Dr. P. W. Zimmerman, of the Boyce Thompson Institute. On April 17 Professor Leon Asher, of Berne, Switzerland, lectured on "Integration by Internal Secretions"; on April 30 Professor C. H. Best, of the University of Toronto, lectured on "Insulin," and on May 6 Dr. W. O. Nelson, of Yale University, lectured on the "Male Sex Hormones." It is planned to continue the series next autumn with lectures by outstanding authorities on other hormones. The series will eventually be published and distributed at cost by the chapter.

## THE AWARD OF THE WILLARD GIBBS MEDAL TO ROGER ADAMS

DR. ROGER ADAMS, head of the department of chemistry of the University of Illinois and past president of the American Chemical Society, was presented with the Willard Gibbs Medal for 1936 of the Chicago Section at a dinner on May 22 at the Stevens Hotel, Chicago, in celebration of the twenty-fifth anniversary of the founding of the award by William A. Converse.

President Arthur Cutts Willard, of the University of Illinois, spoke on "The Medalist." Professor Edward Bartow, of the State University of Iowa, president of the American Chemical Society, made the presentation, and Thomas Midgley, Jr., vice-president of the Ethyl Gasoline Corporation, delivered the epilogue. Professor Adams discussed "Organic Chemistry." The history of the Willard Gibbs medal was outlined by Dr. Arthur Guillaudeu, chairman of the Chicago Section. Professor Adams won the medal, one of the highest scientific honors bestowed in the United States, "for outstanding and fundamental contributions to synthetic organic chemistry and for conspicuous achievements as a teacher of chemistry." An account of his work appears in the issue of SCIENCE for January 10. The following statement in regard to his life has been sent us by a correspondent:

Professor Adams was born in Boston on January 2, 1889. He attended the Cambridge, Mass., public schools and entered Harvard College at sixteen, receiving the bachelor of arts degree in 1909 and the master of arts a year later. He took the doctor's degree at Harvard in 1912, having been in charge of all laboratory work in chemistry at Radcliffe College during the first two years of his graduate work. Recipient of a traveling fellowship, he studied under Diels in the University of Berlin and under Willstätter at the Kaiser Wilhelm Institute in Dahlem. He also traveled in Denmark, Sweden, Finland, Russia, Switzerland and England.

From 1913 to 1916 he was instructor in organic chemistry at Harvard University and Radcliffe College. He went to Illinois as assistant professor in 1916, and has been consulting chemist of the Abbott Laboratories, North Chicago, since 1917.

During the war he served as major in charge of an Offense Chemical Research Division in Washington, D. C., where he worked with poison gases. Returning to Illinois as full professor in 1919, he became head of the department of chemistry in 1926.

Professor Adams was a member of the National Research Council Chemical Committee from 1923 to 1928 and a member of its Fellowship Board during the last eight years. He was appointed by President Roosevelt to represent chemistry on the Science Advisory Board and also on the new Government Relations Committee of the National Academy. He holds the honorary degree of doctor of science from the Polytechnic Institute of Brooklyn, and the William H. Nichols Medal of the New York Section of the American Chemical Society. He is a member of many scientific organizations.

## AWARD OF THE NATIONAL INSTITUTE OF IMMIGRANT WELFARE TO DR. CARREL

THE first annual National Institute of Immigrant Welfare awards of merit, given to "distinguished citizens of foreign birth who have made significant contributions to American life," were presented on May 13 to Dr. Alexis Carrel, Jonas Lie and Walter Damrosch at a dinner of the institute at Hotel Biltmore. Dr. Harry Woodburn Chase, chancellor of New York University and chairman of the committee on awards, presented to each of the winners a hand-lettered scroll bearing the title "An American Roll of Honor."

Eighteen different countries of origin were represented in the panel of thirty names from which the final selections were made. Dr. Carrel, who was born in France, came to the United States in 1905; Mr. Lie, a Norwegian, came in 1893, and Dr. Damrosch, who was born in Germany, near the Polish border, came in 1871.

In the absence of Dr. Carrel, Dr. Simon Flexner received the award and made the following remarks:

We can all imagine Dr. Carrel's great disappointment in being prevented by illness from accepting in person the distinguished honor you have conferred on him. In his absence, it may be a slight compensation to be told briefly of his eminent scientific career. Dr. Carrel came to America fully thirty years ago, and soon after graduation in medicine at the University of Lyons. He is a splendid example of the French educational system working through a gifted mind. Dr. Carrel's writing even in a foreign tongue such as English is strong, clear and concise, and the scientific problems he selected for experimental study were equally sharply conceived. Dr. Carrel must, as a medical student, have been impressed with the backward state of the surgery of the blood vessels and the serious consequences of this glaring defect. Before his discoveries, to incise or otherwise severely injure a blood vessel was to destroy it: it had either to be ligatured or tied, or allowed to fill with clot to prevent hemorrhage, and was lost.

By means of a technique original, ingenious and precise, Dr. Carrel learned how to suture and save blood vessels, and in consequence for the first time organs *en masse* could be removed from one part of the body and transplanted to another part without loss of function and efficiency. A whole new chapter of physiology or physiological surgery was suddenly opened up for exploration. Among the early rewards was a successful method of blood transfusion, since much simplified, which is daily employed as a life-saving device throughout the world. The recent perfection of the Lindbergh pump, in which organs can be cultivated and observed outside the body for long periods, is a mere, although difficult, extension of the earlier discoveries which in 1912 brought Dr. Carrel the Nobel prize.

Another result of the studies on transplanted organs is the cultivation of cells and tissues of warm-blooded animals in glass. Every one has heard or read of the bit of chicken heart, the artificial cultivation of which was begun more than twenty years ago. Now cells and tissues of the most diverse sort are grown outside the body indefinitely, and their properties can be studied in new ways utterly impossible by the older methods. Thus another chapter in cellular physiology and pathology, thanks to Dr. Carrel, is being written. And as an important side issue the viruses, the causes of many severe diseases in animals and plants, can be made to grow outside the body. These viruses are too small to be seen under the microscope and differ from bacteria in not increasing or growing on dead substances. They can now be studied by implanting them on living, growing tissues in glass.

In conclusion, it may be said that Dr. Carrel has enriched surgery, physiology and pathology through his scientific discoveries and is to be regarded as a benefactor of mankind.

# SCIENTIFIC NOTES AND NEWS

DR. ALBERT F. BLAKESLEE, director of the department of genetics of the Carnegie Institution of Washington at Cold Spring Harbor, L. I., has been elected a foreign member of the Royal Danish Academy of Science.

THE following have been elected correspondents of the Academy of Natural Sciences of Philadelphia: Ernst V. Antevs, John H. Barnhart, Thomas Barbour, Calvin B. Bridges, Andrew E. Douglass, Richard Goldschmidt, Shinkishi Hatai, J. Hutchinson, Paul Marchal, Mary J. Rathbun, R. B. Seymour Sewell, Hans Spemann, Erik H. O. Sensiö, Erwin Stresemann, Francis B. Sumner and Thomas H. Withers.

M. JEAN BOSLER, professor of astronomy and director of the observatory at Marseilles, has been elected a correspondent of the Paris Academy of Sciences in the section of astronomy, to succeed the late Professor Willem de Sitter.

DR. THEODOR HESSELBERG, director of the Norwegian Meteorological Institute at Oslo, has been elected a corresponding member of the Prussian Academy of Sciences.

THE Elisha Kent Kane Gold Medal of the Geographical Society of Philadelphia was presented to Lincoln Ellsworth at the annual dinner of the society on May 15. Francis Fisher Kane, a nephew of Elisha Kent Kane, made the presentation.

*Nature* reports that the council of the Royal Society of Edinburgh has awarded the Keith Prize for the period 1933–35 to Professor Lancelot T. Hogben, for his papers on genetical subjects published during the period of the award; and the Neill Prize to Dr. Samuel Williams, University of Glasgow, for his contributions to the anatomy and experimental morphology of the Pteridophyta.

THE honorary degree of doctor of science will be conferred upon Dr. Lawrason Brown, consulting physician of the Trudeau Sanatorium, Saranac Lake, N. Y., at the commencement exercises of the Medical College of the University of Virginia.

THE American Psychiatric Association, meeting at St. Louis on May 6, chose Dr. Ross McC. Chapman, of Towson, Md., as president-elect to take office in 1937. He succeeds Dr. C. Macfie Campbell, of Boston, who took office as president. The retiring president was Dr. Clarence O. Cheney, of New York. Dr. Siegmund Freud, of Vienna, was elected to honorary membership.

DR. DUNCAN A. MACINNES, since 1926 associate member of the Rockefeller Institute for Medical Research, was elected president of the Electrochemical Society at the recent Cincinnati meeting. He succeeds James H. Critchett, of the Union Carbide and Carbon Research Laboratories, New York City.

DR. R. R. KRACKE, of Emory University, Georgia, was elected president of the American Society of Clinical Pathologists at the recent Kansas City meeting.

DR. H. A. CARR, professor of psychology at the University of Chicago, was elected president of the Midwestern Psychological Association at the annual meeting, which was held at Northwestern University on April 24 and 25. Professor J. P. Guilford, of the University of Nebraska, was elected a member of the executive council.

PROFESSOR HARRY P. BURDEN, of the department of civil engineering at Tufts College, has been appointed