Westminster College in 1918 and his M.A. degree from Colorado College in 1919. He received his Ph.D. from the University of Chicago in 1926, after having done part of his graduate study at the University of California and at Columbia University. In 1924 he married Grace Oberschelp, who died in 1927; and in 1939 he married Mrs. Frances Hady, who with her two children, and his mother, Mrs. Alexander McGeoch, survive him.

He came to Iowa as head of the department of psychology in the fall of 1939, and while here he has won high recognition for his scholarly activities in the pursuit and promotion of research, his excellence in teaching and administrative activities, his good judgment and winsome personality, and his trustworthy leadership in the department and in the university as a whole. His researches have centered around problems in the psychology of learning. He had just completed his magnum opus, a volume entitled "The Psychology of Human Learning," which is being published by Longmans, Green. He has served as editor of the *Psychological Bulletin* since 1935, and has published a number of papers, principally in the field of experimental psychology in education.

Professor McGeoch has been active in the American Psychological Association, the American Association for the Advancement of Science (secretary, Section I, 1934–1936), the Eastern Psychological Association, the Midwestern Psychological Association (secretary-treasurer, 1932–1934; president, 1935), the Society of Experimental Psychologists, the Southern Society for Philosophy and Psychology, and the National In-

stitute of Psychology (president, 1941). He was a member of Sigma Xi, Phi Beta Kappa, Phi Delta Kappa and Phi Sigma. He served as instructor of psychology at Washington University, 1920–1922; assistant professor, 1922–1926; and associate professor, 1926–1928; professor of psychology, University of Arkansas, 1928–1930; professor and chairman of the department of psychology, University of Missouri, 1930–1935; research professor, Wesleyan University, 1935–1939, which position he left to come to the University of Iowa.

CARL E. SEASHORE

THE STATE UNIVERSITY OF IOWA

#### RECENT DEATHS

SIR WILLIAM BRAGG, Fullerian professor of chemistry and director of the Royal Institution, London; director of the Davy-Faraday Research Laboratory; from 1935 to 1940 president of the Royal Society, died on March 13 in his eightieth year.

Dr. Robert William Hegner, professor of protozoology and head of the department of medical zoology at the Johns Hopkins University, died on March 11 at the age of sixty-two years.

Dr. Karl McKay Wiegand, professor emeritus of botany, formerly head of the department at the New York State College of Agriculture at Cornell University, died on March 12 at the age of sixty-eight years.

Dr. ROBERT WILSON SMITH, professor emeritus of biology, McMaster University, Hamilton, Ontario, died on February 22, in his eighty-second year.

### SCIENTIFIC EVENTS

## THE ROYAL OBSERVATORY AT THE CAPE OF GOOD HOPE<sup>1</sup>

The report for 1940 of H.M. Astronomer at the Cape of Good Hope illustrates how astronomical work in the belligerent countries is being affected even though they may be far removed from the present scene of hostilities. Half the observing staff at the Cape is now engaged on non-astronomical duties, this at a time when so many observatories in Europe have perforce suspended work. Nevertheless, the depleted staff is doing its best to secure such observations as can not be replaced by any made at a later date. Meridian observations of the moon have been started in view of the possible loss of European observations, and volunteers have come to the rescue in observing occultations. Photographic work has been somewhat precarious owing to delays in the delivery of plates, but few photographs have been lost, and the position has been eased by a modification of the program of

1 From Nature.

routine solar observations which supplements that still being carried on at Greenwich. Work on the Reversible Transit Circle continues on a somewhat reduced scale, and the photometric observations are now sufficiently far advanced to make possible the construction of a framework of stars of magnitudes between 7 and 10 to which the magnitudes of the zone stars can be referred. With the 1940 batch of parallaxes the observatory now enters the very restricted list of stations at which the distances of more than a thousand stars have been determined trigonometrically.

The section of the report which will be read with perhaps the greatest interest concerns the total solar eclipse of October 1, 1940. The main part of the program was to measure the gravitational deflection of light in the sun's field—the Einstein effect. The Greenwich expedition which was to have cooperated in this work was cancelled at the outbreak of war, and the entire program was carried through, as planned, by the Cape staff. It is disappointing to

have to record total failure in this part of the work. The field of stars close to the eclipsed sun was known beforehand to be a poor one; but eclipses are so few and far between that the attempt seemed justified. In fact, the lessened exposure time and reduced aperture necessary to prevent fogging of the plates by the rather bright sky, combined with the poor daytime "seeing" on the Karroo to prevent any stars showing on the negatives at all. Astronomers all over the world will sympathize with H.M. Astronomer and his staff in this disappointment, particularly as observing conditions were otherwise good. Their sole compensation was in securing the only large-scale photographs of the corona obtained during this eclipse -photographs which, though interesting and indeed important, represent a most inadequate reward for months of work.

#### NEW KODACHROME SLIDE SERIES OF THE AMERICAN MUSEUM OF NATURAL HISTORY

The department of education of the American Museum of Natural History has made available to schools and colleges the first teaching series of kodachrome lantern slides to be offered by any institution. The "Evolution of the Horse" is the title of this set of twenty-five slides made up in the  $2 \times 2$  inch size.

The late Dr. Walter Granger, paleontologist at the American Museum, endorsed the accuracy of the slides which are reproductions of exhibits in the museum.

A process of duplicating kodachrome pictures has been developed by the museum, so that careful control of the color of the final slide is maintained. The original photographs of the exhibits are made on the larger kodachrome sizes so as to retain as much detail as possible. These large pictures are then rephotographed down to the thirty-five millimeter size using an artificial light source accurately adjusted as to color temperature. A complete series of faint complementary color correction filters makes it possible to adjust the hues of the final slides to as close a duplicate of the original colors in the museum exhibits as is necessary to maintain fidelity.

The "Evolution of the Horse" series contains maps of the chief fossil deposits in the United States, pictures of the formations in which the fossils are found, a progressive series of the fossil horse skeletons, Charles R. Knight's paintings of restorations of the fossil horses and the contemporary life of each period. Slides comparing the skulls, hooves and overall size of the earliest and modern horses complete this series. A special manuscript has been written describing the slides and the story of "The Evolution of the Horse."

This set of slides is the first of several that are

planned. The Story of the Dinosaur and Ancient Man will follow soon. The "Evolution of the Horse" is already in use in the high schools of New York City.

#### FOREST FIRE PROTECTION

The American Forestry Association, in an open letter to the Congress, urges that forest fire protection be placed on a war-time basis. Shortage of employable labor in the forest regions because of military service and demands of war industries, coupled with the curtailment and diversion of the CCC, heretofore an important link in forest fire protection, were given as reasons for the growing fire peril to vital timber resources.

Recommendations that a war priority rating be given forest protection and that the CCC be reappraised in the light of a streamlined, mobile resource protection force with the status of an essential war agency were made by the association.

Back of these recommendations is the important fact that forest resources are now being heavily drawn on and must continue to be heavily drawn on in the prosecution of the war. According to the association, the war already has called for 2,500,000,000 feet of lumber from the nation's forests, and the War Department has let contracts for upwards of a billion feet more. Wood is needed in great volume for airplanes, cargo and fighting ships, construction of training camps and cantonments, crates for shipping food and equipment to the battle fronts, and scores of other war-needed products. Protection of such a vital war resource is an immediate and major concern to the Congress and to the nation. It is pointed out in the letter to the Congress that

Failure to make provision to assure adequate protection of these resources during seasons of the year when it is known they will be exposed to critical danger, may easily disrupt and delay our all-out plans to win this war. Forest fires do not wait for man to organize after the fire season arrives. They can be dealt with successfully only by advance organization, planning and preparedness. The question as it now presents itself appears to be primarily one of providing necessary man power in advance through centralized governmental action instead of leaving it to regional protective agencies to compete with one another for labor and to be short-handed and unprepared when critical forest fires break out.

# COMMITTEE OF EXAMINATIONS AND TESTS OF THE AMERICAN CHEMICAL SOCIETY

THE Committee of Examinations and Tests, Division of Chemical Education, of the American Chemical Society, has announced that the 1942 Cooperative Chemistry Test will be available by April 1. Inquiries