DR. JAY FRANK SCHAMBERG, professor of dermatology and syphilology at the Graduate School of Medicine of the University of Pennsylvania, died on March 30, at the age of sixty-three years.

DR. CHARLES WENDELL TOWNSEND, formerly specialist in obstetrics and children's diseases in Boston, known for his work in ornithology, died on April 3 in his seventy-fifth year.

DR. FRANCIS GARNER MILLER, dean of the School of Forestry of the University of Idaho since 1917, died on March 8, at the age of sixty-three years.

SYDNEY HOWARD VINES, emeritus professor of botany at the University of Oxford, died on April 5 at the age of eighty-four years. Professor Vines was Sherardian professor of botany and fellow of Magdalen College from 1888 to 1919.

# SCIENTIFIC EVENTS

## THE ROTHAMSTED EXPERIMENTAL STATION

A LETTER to the London *Times* for March 19 calls attention to the fact that the work of the Rothamsted Experimental Station at Harpenden is threatened by the encroachment of the builder. The letter is signed by Devonshire, chairman of the Society for the Extension of the Rothamsted Experiments; F. Gowland Hopkins, president of the Royal Society; Stradbroke, president of the Royal Agricultural Society; Stanley O. Ratcliff, president of the National Farmers' Union; Clinton, chairman of the Lawes Agricultural Trust Committee; A. D. Hall, scientific adviser to the Ministry of Agriculture; E. J. Russell, director of the Rothamsted Experimental Station.

The station was founded in 1843 by John Bennet Lawes, the squire of Rothamsted, with whom was associated Joseph Henry Gilbert, chemist, and for many years it was carried on at the expense of the founder. Before he died he set up a trust to continue the work, endowed it with £100,000 and the use for 100 years of the experimental plots that had even then become classical.

The letter is quoted in part below:

> It is the special feature of these field experiments that they have been carried on without essential change ever since they were started some 80 to 90 years ago. From the outset various measurements and records have been systematically taken and the work was so well planned that the mass of data now accumulated forms a veritable treasure-house for the agricultural experimenter because it is found to provide material for the elucidation of all sorts of agricultural problems far removed from those in the minds of the founders.
>
> Much of the farm has been "zoned" for houses: it now has a prospective building value. The several agreements under which the land has hitherto been held from the estate no longer afford any certainty of continuity; and the only possible way of averting the impending danger is for the Lawes Agricultural Trust itself to acquire the estate, including the Manor House. A purchase price of £30,000 has been agreed between Sir Edwin Savill, acting for the trust, and the Public Trustee, acting for the estate, but the offer is open for a short time only. The trust has no accumulated reserves, its whole income going on the maintenance of the work. The Development Fund for the present is not available. Meanwhile the time is short and the urgency great. We venture therefore to appeal through you to some generous donor or donors to come forward and save these famous and invaluable field experiments and thus allow the workers to continue their investigations in peace and security.

## FIRST INTERNATIONAL CONGRESS OF ELECTRO-RADIO-BIOLOGY

FOR the purpose of instituting among physicists, chemists, biologists, naturalists and physicians a close and profitable collaboration which is indispensable for the advance of radio-biology considered not as a branch of radiology or of biology but as a separate science, the International Society of Radio-Biology is now organizing the first International Congress of Electro-Radio-Biology. The congress will bring together for the first time those whose studies are concerned with matters having a direct or indirect relation with the subject. The congress will take place in Venice in September under the presidency of H. E. Count Volpi di Misurata, Minister of State.

An Italian correspondent writes: All subjects concerning oscillatory and corpuscular phenomena in relation to biology will be under review, including supersonics, electric waves, light of different wave-lengths, radium, penetrating radiation and its probable influence on organic matter and living organisms, photodynamic action, long-distance action of metals, Gurwitsch rays, luminescence, radiation of radio-active salts in organic combinations; electric states of the atmosphere; spectrography; influences of radiation on heredity, etc. These subjects will be treated by specialists.

Following lectures by leading investigators there will be discussions of a more strictly radio-biological nature.

The following scientific men are expected to be present:

Emil Abderhalden (Halle, A. S.); Belak (Budapest); Brunetti Rita (Cagliari); Arthur H. Compton (Chi-

cago); Coolidge (Schenectady, N. Y.); Ducceschi (Padova); Otto Glasser (Cleveland); Gola (Padova); Gurwitsch (Leningrad); Haskins (Schenectady, N. Y.); Magrou (Paris); Marinesco (Bucharest); Nadson (Leningrad); Nemenow (Leningrad); Palmieri (Bologna); Perussia (Milano); Pincussen (Berlin); Pugno-Vanoni (Padova); Rahn (Ithaca, N. Y.); Raman (Bangalore, India); Reche (Leipzig); Roffo (Buenos Aires); Rossi Bruno (Padova); Swend Lomholt (Copenhagen); Stempell (Münster); R. W. Wood (Baltimore).

Detailed information can be obtained from The International Society of Radio-Biology, care of Dr. Giocondo Protti, Venice, Italy, Canal Grance—S. Gregorio 173.

## THE FEDERAL FOREST HOLDINGS IN THE EAST

PURCHASE of large areas and initiation of a policy of rapid expansion of Federal forest holdings in the eastern half of the United States signalize the year 1933, according to the annual report of the National Forest Reservation Commission.

The report shows that 667,314 acres of forest land were approved by the commission for purchase, and 163,042 actually acquired by the government in the fiscal year 1933. Approximately 2,000,000 additional acres have been approved for purchase since July 1 and, under terms of the contracts, Forest Service protection and management have already been extended to cover much of this area. Thousands of Civilian Conservation Corps and Public Works Administration workers have been employed on the new purchase units.

Forest land purchases by the Federal Government during the last fiscal year took place in 37 units in 20 states east of the Great Plains. Most of the 438 tracts approved were small acreages, ranging from 50 to 1,000 acres. The average price was $1.83 per acre. The average cost of lands actually acquired was $4.10 per acre compared to an average of $4.55 per acre for all land bought in previous years. These purchases brought the national forest lands acquired or approved by purchase in the east and south up to 5,386,936, of which 4,532,698 acres had been fully acquired. Acreage approved in 1933 exceeded that of any previous year.

Congress provided only $180,278 for federal forest land purchase for 1933, and a cessation of the acquisition program seemed inescapable. Late in the year, however, an executive order of the President, allotting $20,000,000 for the purchase of additional lands, will allow six to eight million additional acres to be added. It is now expected that purchasing will progress at the rate of half a million acres per month.

These purchases will nevertheless fall far short of meeting a critical situation, according to the report. There are approximately 163,000,000 acres of land in the eastern forest zones where serious soil erosion is combined with major watershed influence. The long-established program of national forests east of the Great Plains, where the objectives of watershed protection and timber production are so important, eventually should embrace, it is said, at least ten times the acreage now in federal ownership.

The gross area of all the national forests and national forest purchase units in the eastern half of the country existing at the end of the fiscal year was 16,589,387 acres, of which about 54 per cent. were in government ownership or being acquired. These figures do not take into account new purchases approved and new units formed since July 1.

Net appropriations for purchase of forest lands in the east from 1910 to 1933 amount to $25,216,139. The $20,000,000 allotted by executive order after the end of the fiscal year brings the total amount up to $45,216,139.

The year marked the first purchases in Kentucky, in the newly-formed Cumberland unit. First purchases were also made for the Evangeline unit in Louisiana. During the current fiscal year, new purchase units have been established in Illinois and Missouri.

Members of the National Forest Reservation Commission are the Secretaries of War, Interior and Agriculture; Senators Keyes, of New Hampshire, and George, of Georgia, and Representatives Doxey, of Mississippi, and Woodruff, of Michigan. John E. Burch, of the U. S. Forest Service, is secretary.

## EXHIBITS IN PHYSICAL ANTHROPOLOGY AT THE FIELD MUSEUM

A SERIES of exhibits illustrating various phases of race biology or physical anthropology is being added to Chauncey Keep Memorial Hall of the Field Museum, Chicago. The first five cases of this series have now been completed and installed in the hall.

One of the new exhibits shows the various criteria employed by anthropologists to compare and distinguish racial characteristics. Examples of round-headed and long-headed skulls are included in it, together with a map indicating the distribution of types of head form. Charts show cranial forms, age changes and racial differences in skulls, differences in the outlines and proportions of the body due to race and sex, variations in the shape of eyes, nose, chin and lips, and age changes in teeth. Distribution of races according to skin color and types of hair is shown on maps. Samples of hair from the various groups, several types of ears and the disarticulated skeleton of a new-born child complete the contents of the case.

In another case, casts made from living subjects, accompanied by photographs, illustrate differences in