May 4. "Drug plants and their cultivation," by Dr. H. H. Rusby.

May 11. "How to grow fruits in limited areas," by Professor M. A. Blake.

(Exhibition of Flowers, May 11 and 12)

May 18. "Fiber plants and their cultivation," by Lyster H. Dewey.

May 25. "Women as gardeners," by Delia W. Marble.

June 1. "Diseases of garden crops and their control," by Dr. Mel. T. Cook.

June 8. "Insect pests and their control," by Dr. F. J. Seaver.

The following lecture course was given by the Illinois Audubon Society during March. March 9, Ernest Harold Baynes, Meriden, N. H., "Birds in the nesting season." March 16, Norman McClintock, Pittsburgh, Pa., "Moving pictures of wild birds and animals." March 23, Edward Howe Forbush, Boston, Mass., "How birds help to win the war." March 30, Louis Agassiz Fuertes, Ithaca, N. Y., "Birds and their conservation."

IT is related in Nature that the staff of the Natural History Museum, London, has been of assistance to various public departments in connection with the war. The following are examples of some of the questions which its members have been asked to answer: (1) nature of some organisms which caused blocking up of certain sea-water pipes; (2) as to some mite-infested oats at the front; (3) application of a remedy for the rice weevil in connection with the disease of beriberi; (4) as to methods of destruction of bedbugs; (5) the identification of specimens of larvae found in drinking water; (6) nature of wood used in the construction of a propeller of a Zeppelin brought down in this country; (7) inquiries as to certain wood stated to possess luminous properties; (8) questions arising out of the Canadian commission to consider the alleged depredations of sea lions on the Pacific coasts of North America, in connection with the fishing and canning industries; (9) identification of certain animal forms of tinned food, such as Pacific lobsters, sardines or sprats; (10) the identification of poisonous fishes in the West Indies; (11) the sponge fishery in the West Indies, and (12) the introduction of reindeer and other animals into South Georgia.

The Osiris prize of the value of \$20,000 was founded for the recognition of the most impartant discovery or work in science, letters, arts, industries, or generally anything for the public benefit. The prize has been held in abeyance since the beginning of the war, but the Institute of France has decided to make an award this year.

Professor Henry Chandler Cowles, of the department of botany at the University of Chicago, recently gave the annual address at Iowa State College for the national honorary societies Phi Kappa Phi and Gamma Sigma Delta.

The Royal Society of Canada recently closed its thirty-seventh yearly meeting at Ottawa, Canada. There was an unusually large number of papers presented in all sections of the society, including those in the mathematical, physical and chemical, as well as the biological and zoological sciences. Abstracts of papers and discussions are expected in a forthcoming issue of SCIENCE.

It is announced in *Nature* that Mr. W. B. Randall of Waltham Cross, has generously provided funds for the establishment of a new research post at the Rothamsted Experimental Station, and the committee has appointed Mrs. D. J. Matthews (formerly Miss Isgrove) to occupy it. Mrs. Matthews will devote herself to the study of some of the problems connected with soil sterilization as it is now being carried out in certain types of nurseries.

On the initiative of Professor Gradenigo stations of psycho-physiological research on the effects of aviation have lately been founded at Turin and Naples. They are chiefly intended for the examination of candidates for service as air pilots.

UNIVERSITY AND EDUCATIONAL NEWS

Congress has passed a vocational training bill which, carrying an appropriation of \$2,000,000, provides for an elaborate system of educating soldiers in trades. It provides for the teaching of more than 300 vocations. While a soldier is undergoing training he is to receive army pay; he is free to accept or reject the training.

Dr. William Allan Neilson was installed as president of Smith College on June 13. Because of war conditions other educational institutions were not asked to send representatives.

B. R. Buckingham has been appointed head of a bureau of research which forms a part of the newly established college of education of the University of Illinois.

Dr. A. R. Bailey, assistant professor of engineering at the University of Michigan, has resigned.

During the past year Professor Leo F. Rettger, of Yale University, gave the course of lectures in general bacteriology at Wesleyan University which for many years was one of the regular courses conducted by the late Professor H. W. Conn.

DISCUSSION AND CORRESPONDENCE MEADE COTTON

This name has been given to a new Upland long-staple variety representing the nearest approach to Sea Island cotton in length and fineness of fiber. The original selection was made in 1912 at Clarksville, Texas, in a field of a variety locally called "Blackseed" or "Black Rattler," but not the same as the varieties that have borne these names in other parts of the cotton belt. The possibility of securing from this stock an Upland variety that would rival the Sea Island in length and fineness of staple appealed very strongly to Mr. Rowland M. Meade, at that time an assistant in cotton breeding in the Bureau of Plant Industry, and his enthusiasm now appears fully justified by the results of the work that he began.

Three generations of progenies from select individuals had been raised and a superior stock had been separated before the sudden and untimely death of Mr. Meade at San Antonio, Texas, in June, 1916, at the age of twenty-seven. The new variety has been called Meade as a tribute of personal regard of his associates, and to commemorate his services as a plant breeder. Though his work

ended at an age when men are supposed to be prepared only to begin such investigations, he had studied cotton intensively for more than a decade and had made notable contributions to our knowledge of the habits of the plant and to the breeding of superior varieties.

Brief statements regarding the Meade variety have appeared in the current annual reports of the chief of the Bureau of Plant Industry and of the chief of the Bureau of Markets. Tests of the strength and spinning qualities of the fiber have given favorable results, so that the possibility of substituting this type of cotton for corresponding lengths of Sea Island is definitely indicated. The length of staple equals or may slightly exceed much of the "mainland" Sea Island crop of Georgia and Florida, Meade fiber under favorable conditions being usually about 11 inches, seldom falling below 17, and sometimes attaining 13. There is little tendency to "butterfly," that is, to shorten the fibers at the base of the seed, which was one of the undesirable traits of the older long-staple varieties, such as Floradora, Sunflower and Allen.

When compared with Sea Island in adjoining rows or plots, the cultural superiority of the Meade cotton is clearly shown. It produces earlier and more abundant flowers, the bolls are nearly twice as large, a heavier crop can be set in a short period, and the fiber matures in advance of the Sea Island, all tending to avoid damage by the boll weevil. Even when a large proportion of the buds or young bolls are shed, as a result of severe weevil injury or other unfavorable conditions, the Meade rows often yield two or three times as much as the Sea Island. And since buyers are accepting the Meade fiber as practically equivalent to the Sea Island the advantage to the farmer is clear. Some of the 1917 crop of Meade cotton was sold for 73 cents on the Savannah market.

Substitution for the Sea Island is also facilitated by the fact that the seeds of the Meade cotton do not have a dense covering of fuzz like most of the Upland varieties, but are naked on the sides like the seeds of the Sea Island and Egyptian cotton, so that it is pos-