measuring instrument of precision. These features have been adopted in the design of practically all later spectrographs used in stellar radial velocity determinations.

Assigned to the duty of initiating the work of the Chile station of the Lick Observatory, he went to Santiago early in the year 1903 and within six months of the day of landing at Valparaiso, selected and secured the site for the observatory, erected the dome and telescope and began the actual work of securing spectrograms of the southern stars. He conducted the work of this station for nearly three years with distinguished success.

Returning to Mount Hamilton in 1906, he devoted the years to 1924 chiefly to spectrographic studies of the nebulae and of the novae. The former led, among other results, to the accurate measurement of the wave-lengths of the nebular lines, including some not previously reported; to the detection of the presence in the gaseous nebulae of the continuous emission of hydrogen, beginning abruptly at the end of the Balmer series, and extending into the ultra-violet; to the recognition of the remarkable variety of forms corresponding to the different nebular lines in the planetary nebulae; to the discovery that the nuclei of the planetary nebulae give a continuous spectrum strong in ultra-violet light, indicating that they are at a very high temperature, and to the conclusion that the nuclei of such nebulae are to be classed with the O-type stars. Some of these results were important factors in Bowen's recent brilliant work on the nature of nebulium.

Wright's studies of the novae can not be summarized briefly; it must suffice to say that they are more comprehensive and penetrating than those of any other investigator, covering in several cases the entire range of the spectrum and the entire known history of the star.

Since 1924 Mr. Wright has devoted his time largely to the photographic study of planetary detail, as revealed by plates sensitive to light of different colors, from the ultra-violet to the infra-red. This work is unquestionably the most significant and promising advance that has been made in the study of the planets in recent years, and has already resulted in important contributions to our knowledge of conditions on Mars and Jupiter.

Any one of these researches would in itself entitle Mr. Wright to recognition as one of the leading students of astrophysics; taken together they fully justify the award now made to him.

No grants of Draper funds in support of research in the field of astronomical physics have been made in the current year. The unexpended balance from the income of the Draper Foundation, available for this purpose, is $508.63.

Respectfully submitted,

W. W. CAMPBELL, *Chairman*

APRIL 3, 1928

APPOINTMENTS OF THE CARNEGIE INSTITUTION OF WASHINGTON

RECENT appointments of the Carnegie Institution of Washington include the following:

Dr. R. J. Havighurst, assistant professor of chemistry, Miami University, Oxford, Ohio, fellow of the Carnegie Institution of Washington in the history of science for the year beginning September 1, 1928, to enable Dr. Havighurst to undertake special studies in cooperation with Dr. George Sarton, associate in the history of science.

Dr. Wm. A. Heidel, Wesleyan University, research associate of the Carnegie Institution of Washington, for the period from July 1, 1928, to December 31, 1931, for the purpose of enabling Dr. Heidel to continue his studies on a comprehensive and critical history of early Greek thought, with special reference to its philosophical and scientific aspects.

Dr. Hubert L. Clark, Museum of Comparative Zoology of Harvard University, research associate of the Carnegie Institution of Washington, for the purpose of undertaking further studies of the echinoderm fauna of North Australia with a view particularly to interpretation of continental connections.

Dr. Henry E. Crampton, Columbia University, continuation of appointment as research associate of the Carnegie Institution of Washington, for the purpose of undertaking further studies of organic differentiation in nature as illustrated by land snails belonging to the genus Partula. Field studies will be undertaken especially in the Caroline and Pelew Islands, and it is hoped that further evidence may be obtained which may bear directly upon the problem of a pre-Pacific continent. Funds were provided for this study by Carnegie Corporation of New York.

Dr. Harald U. Sverdrup, Geophysical Institute, Bergen, Norway, research associate of the Carnegie Institution of Washington, for cooperation with the department of terrestrial magnetism of the institution in connection with development of a program for oceanographic studies during the forthcoming cruise of the non-magnetic yacht *Carnegie*.

SCIENTIFIC NOTES AND NEWS

DR. EDGAR F. SMITH, emeritus professor of chemistry at the University of Pennsylvania and formerly provost of the university, died on May 3 in the seventy-fourth year of his age.

PROFESSOR EDMUND BEECHER WILSON, of the department of zoology at Columbia University, has been awarded the gold medal of the Linnean Society of London. The presentation will be made in London on May 24 at the anniversary meeting of the society.

DR. LIBERTY H. BAILEY and Dr. W. R. Whitney were presented with the gold medals of the National Institute of Social Sciences on May 3. Dr. John Merle Coulter, adviser of the Boyce Thompson Institute for Plant Research, presented the medal to Dr. Bailey, who formerly was director of the State College of Agriculture at Cornell University. It was bestowed in recognition of "distinguished social service in the