

cago); Coolidge (Schenectady, N. Y.); Duceschi (Padova); Otto Glasser (Cleveland); Gola (Padova); Gurwitsch (Leningrad); Haskins (Schenectady, N. Y.); Magrou (Paris); Marinisco (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

hands and feet among various peoples, due to specialized uses. A graphic portrayal of the main divisions of the human race is presented in another case by means of thirty-seven photographs of the more important types, arranged geographically, with their suggested basic relationships indicated. Skulls of a number of these types are also exhibited.

A fourth case is devoted to the methods of head and body deformation practised by many peoples. These include scarification, tattooing, binding of feet, artificial deforming of skulls, filing of teeth, piercing of noses with such things as bone pins, stretching of the neck by encircling it with metal rings placed one above the other, increasing the size of the lips by the insertion of wooden disks, and other acts to produce a grotesque appearance.

In the fifth case is a series of endocranial casts of brains of monkeys, apes, other animals and various modern peoples. These are accompanied by drawings illustrating the location of the brain, the areas associated with the various functions, racial types of skulls and the position of the bones inside the body. The operation of trepanning, as practised by various peoples over thousands of years, is illustrated by skulls showing the hole in the skull bone. The piece of bone thus removed was often worn as an amulet by prehistoric peoples.

#### THE AMERICAN TYPE CULTURE COLLECTION

IN 1925 the American Type Culture Collection, originally maintained by the American Museum of Natural History and temporarily at the Army Medical Museum in Washington, was established in the McCormick Memorial Institute in Chicago. It is administered by a committee representing the Society of American Bacteriologists, the American Phytopathological Society, the Society of Pathologists and Bacteriologists, the Society of American Zoologists and the McCormick Institute.

The collection maintained at the McCormick Institute contains at the present time about 1,300 cultures representing all branches of bacteriology. In addition, connections have been established with other laboratories which have made a large number and variety of bacteria, yeasts and fungi available for distribution.

In the nine years that the collection has been under the present management over 34,000 cultures have been distributed. The greater part of these have gone to institutions mostly for teaching purposes, but the calls for cultures for industrial purposes have increased materially. The collection has been able to be of additional service by obtaining cultures for special purposes from laboratories in this country and Europe.

The collection was established on a limited grant

from the Rockefeller Foundation, but since the expiration of this fund it has been supported by the income from the sale of cultures supplemented by a small grant from the Society of American Bacteriologists and a few contributions from industrial companies. Under these conditions it has been necessary to exercise rigid economy in the management of the collection, but this has been done without any serious impairment of its efficiency and only a small reduction in the number of available cultures.

At the same time it was necessary to increase the price of cultures and this has, as would be expected, caused a falling off in the number of cultures sold. The depressed business conditions have also affected their sale adversely, but in spite of these unfavorable conditions nearly 3,000 cultures were distributed in the past year and the committee was able to meet all obligations and finish the year with a small balance.

It has never been the desire of the committee to make the collection self-supporting. It is believed that a more useful purpose can be served by maintaining a larger collection, including those species for which there is not enough demand to make their maintenance profitable. It is the aim of the committee to make available to the investigator and teacher authentic cultures of the greatest range possible of bacteria, yeasts and fungi. When funds are available protozoa will be added.

Since, under present conditions, it seems possible to provide this service only through the sale of cultures, it is hoped that those interested will call the attention of their friends and correspondents to the service offered by the collection, which may be addressed at 637 South Wood Street, Chicago, Illinois.

#### THE CHICAGO FIELD CONFERENCE ON EARTH HISTORY

WITH a field trip on Saturday, May 12, in the region south of Chicago, the State Geological Survey will inaugurate its fifth annual series of earth history field conferences for science teachers of Illinois.

Six of these trips are given in various parts of the state each year as a free extension service, hundreds of people participating in these educational excursions.

During 1933 more than 700 teachers and others interested in natural science attended trips held in the vicinities of Kankakee, Gibson City, Macomb, Belleville, Granville and Galena. The Galena trip, held in October, attracted 258 persons.

The excursions are planned and conducted by geologists on the staff of the Geological Survey, and supply authoritative information on the geology, geologic history, physiography and mineral resources of local areas throughout the state.

All the trips are held on Saturdays and begin at