

in recent years, this expansion has not covered, nor can it hope to cover adequately the fields of fundamental research which have derived support largely from other sources.

Dr. Jewett, in his announcement, pointed out that the National Academy of Sciences has a Congressional charter and thereby bears important public responsibilities. He said that as the welfare of science and the welfare of the nation are more and more intimately associated, the academy because of its prominent position in American science must assume leadership in preserving and advancing science in the Western Hemisphere. To this end, Dr. Jewett expressed the hope that the fund would establish a noteworthy reputation and in the future would attract gifts, both large and small, from people in all walks of life who wished to make public benefactions.

**PRESENTATION OF THE HENRY DRAPER
MEDAL OF THE NATIONAL ACADEMY
OF SCIENCES TO DR. ROBERT
WILLIAMS WOOD**

THE Henry Draper Medal of the National Academy of Sciences was presented to Dr. Robert Williams Wood, research professor of experimental physics at the Johns Hopkins University, at the annual dinner of the academy on April 29, "in recognition of his contributions to astronomical physics."

A brief citation of the reasons for the award was given by Dr. Otto Struve, a member of the committee of the Henry Draper Fund, which made the recommendation, and the presentation was made by the president of the academy, Dr. Frank B. Jewett. Dr. Wood presented a paper before the academy entitled "Diffraction Gratings and Replicas for Astrophysical Research," an abstract of which appears in this issue of SCIENCE. The citation given by Dr. Struve follows:

By unanimous vote of the committee on the Henry Draper Fund of the National Academy of Sciences has recommended the award of the Draper Medal for distinguished contributions to physical astronomy to Dr. Robert Williams Wood, professor emeritus of experimental physics at the Johns Hopkins University. Professor Wood's contributions in the field of physics have been so many and varied, and so fruitful in their applications that no word at this time could add to the wealth of recognition which they have received.

In the field of astrophysics three important researches, among many others, stand out especially. The first is Wood's pioneer work on resonance radiation and its applications to solar and stellar spectroscopy. A second is his development and skilful use of absorption screens of many types for astronomical and spectroscopic photography. Finally, and perhaps more important of all for the future of astrophysics,

are the remarkable advances he has made in the construction of diffraction gratings. Where the use of the grating to produce a spectrum has been limited almost wholly to the sun and to bright sources in the physical laboratory, Wood through selection and shaping of the point of his ruling diamond has succeeded in throwing as much as one half of the incident light into a chosen order of the spectrum. In addition he was the first to achieve excellent results in ruling gratings on films of aluminum evaporated on glass. As a result a modern Wood grating with high concentration of light is one of the most effective instruments of research in stellar spectroscopy. It has made possible the analysis of the spectra of the brighter stars on a large scale, has opened up the almost unexplored ultra-violet region of stellar spectra, and has already led to discoveries of interest regarding the constitution of the gases in interstellar space.

The capacity to develop valuable new methods and new instruments, the widening application of which no one can adequately foresee, is given to but relatively few men. Our medallist of to-day is certainly to be numbered within this chosen group.

**ELECTIONS OF THE NATIONAL ACADEMY
OF SCIENCES**

ELECTIONS at the spring meeting of the National Academy of Sciences held in Washington on April 30 are:

Vice-president (for a term of four years): Dr. Isaiah Bowman, president of the Johns Hopkins University, to succeed Dr. Arthur L. Day, whose term expires on June 30.

Members of the Council (for a term of three years): Dr. S. A. Mitchell, Leander McCormick Observatory, University, Virginia, to succeed himself; Dr. E. B. Fred, University of Wisconsin, to succeed Dr. E. D. Merrill.

New Foreign Associates: Dr. Edgar Douglas Adrian, professor of physiology, University of Cambridge, and fellow of Trinity College; Dr. Archibald Vivian Hill, honorary professor of physiology at University College, London, and Foulerton research professor and secretary of the Royal Society, London; Sir Arthur Keith, Buckston Browne Farm, Downe, England.

New Members: Werner Emmanuel Bachmann, professor of organic chemistry, University of Michigan; René Jules Dubos, associate member of the Rockefeller Institute for Medical Research, New York City; Evarts Ambrose Graham, professor of surgery, Washington University, and chief surgeon, Barnes and St. Louis Children's Hospital; Arthur Scott King, superintendent of the physical laboratory, Mount Wilson Observatory; Charles Christian Lauritsen, professor of physics, California Institute of Technology, Pasadena; Alfred Lee Loomis, director, the Loomis Laboratories, Tuxedo Park, New York; J. Robert Oppenheimer, professor of physics, University of California, and California Institute of Technology; John Thomas Patterson, professor of zoology, University of Texas; Karl Sax, professor of botany, Harvard Univer-