

WALTER DAVID HUNTER

ON October 13 Dr. W. D. Hunter, chief of the section of insects affecting southern field crops of the Bureau of Entomology of the U. S. Department of Agriculture and a member of the U. S. Federal Horticultural Board, died suddenly at El Paso, Texas, in his fiftieth year. He was buried on October 16 at Houston, Texas, where he had been stationed for some years, leading the successful fight to exterminate the pink bollworm of cotton in the United States. Dr. Hunter was graduated at the University of Nebraska with the degree of A.B. in 1895 (A.M. in 1897), and in 1916 was given the degree of LL.D. by Tulane University, of Louisiana. After graduation he was an assistant in entomology at the University of Nebraska, and in 1901 was assistant entomologist in the Iowa Agricultural Experiment Station. In 1902 he came to the U. S. Department of Agriculture and was made assistant entomologist in charge of boll weevil investigations, and in 1905 was placed in charge of all southern field crop insect investigations. In 1908 he was made a member of the Federal Horticultural Board. Since the advent of the pink bollworm in Texas he has been stationed at Houston, Texas, in active charge of the eradication work directed against this insect. Dr. Hunter was a fellow of the American Association for the Advancement of Science, member of the American Ornithologists' Union, the Entomological Society of Washington and the American Association of Economic Entomologists. He was president of the last-named organization in 1913. He was the author of numerous papers and reports, all of a very high character.

Dr. Hunter was one of the strongest men in the Department of Agriculture. He gained a grasp, not only of the boll weevil situation, but of the whole cotton-growing industry, of an almost unequalled character. He commanded the respect and confidence of the best men in the south. He was one of the advisory board of the Bureau of Entomology, and the work which he and his assistants have done on the cotton insect problem, particularly on the cotton boll weevil and the pink bollworm, has been of the very highest rank, both from the scientific and the practical point of view.

Although Dr. Hunter's main work was devoted to the solution of cotton insect problems, he became greatly interested a dozen years ago in the carriage of disease by insects. His admirable presidential address before the American Association of Economic Entomologists was entitled "American interest in medical entomology," and at about the same time he was charged with the direction of the Bureau of Entomology project entitled "Insects affecting the health of man and animals," on which Mr. F. C. Bishopp,

Captain D. L. Van Dine and Dr. W. V. King have done such remarkable work under his supervision.

Probably Dr. Hunter will always be best remembered as the man who had virtual charge of the cotton boll weevil investigations of the department for more than twenty critical years; but surely his work in the eradication of the pink bollworm in Louisiana and Texas, both as an entomologist and as a member of the Federal Horticultural Board resident in Texas, with the immense practical difficulties involved, necessitating clear judgment, infinite tact and ability to influence men of affairs, will always be remembered by those who understood the seriousness of the situation and who are familiar with its countless difficulties.

He was a sound entomologist. He was a broad, far-sighted man of affairs. He was an administrator who commanded the respect and affection of those associated with him. His death is a very great loss to the Department of Agriculture and to the country as a whole.

L. O. HOWARD

BUREAU OF ENTOMOLOGY,
U. S. DEPARTMENT OF AGRICULTURE

SCIENTIFIC EVENTS

THE UTILIZATION OF WATER AREAS

A RECENTLY formed committee of the division of biology and agriculture of the National Research Council is instructed to consider the possibilities of increased utilization of interior waters for production of food and other necessities and especially to indicate what may be the need and the possibilities of scientific investigation to promote such an end. The committee will consider the general subject of aquaculture and also its probable relations to conservation of waters in streams, lakes and soils, and thus to agriculture, forestry and the general welfare.

It is the intent of the committee: (1) to secure information regarding the status of aquaculture in certain other countries and the nature of the research work that is directed at the problems of aquaculture in those countries; (2) to learn what facilities and personnel in this country are available for research relating rather directly to this subject; (3) to inquire if, among institutions and persons engaged in such studies, it is desirable or practicable to promote a greater degree of cooperation or coordination of work than now prevails, and (4) to ascertain if additional facilities or means may be desirable and obtainable.

Fundamental to all this is the necessity of offering, if practicable, a general statement of the kinds of research work that should be pursued in order to establish the foundation of scientific data requisite for the development of practical methods of preserving

and increasing the productivity of waters. This aspect of the committee's task is to be viewed in a broad way. Undoubtedly it is desirable that there should be experimental work of a relatively direct nature, but strictly scientific in method, in reference to such matters as the nutrition of fishes and selective breeding. It is also probable that no less important in the long run will be physiological physico-chemical and other studies not utilitarian in viewpoint but still having to do with problems underlying the *biological productivity* of bodies of water.

The committee fully realizes that the successful accomplishment of its task is conditioned upon the assistance of all who have an interest in the matter. It can report fully and wisely only if it has advice, suggestions, criticism and especially information from institutions and persons having a direct or indirect concern in the kinds of work that come within its purview.

This statement is intended to invite the submission of advice and information. Communications may be addressed to the Division of Biology and Agriculture, National Research Council, Washington, D. C., or to Professor R. E. Coker (Box 950, Chapel Hill, N. C.), who has been requested by Professor Metcalf to serve as acting chairman of the committee, pending his return from foreign travel.

The Committee:

MAYNARD M. METCALF,
Johns Hopkins, Chairman;
R. A. HARPER,

Columbia University;
STEPHEN A. FORBES,
Illinois Natural History Survey;

CHANCEY JUDAY,
*Wisconsin Geological and
Natural History Survey;*
E. N. TRANSEAU,

Ohio State University;
S. W. BEYER,

Iowa State College;
R. E. COKER,

*Acting Chairman, University of
North Carolina, Chairman, Division
of Biology and Agriculture, ex officio*

RADIO TALKS FROM THE HARVARD COLLEGE OBSERVATORY

DR. HARLOW SHAPLEY, director of the Harvard College Observatory and professor of astronomy at Harvard University, gave on November 2 the first of a series of twenty-two radio talks on astronomy to be given by members of the Harvard Observatory on Tuesdays and Thursdays and broadcast by station WEEL. Dr. Shapley's subject was "What are the stars?"

The other talks have been scheduled as follows:

- November 5—*Bright stars and constellations*, DR. WILLIAM LUYTEN.
 " 10—*Telescopes and their uses*, PROFESSOR WILLARD P. GERRISH.
 " 12—*Photographing stars and planets*, PROFESSOR EDWARD S. KING.
 " 17—*Great American observatories*, LEON CAMPBELL.
 " 19—*The origin of the earth and other planets*, DR. SHAPLEY.
 " 24—*Eclipses of sun, moon and stars*, MR. CAMPBELL.
 " 26—*Comets*, PROFESSOR KING.
 December 1—*Shooting stars*, DR. WILLARD J. FISHER.
 " 3—*The age of the earth*, DR. SHAPLEY.
 " 8—*The stuff stars are made of*, DR. CECILIA H. PAYNE.
 " 10—*Classifying the stars*, DR. ANNIE J. CANNON.
 " 15—*Stellar evolution*, DR. PAYNE.
 " 17—*The number and sizes of the stars*, DR. LUYTEN.
 " 22—*Star clusters and nebulae*, PROFESSOR SOLON I. BAILEY.
 " 29—*The Milky Way*, PROFESSOR BAILEY.
 " 31—*Measuring the universe*, DR. SHAPLEY.
 January 5—*Beyond the Milky Way*, DR. LUYTEN.
 " 7—*The amateur's work in astronomy*, MR. CAMPBELL.
 " 12—*New stars and variables*, DR. CANNON.
 " 14—*Relativity*, PROFESSOR KING.
 " 19—*Life in other worlds*, DR. SHAPLEY.

GEOLOGICAL EXCURSION OF NEW YORK STATE COLLEGES

THE first intercollegiate geological field meeting of New York state colleges was held at Clinton and Little Falls, N. Y., on May 15 and 16 last. The various delegations of teachers and students met at Clinton during the forenoon of Friday, May 15, and were guests at luncheon of Hamilton College. The afternoon was spent in a visit to the iron mines in the Clinton formation and in examining the Silurian section in the neighborhood. A dinner was held in the evening at the house of the country club near Utica. President F. C. Ferry, of Hamilton College, made a brief address of welcome, and Professor A. P. Brigham, of Colgate University, delivered a lecture on the geography and historical significance of the Mohawk gorge at Little Falls. Dr. N. C. Dale, of Hamilton College, spoke briefly about Paleozoic rocks and Dr. H. L. Alling, of the University of Rochester, discussed Adirondack pre-Cambrian problems.

On Saturday the party journeyed to Little Falls where the day was spent. The structural features studied were the various pre-Cambrian intrusives, the great unconformity, the fault bounding the gorge on