth day was a discussion on the blood reservoirs as presented by the physiologist Rein, of Göttingen, and the clinicians Eppinger, of Cologne, and Nissen, of Berlin.

In view of the depression, the usual banquet, together with other social functions, was dispensed with. The city of Wiesbaden, however, gave a symphony concert. The next meeting will be held in Hanover, in 1934, under the chairmanship of the chemist Professor Bosch.

SYMPOSIUM AT LENINGRAD ON THE STRUCTURE OF SOLID BODIES

AN important symposium on the elementary structure of solid bodies (chiefly non-metallic), at which many distinguished foreign savants participated, was held in Leningrad, from September 13 to 18, at the Physicotechnical Institute. In an introductory paper, A. F. Joffe (Leningrad) discussed the permanent distortion of crystals and pointed out that structurally perfect crystals offer least resistance to distortion. W. L. Bragg (Manchester) described the results of x-ray analyses of substances of more complicated structure, such as silicates. V. Heitler (Göttingen-Moscow) dealt with a semi-classical theory of the homopolar valence forces. Mrs. M. Classen (Leningrad) described the measurement of the limit of elasticity in perfect crystals and indicated that non-metallic crystals show annealing effects similar to those of metals. J. Frenkel (Leningrad) analyzed the concepts "solid" and "liquid," pointing out that many properties which used to be considered characteristic of solids are shared to some extent by liquids and *vice versa*. Liquids, for instance, have a measurable rigidity under high frequency (mechanical) oscillations. B. K. Fredericks (Leningrad) discussed the "swarm-theory" of liquid crystals. J. D. Bernal (Cambridge) considered the rational classification of crystals according to the nature of the weakest bonds and the rotation of molecules or radicals present. J. Errera (Brussels) spoke on the dielectric polarization of solids, distinguishing between ionic polarization due to high frequency in substances far from their melting point (NaCl), and dipole polarization due to low frequencies in substances near their melting point (H_2O). A. V. Kurtchatov (Leningrad) dealt with the dielectric properties of Rochelle salt and explained the occurrence of the upper Curie point by the Lorentz interaction of rotating dipoles. The nature of the lower Curie point remains obscure, some ascribing it to the "freezing" of the dipoles and others to a depolarizing action determined by the symmetry of the crystal. N. Achulov (Moscow) considered magnetostriction and explained the abnormal character of the mechanical properties of ferromagnetic bodies in terms of electronic orientations under the influence of mechanical stresses. He gave further a new method for calculating the magnetic susceptibility in crystals. P. L. Kapitza (Cambridge) spoke on magnetostriction in non-ferromagnetic bodies (bismuth and others). R. Fowler (Cambridge) presented a report on Wilson's theory of semi-conductors which attributes their electrical properties to the ther-