ration with Dr. Elkin and with Mr. Mason Smith he determined with the heliometer the parallaxes of more than two hundred stars, and this at least doubled our direct knowledge at that time of stellar distances. By far the greater part of this observing was done by Chase himself, who for a period of twenty years observed on nearly every favorable night. It is well recognized that the heliometer is one of the most difficult and exacting instruments that the astronomer has been called upon to use.

In addition to his work on stellar parallaxes Chase published a valuable Triangulation of the Victoria Comparison Stars in connection with Gill's determination of the solar parallax from the observation of asteroids; a Triangulation of the Stars in the Cluster Coma Berenices; and a painstaking and conclusive research as to the effect of color on heliometer measures.

In recognition of these and other contributions the French Academy of Sciences conferred jointly upon Elkin, Chase and Smith their Lalande Medal in 1908.

Chase was exceedingly fond of athletics and outdoor life. He was an expert tennis player, especially at doubles; with one of his colleagues at Yale he several times won the Connecticut State Championship. Next to astronomy his chief passion was farming. One year when he was in charge of Yale Observatory he plowed up about five acres of the Observatory plat and sowed it in wheat. He did not get much of a return from this adventure except, as he laughingly said, "the fun of doing it." Both in Connecticut and Colorado he hunted on every occasion that he could, and, in fact, it was while hunting that death overtook him. He was found on the evening of November 9, in the shallow waters of a lake near his home, where he had succumbed a few minutes before to a heart attack.

Chase never married. The nearest relatives who survive him are cousins. His father had died a few years ago, and his mother still more recently. A Colorado friend writes of him, "I never saw a more devoted son than he was to his father and mother, both of whom lived to advanced ages."

Chase expressed some disappointment towards the end of his life as to the value of his arduous labors on stellar parallaxes, expressing the view that his results had been superseded by the more accurate photographic methods that followed. But his colleagues saw much more clearly than he did the pioneer rôle he had played, a rôle that helped to make possible the development of more accurate methods.

FRANK SCHLESINGER

RECENT DEATHS

DR. LYMAN CHURCHILL NEWELL, professor of chemistry at Boston University, died on December 13, at the age of sixty-six years.

DR. JOHN MERRILL POOR, professor of astronomy at Dartmouth College and head of the Shattuck Observatory, died on December 11. He was sixty-two years old.

PROFESSOR ALLISON W. SLOCUM, for thirty-nine years professor of physics at the University of Vermont, died on December 10, at the age of sixty-seven years.

JOSEPH L. MAYER, chief chemist of the Louis K. Liggett Company for more than twenty years and head of the department of chemistry of the Brooklyn College of Pharmacy, died suddenly on December 1, at the age of fifty-eight years.

DR. CLOYD N. MCALLISTER, professor of psychology and head of the Normal School at Berea College, died on October 31, at the age of sixty-three years. He had been at Berea for twenty years.

JAMES H. GIBBONEY, chief chemist of the Norfolk and Western Railway, died at his home, Roanoke, Virginia, October 31, 1933, at the age of fifty-four years. He was analyst for some time for the Virginia Geological Survey.

PROFESSOR ERWIN BAUR, director of the grain experimental station of the Kaiser Wilhelm Institute at Müncheberg, near Berlin, died on December 3, at the age of fifty-eight years.

SCIENTIFIC EVENTS

QUARANTINE AGAINST THE DUTCH ELM DISEASE

SECRETARY OF AGRICULTURE WALLACE has announced the establishment of a new quarantine, effective from October 21, designed to prevent further introductions of the Dutch elm disease from Europe. Following the apparently successful efforts made in Ohio to eradicate the few cases of this disease which cropped up there in 1930, the disease suddenly increased last summer, when an outbreak of considerable intensity was discovered in the environs of New York City, principally in northern New Jersey.

According to a bulletin issued by the U. S. Department of Agriculture:

> Almost simultaneously with this development, it was found that elm burl logs were being imported into this country from Europe for the manufacture of veneer. Examination of these logs disclosed the presence in

some shipments of the Dutch elm disease fungus, and all the eight shipments entering since July 25 of this year were found to be more or less heavily infested with elm bark beetles, insects known to be important means of spreading the disease in Europe, where the disease has been distributed widely during the last decade and, on a large scale, has destroyed or seriously damaged elm shade trees.

With the willing cooperation of the importers of these logs, all shipments so far entered since this discovery have been treated in an attempt to safeguard them against escape of the insect carriers, and prompt action has now been taken by the Department of Agriculture to guard against future danger.

Secretary Wallace notes that the new quarantine seeks to close as effectually as possible every avenue to the entrance of the disease but at the same time seeks not to hamper any trade movement that could be permitted with safety. Under this quarantine, elm burl logs are to be allowed entry under permit with regulations providing that they arrive in this country free from bark so that no dangerous insect carriers of the fungus can be introduced with them. The regulations further require a hot water or other approved treatment to destroy any of the Dutch elm disease fungus that might be present in the logs.

In view of the important part which these elm bark beetles are said to play in spreading the fungus from dead or dying elm wood to living trees, the quarantine also stipulates that all lumber, timber, crates, boxes or other containers and manufactured articles derived from the wood of elm and related plants entering this country from Europe must be free from bark.

THE CALIFORNIA WILD LIFE ADMINISTRATION AND PEST CONTROL COMMITTEE

PROVIDED by the last California Legislature, the Wild Life Administration and Pest Control Committee held its first meeting at the University of California on December 19. This committee, established by authority of Senate Concurrent Resolution No. 26, includes representatives of all groups interested in the wild life of the state, its administration and control.

This committee grew out of an investigation inaugurated by President Robert G. Sproul within the university, to determine the basis of discord that existed among various agencies dealing with the many phases of wild life control and administration. The committee, in its report, suggested the formation of such a committee as that now provided, to act as a clearing house for controversial questions that arise, so that the administration of wild life may be harmonious and necessary control measures agreed upon for the benefit of the state.

The organizations, designated by the resolution, have appointed representatives as follows: State Department of Public Health, Edwin T. Ross; State Division of Fish and Game, John L. Farley; State Department of Agriculture, W. C. Jacobson; State Association of Agricultural Commissioners, Gordon Laing, Alameda County; Agricultural Department, State Chamber of Commerce, R. N. Wilson; Conservation Department, State Chamber of Commerce, Charles G. Dunwoody; Zoology Division, University of California, C. A. Kofoid; Pharmacology Department, Medical School, University of California, C. D. Leake; Hooper Foundation for Medical Research, University of California, Karl F. Meyer; College of Agriculture, University of California, T. I. Storer, Davis.

Other groups to be represented, but which have made no appointments as yet, are the United States Biological Survey, California Academy of Sciences, California Farm Bureau Federation, Cooper Ornithological Club and a state-wide sportsmen's organization. In addition, these representatives will name three members-at-large.

INTERNATIONAL MATHEMATICAL CONGRESS MEDALS

EVERY four years there is held an international gathering of mathematicians, known as the International Congress of Mathematicians. At the next meeting, to be held in Oslo in 1936, two Gold Medals will be awarded to mathematicians selected for their outstanding contributions to mathematics by an international committee appointed for the purpose. The foundation of these medals is due to the efforts of the late Dr. J. C. Fields, F.R.S., research professor of mathematics at the University of Toronto. Dr. Fields was responsible for assembling the Mathematical Congress in Toronto in 1924—the only meeting which has been held on this continent. He was president of the congress and the editor of its *Proceedings,* which constituted two large volumes, published by the University of Toronto Press. With funds remaining after the completion of the work, Dr. Fields suggested the foundation of these medals, as a Canadian contribution to the cause of international scientific cooperation, which he always had much at heart. Unfortunately Dr. Fields did not live to see the realization of his scheme, as he died in August, 1932, a month before the meeting of the Congress in Zurich, which gave international approval to the foundation of the medals. The medals will be awarded at each International Congress of Mathematicians in future.

In spite of the fact that the medals are of Canadian origin and are due to the personal efforts of Dr. Fields, it was his particular wish that in design and award they should be truly international in character, and should not be associated with any country or person. The task of designing a suitable medal was entrusted to the distinguished Canadian sculptor, Dr. R. Tait McKenzie, R.C.A., who has now completed his work.

The medal is two and a half inches in diameter.