ROBERT SIMPSON WOODWARD

BIOGRAPHICAL material in regard to the career of R. S. Woodward is being compiled, and the undersigned would be grateful for any data which the readers of SCIENCE can furnish.

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QUOTATIONS

TWO ASTRONOMICAL AUTHORITIES ON THE WANING OF PURE SCIENCE RESEARCH IN THE UNITED STATES[1]

Two of the world's recognized astronomical authorities, Henry S. Pritchett, of New York, and George E. Hale, of Pasadena, California, view as dangerous the limited opportunities for pure science research in the United States.

Fearing that fundamental scientific investigation in this country is waning, these two notables are participating in a national project to promote and encourage research in the field of natural science. Associated with them are representatives of other important scientific fields, financiers, diplomats, lawyers and philanthropists. This group of twenty-six men were appointed by the National Academy of Sciences to raise a fund of $20,000,000 for research in pure science. Herbert Hoover is chairman of the undertaking and is devoting much personal attention to the successful realization of the project.

In his strictly academic days as a college professor and as president of the Carnegie Foundation for the Advancement of Teaching, President Pritchett has had ample opportunity to observe the crying need for funds to aid pure science investigators; to supply them with teaching assistance, with laboratory equipment and other necessities to carry on their work.

"It is a fact," President Pritchett says, "that the number of men who are competent to conduct scientific research of the highest order is limited. In order that research may be fruitful the problem which is being attacked must be significant and the man who engages in it must be a man of real ability. The presence in scientific research of men of the first order is indispensable to genuine progress. Whenever such men shall cease to appear amongst them who are devoted to research, the movement will lose its force."

Few men are more ably qualified to express an opinion on the value of pure science investigation and its need of financial support than Professor Hale, who during his seventeen years as director of the Mt. Wilson Observatory of the Carnegie Institute [*sic*] and as its organizer, has had ample opportunity to observe the disastrous drawback to progress, which frequently result [*sic*] from lack of funds to complete an investigation.

Professor Hale's own contributions to fundamental science, described in many of his important works, such as "The Study of Stellar Evolution," "Ten Years Work of a Mountain Observatory" and "The New Heavens," are among the most notable of the present day. The National Research Endowment is fortunate in being able to include among their board of trustees such particularly well-qualified authorities in the scientific world as Professors Pritchett and Hale.

The plan of administration will be to determine who among the ablest and most productive investigators, engaged in effective research in pure science, are in need of assistance. They will be asked to present their plans of research to the trustees of the fund, stating their exact needs, such as more time for research; the aid of scientific assistants; computers or technicians as well as the special instruments or accessories which may be needed. Appropriations will be made to them for a fixed period of years, subject to renewal if circumstances warrant it.

[1] Sent for publication in SCIENCE from the National Academy of Sciences, B and 21st Streets, Washington, D. C.

SCIENTIFIC BOOKS

The Biology of the Protozoa. By GARY N. CALKINS. Lea and Febiger, Philadelphia and New York, 1926, 623 pp. $7.50.

A NOTABLE work, "founded on thirty years of research on the Protozoa and on an equal number of years of teaching Protozoology" and worthy of such a foundation; a work of great value to students of Protozoa and to every one interested in the general problems of biology. Outstanding is the successful attempt to bring unity into the usually disconnected treatment of this heterogeneous group, through centering the whole about the general concepts of organization and vitality—particularly the latter. A book results that is consecutively readable, as well as valuable for reference.

There are detailed chapters, with illustrations (many original) on structural features and nuclei; on general physiology and reproductive processes; on the special morphology and taxonomy of the main groups of Protozoa. In these latter chapters are keys to genera, for the Mastigophora, Rhizopoda and Infusoria. The treatment is up to date and is throughout informed by the results of the author's own investigations.