JAMES WALKER MCCOLLOCH, professor of entomology, Kansas State Agricultural College, died on November 11. Professor R. L. Parker writes: "Professor McColloch was born in Anthony, Kansas, April 14, 1889. In 1912 he received the B.S. degree from the Kansas State Agricultural College, and in 1923 received the M.S. degree from the same institution. He began work as an assistant entomologist at the Kansas State Agricultural College in 1910, was associate entomologist of the Kansas Agricultural Experiment Station in 1918 and was raised to the rank of professor in 1925. In his passing, entomologists are mourning the loss of one of the outstanding workers in that science. Through the publication of papers, bulletins and circulars, he became known as an authority on the chinch bug, Hessian fly, wireworms, white grubs and other subterranean insects. He was a member of several scientific organizations; namely, the American Association for the Advancement of Science, the American Association of Economic Entomologists, the Entomological Society of America, the Ecological Society of America, the Kansas Academy of Science, the Kansas Entomological Society, Phi Kappa Phi, Gamma Sigma Delta, Alpha Zeta and Sigma Xi. At the time of his death he was editor of the *Journal* of the Kansas Entomological Society and one of the sectional editors of *Biological Abstracts.*"

A CORRESPONDENT writes: "Dr. Frederick Tuckerman died at Amherst, Massachusetts, November 8 at the age of seventy-two years. He was graduated from the Massachusetts Agricultural College in 1878, received the degree of M.D. from Harvard University in 1882, studied in London, Berlin and Heidelberg, receiving the degree of Ph.D. from the latter institution in 1894. He was a lecturer on anatomy and physiology, a writer on scientific and historical subjects, a member of many scientific and other societies, and a gentleman of culture and learning."

THE death is announced of Professor Carlo Francioni, director of the pediatric clinic of the University of Bologna, at the age of fifty-two years.

SCIENTIFIC EVENTS

THE CAMBRIDGE LOW TEMPERATURE RESEARCH STATION

A RECENT gift from the British Empire Marketing Board has substantially extended the low temperature research station at Cambridge which, under the Department of Scientific and Industrial Research, is carrying on work of importance to the future of trade in food supplies. Sir William Hardy, the director of the station, recently made a statement in regard to its work to a special correspondent of the London *Times*, according to which the older part of the building has been in use for about eight years. The site was given by the University of Cambridge, which is actively assisting the work in other ways through its own physiological, botanical and chemical laboratories. The work of the low temperature station is now concerned exclusively with meat and fruit. Formerly it dealt also with fish, but an inland station can not do such work satisfactorily, and the Empire Marketing Board is therefore helping to establish a station for the purpose at Aberdeen.

The function of the station here is delimited in another direction also. It may be called upon to decide what conditions of temperature and so forth are needed in the shipment of supplies from oversea countries, but, these conditions having been theoretically determined in the Cambridge laboratories, the provision of them on board ship becomes an engineering problem, and this side of the task devolves on the National Physical Laboratory at Teddington.

The Low Temperature Station is lavishly equipped with cold-storage plant and other apparatus, in which products under examination may be kept at any required temperature and under closely regulated conditions in other respects. Any temperature can be produced between minus 30 deg. Centigrade and plus 40 deg., and kept constant to a hundredth of a degree. Sir William Hardy explained that it takes some months in the first instance to extract all the heat from the installation and get the conditions steady. The refrigerating engines are kept continuously at work. They had been running without a pause for eight years until this summer, when they were stopped to allow the new installation to be linked up with the older plant.

On two occasions members of the staff have been sent out to Australia to return with cargoes and conduct investigations during the voyage. A survey is starting at present of conditions in ships bringing foodstuffs from New Zealand, and a similar survey has been in progress for the last two years on British trawlers. Municipal authorities and private fruit dealers also may bring their problems to the station. A dealer may write to ask why all his pears are turning rotten this year. In such a case the director will send one of his staff to make an investigation on the spot. The station has also a small canning plant of its own for research into the separate problems of this growing industry.

LAND FOR FOREST RESERVATIONS

THE acquisition by the federal government of a total of 85,195 acres of land for national forest purposes was approved recently by the National Forest

Reservation Commission at its first meeting of the current fiscal year. The purchase program involves eleven units and a total obligation of $229,506.82 with an average price of $2.69 per acre.

The areas approved for purchase are located in purchase units already established in eight states. When acquired, they will be placed under national forest administration by the Forest Service of the U. S. Department of Agriculture, to be managed for permanent timber production, watershed protection and other public forest uses. Some of the lands contain young timber growth which, with adequate fire protection and the right kind of management, will develop into good timber stands. Certain areas have been so badly denuded by cutting and fire that they will have to be replanted.

THE late Secretary of War Good was chairman of the commission; other members are Secretary of the Interior Wilbur, Secretary of Agriculture Hyde, Senators Keyes of New Hampshire and Harris of Georgia, and Representatives Hawley of Oregon and Aswell of Louisiana. John E. Burch is secretary.

The purchase program approved by the commission is as follows:

Purchase Unit	*Acres*	*Obligation*
Alabama, Ala.	3,483	$ 20,639.00
Catahoula, La.	33,916	123,583.00
Cherokee, Ga.-Tenn.	408	1,224.00
Huron, Mich.	5,096	9,807.73
Keweenaw, Mich.	3,422	7,425.77
Mackinac, Mich.	17,626	26,441.05
Marquette, Mich.	75	111.84
Moquah, Wis.	13,236	18,483.81
Ouachita, Ark.	980	2,836.00
Ozark, Ark.	2,912	12,370.35
Superior, Minn.	4,041	6,484.27

THE NEW YORK ASSOCIATION OF BIOLOGY TEACHERS

(1) THE New York Association of Biology Teachers announces the following program of addresses for its first six monthly meetings of 1929–1930.

September: Dr. Benjamin Harrow, "Amino Acids and Vitamins."
October: Dr. A. B. Stout, "Sterilities in Plants."
November: Dr. L. O. Howard, "We must know more about Insects."
December: Dr. Gary N. Calkins, "The Nucleus."
January: Dr. Lee Crandall, "Explorations in New Guinea."
February: Dr. Knight Dunlap, "Present Views regarding the Function of the Brain."

The meetings ordinarily are held on the third Friday evening of each month at the American Museum of Natural History. In addition, the organization will hold two other regular evening meetings, including a joint science dinner with the teachers of physics and chemistry, several "field" trips, including four to the Brooklyn Botanic Garden for a series of demonstrations of work in plant breeding and pathology: sorghum, corn genetics; variation of the Boston fern; breeding for immunity in grains; cabbage types; etc.

(2) A report on science sequence in high schools was prepared by a committee of chairmen of biology departments (high schools) of New York City as a basis for discussion and possible action. The principal points stressed are two: the importance of extending effective science instruction downward into the first two years of the junior high and last two of the elementary school systems; and second, the urgent need of developing high-school courses in chemistry and physics which shall function in the lives of the pupils taking them, independently of preparation for possible later courses in higher grades of the same sciences.

(3) Readers of SCIENCE interested in obtaining a copy of a survey of the secondary science situation in New York City public high schools (Tildsley, "Science as a Way of Life," Bulletin of High Points in the Work of the High Schools of New York City, October, 1928) may do so by sending six cents postage to Dr. R. C. Benedict, Haaren High School, 10th Ave. and 59th St., New York City.

Dr. Benedict, who has sent to SCIENCE the information given above, reports that he has checked over the recently issued volume of Proceedings of the American Association for the Advancement of Science and finds that 125 members of the New York Association of Biology Teachers are members of the association.

PERMANENT SCIENCE FUND

A NEW fund the income of which will be available for advancing scientific research has recently been established in a manner sufficiently novel to be of interest to scientific men and to those who may contemplate gifts to science.

By an agreement and declaration of trust made September 5, 1928, the Boston Safe Deposit and Trust Company has agreed to receive and hold in trust gifts or bequests which shall be made to it as trustee of the Permanent Science Fund. The financial administration of the fund will be by the Boston Safe Deposit and Trust Company. The income will be paid over to the American Academy of Arts and Sciences which has undertaken to disburse the money in the aid of scientific research.