

Density of Vegetation. The vegetation, when depleted to a stand of less than 30 per cent., was largely ineffective in the prevention or control of erosion. A 40 per cent. cover sufficed to prevent gully erosion under normal conditions of grazing use in the Boise Region.

Rodents. Rodents were an important factor in contributing to erosion.

Accessibility to Live Stock. Erosion varied directly with the degree to which the vegetation cover was depleted and the surface conditions disturbed by live-stock grazing. This appeared to be far more important than any of the other factors studied.

The results point to the necessity of immediately restoring the plant cover to a density of at least 30 per cent., and initiating improvements in range and live-stock management which will relieve conditions on areas particularly susceptible to erosion. They also indicate the type of more intensive studies needed. Such studies are already under way. A more com-

plete discussion of these results and their significance will be presented later.

FRED G. RENNER

INTERMOUNTAIN FOREST AND
RANGE EXPERIMENT STATION
OGDEN, UTAH

LETTERS OF DR. WILLIAM H. WELCH

AT the request of the trustees of the Johns Hopkins University and Hospital and of the immediate family of Dr. William H. Welch, I have undertaken the preparation of a biography of Dr. Welch. The work on the book is progressing, and I should be very grateful for letters written by him, which can be sent me either in original form or in copy. If the originals are sent they will be copied and then returned promptly by registered mail.

SIMON FLEXNER

THE ROCKEFELLER INSTITUTE
FOR MEDICAL RESEARCH,
NEW YORK

SOCIETIES AND MEETINGS

THE SEVENTEENTH ANNUAL MEETING OF THE AMERICAN GEOPHYSICAL UNION

THE seventeenth annual general assembly of the American Geophysical Union and the meetings of its seven sections were held on April 30 and May 1 and 2, 1936, at Washington, D. C., in the building of the National Academy of Sciences and the National Research Council.

The scientific session of the general assembly was devoted to a symposium on recent trends in geophysical research and included the following papers: "The Place of Geodesy in Geophysical Research," by William Bowie; "Recent Developments in the Geophysical Study of Oceanic Basins," by R. M. Field; "Trends in Seismological Research," by James B. Macelwane; "Recent Progress in the Physical Interpretation of Synoptic Weather-charts," by E. W. Wollard.

Reports were received from four special committees as follows: (1) On geophysical and geological study of oceanic basins; (2) on geophysical and geological study of continents; (3) on establishment of an American journal of geophysics; and (4) on consideration of desirability and feasibility of inviting the International Union of Geodesy and Geophysics to hold its seventh triennial general assembly in 1939 at Washington, D. C. Reports (1) and (2) will be published in the usual annual volume of *Transactions* of the Union. The executive committee was empowered to further consider reports (3) and (4) and to take action as circumstances may warrant.

An interesting feature of the assembly was the

exhibits prepared by the special committee on the geophysical and geological study of continents. The central item was a relief model, constructed to scale, which showed the approximate configuration of the "basement complex" rocks underlying that portion of the United States extending from the Atlantic seaboard to and just beyond the Rocky Mountain Front Ranges. With the irregular blanket of sedimentary rocks removed from the "basement" surface the model made clear the nature, form and interrelation of both the buried and emergent mountain ranges of this region. The relations of the ranges to the profound troughs which flank them and to the more remote dome-shaped uplifts and basin-like depressions were also thus disclosed.

In order to show how "basement structure," as portrayed by the model and by its parent structure contour-map, also finds significant expression and reflection in the areal distribution of surface-sediments, in local variations in the force of gravity, in local variation in magnetic intensities and in regional variations in earth temperature conditions, maps and diagrams were also exhibited in proximity to the structural model as follows: (1) The United States Geological Survey's areal geologic map of the United States; (2) contour-map showing configuration of Pre-Cambrian surface for portion of United States east of Nevada (prepared by R. G. Moss, formerly Eleanor Tatum Long fellow of Cornell University, and now with the Phillips Petroleum Company, and exhibited by courtesy of Mr. Moss and the Geological Society of America); (3) contour-map showing configuration