

The annual losses because of the attacks on growing and stored crops by insect pests and plant diseases are enormous despite all that has been done to lessen them. A conservative estimate of the loss of wheat in the United States in a single recent year because of the black stem rust is 180,000,000 bushels, and this pest is but one of the many that attack the wheat every year. What is needed is a combination and concentration of attack on these pests. The new Crop Protection Institute will help to bring this about. It is not intended that the institute will interfere with or duplicate existing efforts now being made by government bureaus, state experiment stations and other agencies to fight crop pests, but that it will introduce a more general co-operation in the work and give special attention to filling important gaps that now exist in it.

The National Research Council has issued a list of references to investigations upon the production of corn and its uses, prepared by M. Helen Keith, of the Illinois Agricultural Experiment Station. The list includes over 1,300 articles which have been published within recent years in this country and abroad. These investigations cover a wide range of problems such as the breeding and growing of corn as affecting its yield and nutritive qualities, the curing of corn and the preparation of silage, the systematic feeding of farm animals, the physiology of corn nutrition, including its relation to pellagra, the chemical composition of corn, and the extraction of such products as iodine, chloroform, oils, alcohol and benzine. Altogether the list shows that the scientific investigation of all phases of corn problems has become exceedingly extended and important.

THE PROPOSED EXPEDITION TO ASIA OF THE AMERICAN MUSEUM OF NATURAL HISTORY

ANNOUNCEMENT has been made of an expedition to be sent out by The American Museum of Natural History in cooperation with the American Asiatic Association and *Asia Magazine*, the object of which is to search for the most primitive human remains. It will

work for five years in various remote regions of central Asia and will be under the direction and leadership of Mr. Roy Chapman Andrews, associate curator of mammals in The American Museum of Natural History, who for the last ten years has been carrying on zoological explorations in various parts of the Far East. The expedition will be financed by a fund of \$250,000, which is being provided by The American Museum of Natural History, The American Asiatic Association and *Asia Magazine*, and the private subscriptions of Mrs. Willard Straight, Messrs. J. P. Morgan, George F. Baker, Childs Frick, W. A. Harriman and Mr. and Mrs. Charles L. Bernheimer.

In the year 1891, a Dutch army surgeon, Eugene Dubois, while excavating for fossils in central Java, discovered near Trinil part of a skull, two molar teeth and a thigh bone. This discovery has been supplemented by that of other indisputably human remains of which the most ancient, found in southern Germany, is the jaw of the so-called Heidelberg man who may be two hundred and fifty thousand years old.

With the exception of the Java specimen, all fossil human fragments have been discovered in Europe or England. It is, however, believed, that whatever light may be thrown upon the origin of man will come from the great Asian plateau.

Leaving about the first of next February, headquarters for the expedition will be established in Peking. The first year will be devoted to studies in paleontology and zoology in China; the second year the work will be carried into Mongolia and a geologist will be added to the field staff; the third, fourth and fifth years archeologists and anthropologists will be sent out who with the zoologists and paleontologists will carry on work in various parts of Asia.

The importance of this region long has been recognized, but no systematic study on a large scale ever has been attempted, and there is no similar area of the inhabited surface of the earth about which so little is known. Whether or not human remains are found it

will yield rich collections in all branches of science.

The material will be exhibited in the proposed Hall of Asiatic Life in The American Museum of Natural History, which it is hoped the city will add to the museum buildings in the near future, and it is hoped that this expedition will make New York the center of Asiatic scientific activity.

The scientific results of the Third Asiatic Expedition will be embodied in a series of volumes that should be, for many years to come, the standard work on the natural history of Central and Eastern Asia, and also in popular books written in non-technical language. Furthermore, the public will be regularly informed of the whereabouts and the activities of the members of the expedition, for articles written in the field will be published in *Asia Magazine*.

Those responsible for the expedition desire to make it a factor in the development of the educational life of the Chinese Republic. China has no institution wherein natural history objects can be studied and exhibited by modern methods and where the scientific work of her own people can be encouraged and directed. It has therefore been decided to invite the Chinese government to cooperate with the expedition in carrying on its work in the Orient. China will be invited to delegate to the expedition certain men who have had already preliminary instruction in various branches of science; under specialists these men, while in the field, will receive training in modern methods of scientific exploration and study.

When the expedition has been completed, it has been agreed to deposit in Peking a duplicate set of the collections, which will form the basis of the Chinese Museum of Natural History. The proposed institution will then have a valuable nucleus of specimens for exhibition and study and a staff of expert Chinese to carry on the work. It will remain for the government to set aside a suitable building where the collections can be housed.

THE THOMAS A. EDISON PRIZE

THE most meritorious research on "The effects of music" submitted to the American Psychological Association before June 1, 1921, will be awarded a prize of \$500.

This sum has been placed at the disposal of the association by Thomas A. Edison, Inc. It is the wish of Mr. Edison and his associates to direct attention toward the importance of research in the psychology of music. They point out that we have to-day all too little scientific understanding of the effects, both affective and volitional, which contrasted sorts of musical selections produce on listeners of differing native endowments and training, under varying conditions of mood, season and physical condition.

Researches brought to completion during the present academic year may be submitted in competition for the Thomas A. Edison prize. Manuscripts may be sent at any time before May 31, 1921, to the undersigned, who will transmit them, without the names of the authors, to the members of the committee of award, to be designated by the American Psychological Association. Manuscripts should be submitted in form for publication.

The following topics are suggested as suitable, but the choice of subject is not limited to this list. The committee will welcome any research bearing directly on the nature of music and the way it influences people.

Classification of musical selections according to their psychological effects.

Individual differences in musical sensitivity.

Types of listeners.

Validity of introspection in studying affective responses to music.

Modification of moods by music.

Effects of familiarity and repetition: Emotional durability of various types of selections.

Effects of contrasting types of music on muscular activity.

Other objective (physiological) measurements of effects of musical stimuli.

An experimental study of music as an aid in synchronizing routine factory operations.

The problems proposed for investigation are indeed complex, the conditions extremely vari-