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 should be addressed to the Cooperative Test Service, 15 Amsterdam Avenue, New York City.

The accumulation of data and experience of the past six years has had the effect of modifying the concept of what a test should measure and how this should be accomplished. As a result of extensive discussion at a conference, held at the University of Chicago last June, the 1942 form of the test is considerably different from the tests of the past four years. The test has been administered in a preliminary form to determine the difficulty and validity of each item, and the committee hopes for its wide-spread adoption. A brief description of the test follows:

## Part I. General Knowledge and Information.

This section is based on knowledge of our acquaintance with important facts, definitions, laws and theories of chemistry. Historical events and application of chemistry to the social and economic world are represented. *Part II. Application of Principles.* 

This part attempts to measure the ability to solve numerical problems, to balance equations and to make quantitative predictions by the application of chemical principles.

### Part III. Scientific Method.

This section is concerned with the understanding of the relation of observation, definitions, laws, theories in the scientific procedure. The relation of theory to experiment is represented, as well as the ability to interpret chemical data.

Part IV. Knowledge of Laboratory Technic and Procedure. This new section is included in the effort to measure acquaintance with the laboratory and knowledge of "correct" procedures. It does not attempt to measure skill or technic per se.

The committee which is sponsoring the test is comprised of the following members of the Division of Chemical Education:

B. Clifford Hendricks, University of Nebraska; Rufus D. Reed, New Jersey State Teachers College; Ed. F. Degering, Purdue University; Laurence S. Foster, Brown University; Earl W. Phelan, Georgia State Womans College; Theodore A. Ashford, University of Chicago, and Otto M. Smith, Oklahoma Agricultural and Mechanical College, *chairman*.

#### AMERICAN STANDARDS FOR 1942

THE American Standards Association has announced the publication of its new list of American Standards for 1942. This announcement points out that in view of the importance of standards and specifications, not only for every-day work but to speed up production for defense, this particular list of standards should be in the hands of the engineering and purchasing departments of every manufacturing firm in the United States.

Nearly 500 American Standards are listed in a wide variety of industrial fields and in the fields of industrial and public safety. There is a separate heading for American Defense Emergency Standards—standards developed specifically for defense purposes, and for the first time all American Safety Standards are listed together in a separate section.

The standards include definitions of technical terms, specifications for metals and other materials, methods of test for the finished product, dimensions, safety provisions for the use of machinery and methods of work. They reach into every important engineering field, serving as a basis for many municipal, state and federal regulations.

In each case these standards represent general agreement on the part of maker, seller and user groups as to the best current industrial practice. More than 600 organizations are taking part in this work. The standards are frequently reviewed and revised in order to keep them in line with changing industrial needs. New standards, and those brought up to date within the year, are especially marked in the list.

The list will be sent free of charge to any one writing in for it. Requests should be addressed to the American Standards Association, 29 West 39th Street, New York, N. Y.

# WAR WORK OF THE DEPARTMENT OF PSYCHOLOGY OF YALE UNIVERSITY

THE following members of the department of psychology of Yale University are working full- or parttime in work in connection with the war:

Leonard W. Doob, social psychologist who is on leave of absence from the university, is employed now with the Office for Emergency Management in Washington. He is in charge of the analysis section of the Office of the Coordinator of Inter-American Affairs, under Nelson Rockefeller. In this capacity, he supervises a staff in the analysis of public opinion in Latin American republics, and Axis propaganda directed at them. He also analyzes the effects of American activities in this respect and makes recommendations to all divisions of the office on the basis of his findings. Doob is the author of "Propaganda."

Neal E. Miller has recently been granted a leave of absence to accept a commission in the Army Air Force, where he is engaged in the pilot selection program and in research on problems of emotional adjustments in aviators.

Judson S. Brown, instructor in psychology, has been commissioned first lieutenant in the Army Air Corps and will be engaged in psychological research under the direction of Colonel Harry G. Armstrong.

Several members of the department, including Mark A. May, Neal E. Miller, Judson S. Brown and Robert R. Sears have been engaged in New Haven in the Air Raid Warden Training Program giving addresses on the prevention of panic.

Walter R. Miles, professor of psychology, is a member