was called to the need for (1) greater uniformity in motor vehicle traffic laws, (2) standardized methods of reporting highway accidents, (3) improved inspection services for cars, and (4) the expansion of highway patrol organizations. The studies have disclosed that our present knowledge of how and why highway accidents occur is wholly inadequate for a successful study of the problem of highway safety, especially with respect to the habits, capabilities and limitations of automobile drivers. These studies are being continued during the current year with special attention to (1) methods of testing drivers for proneness to accident, (2) speed control on rural highways, and (3) the analysis of case histories of fatal accidents.

In addition to the work of the Highway Research Board the Committee on the Psychology of the Highway of the Council's Division of Anthropology and Psychology has formulated a program of investigations upon (1) the drinking driver in relation to licensing authorities, (2) the effects of fatigue on driving performance and its relation to hours of labor, and (3) problems of headlight illumination.

INDUSTRIAL RESEARCH INSTITUTE

It is hardly more than fifty years since the first research laboratory was established by an industrial firm in the United States. The great development, however, of the industrial laboratory has taken place within the last twenty years, and at present there are well over 1,700 such laboratories in this country. Aside from technological matters, these laboratories have many problems of organization and management in common arising from the urge for making the industrial research unit render its maximum effectiveness to the concern of which it is a part, and for making the best use of the results of research work. While in industry the ultimate test is efficiency, the verdict as to what constitutes efficiency often depends upon how far to look ahead.

In order to provide a medium in which directors of research laboratories might study cooperatively these problems which are alike in many establishments, the Division of Engineering and Industrial Research organized last spring an Industrial Research Institute. This is a self-sustaining organization, under the auspices, at present, of this division of the Council. Its purpose is to provide coordinated facilities for examining common problems and for the compilation of information relating to industrial research developments and to the organization of research agencies in industry. Among the questions to which this institute will give attention are problems of research personnel and its working conditions as distinguished from production personnel, the selection and training of research men, laboratory construction and management, the keeping of research records, planning research budgets as separate from manufacturing budgets, means for keeping informed upon current progress in industry, and cooperation with universities and other research institutions. The institute is to hold several meetings a year. It carries on its studies in part through committees of its own membership and in part through special investigators.

REPRODUCTION OF RECORDS

The work on the reproduction of records, which is being conducted at the National Bureau of Standards in cooperation with an Advisory Committee of the Council, grew out of earlier investigations at the bureau upon the preservation of papers. This work has been turned during the past three years to studies of the durability of photographic film which is coming into increasing use for record purposes. Certain of these investigations have been devoted to the comparison of the usual emulsion-coated acetate film with a Cellophane-base film containing a light-sensitive dye for formation of the record image within the film. Other studies have covered the aging effects of light on film, preservatives and protective treatments to prevent scratching, favorable conditions for the storage of film, methods of testing the condition of old film, shrinkage and expansion of film and paper, especially that used in aërial photography, means for more completely removing hypo in the processing of film and a study of the effects of a small quantity of unstable cellulose nitrate usually present in the slow-burning or safety type of acetate film. The next stages of the work will be to arrange for the confirmation of findings recently obtained in testing the resolving characteristics of various types of film, to carry these resolution tests further by using a number of available commercial devices and to plan tests for the characteristics of commercial apparatus for photographing documents.

The investigations upon the preservation of paper were supported by the Carnegie Corporation cooperatively with the bureau, as were also the earlier stages of work upon record film. These studies for the past year, however, have been supported by contributions from the film and apparatus industry.

(To be concluded)

OBITUARY

MALCOLM LYONS

MALCOLM LYONS, instructor in animal industry of the University of Arkansas, was accidentally shot while hunting on Thanksgiving Day (November 24, 1938), thus ending a most promising scientific career. Although only 27 years of age, Lyons had published a

number of excellent scientific papers in such journals as SCIENCE, *Journal of Nutrition, Poultry Science* and the Experiment Station bulletin series of the Kentucky and Arkansas Stations.

Lyons possessed a keen analytical mind and a deep devotion to research. Although teaching ten hours a week at the time of his death, the head of his department stated that he was actually conducting more research than many other men with no teaching duties to distract them. He worshipped truth and detested inaccuracy and error. He conquered the obstacles that were in his way and forged on toward the goal he had set for himself. He was thorough, energetic, conscientious and dependable. He set a splendid example for his colleagues and students which was a constant challenge to them to serve science with the same loyalty he had shown.

Lyons graduated from the University of Kentucky in 1932 with the degree of B.S. in Agriculture. In 1934 he received his M.S. at Iowa State College, where he served as research fellow in animal nutrition. He served the Kentucky Experiment Station as research assistant for more than two years and the Arkansas Station for a year and a half. In the 1938 summer-term he completed the residence and course requirements at Iowa for the doctor's degree, which he would have received during the present academic year after writing his thesis, the experimental work for which had been completed.

Lyons was greatly admired by all who knew him, and he leaves a host of friends who share the loss with his bereaved family. He is survived by his wife, an eighteen-months-old daughter, his parents and two sisters.

J. HOLMES MARTIN
UNIVERSITY OF KENTUCKY

YNES MEXIA

YNES MEXIA'S death on July 12, in Berkeley, California, closed a career as a botanical collector of note. Born in Washington, D. C., May 24, 1870, during the residence of her father, General Enrique A. Mexia, there on official status from Mexico, she spent the early half of her life in the United States and Mexico, making San Francisco her home for the last thirty years. Always interested in plants, she began actively collecting in 1922 in Mexico. She usually went to remote places, however difficult to reach, the Pongo de Manseriche by raft and canoe, eastern Ecuador by pack oxen, eastern Oaxaca afoot. She prepared her specimens carefully and gave abundant notes. She collected approximately 9,300 numbers, from 140,000 to 150,000 specimens and over 500 new species, the last collection being yet unidentified. Many new species and one new genus were named in her honor.

A list of her expeditions with approximate numbers follows: 1922 Mexico; 1925 Mexico, 500 numbers, 3,500 specimens; 1926–27 Mexico, 1,600 and 33,000; 1928 Alaska, 365 and 6,100; 1929 Mexico, 315 and 5,000; 1929–32 Brazil-Peru, 3,200 and 65,000; 1934–37 South America from Ecuador to Tierra del Fuego, 2,200 and 19,900; 1937–38 Mexico, 700 and 13,000.

The most complete set of her plants is in the herbarium of the University of California; also complete records of her trips and collections.

N. FLOY BRACELIN

RECENT DEATHS AND MEMORIALS

WILLIAM BAKER DAY, since 1919 dean of the College of Pharmacy of the University of Illinois, died on December 10. He was sixty-seven years old.

DR. GEORGE VAN NESS DEARBORN, chief of the Department of Medical Psychology of the U. S. Veterans Administration, has died at the age of sixty-nine years.

DR. JOSEPH A. HILL, for more than forty years a statistician with the Bureau of the Census, died on December 12. He was seventy-eight years old.

A CORRESPONDENT writes: "News has been received of the death at the age of thirty-one years of L. G. Schnirelman, professor of mathematics at the University of Moscow and a member of the Mathematical Institute of the Academy of Sciences of the U.S.S.R. Schnirelman had made first-rate contributions in widely separated branches of mathematics (topology, the calculus of variations, number theory). No branch of science has reached a higher distinction in the U.S.S.R. than mathematics, and the deceased was one of its strongest and most original mathematicians."

THE U. S. Board on Geographical Names has named a mountain 9,900 feet high in Yellowstone National Park Mount Hornaday in honor of the late Dr. William T. Hornaday, until his retirement in 1926 director of the New York Zoological Park. Mount Hornaday is on the divide at the head of Plateau Creek and is visible from the northeast park entrance road.

SCIENTIFIC EVENTS

THE PROPOSED CANCER SERVICE IN GREAT BRITAIN

A BILL embodying a new plan for securing earlier and more effective treatment of cancer involving the establishment of a cancer service which will make the best modern facilities for diagnosis and treatment available in every part of the country has been formally introduced in the British House of Commons.

According to the London *Times* the government has decided to place on county and county borough coun-