editions of Adams's books. The firm also continued to make instruments to the Adams design for many years.

The manuscripts and plates of Adams the elder were inherited by his widow, who gave them to her younger son Dudley. He edited a thirtieth edition of the "Treatise on the Globes," published in 1810. It is said that he had intended to publish another edition of the "Micrographia Illustrata," but it is not improbable that the revised edition (1798) of his brother's "Essays on the Microscope" rendered this unnecessary. Dudley Adams appears to have continued in the instrument business, as Mr. Court possesses a statement written on the back of a shop print, about 1800, of the wholesale trade terms for telescopes. These were evidently of the short brass draw-tube type which Dudley Adams had developed. The note attached to the price list states that "the object glasses not being single but achromatic" shows that non-achromatic glasses were sometimes sold.

Time has only allowed me to dwell in detail on four instrument makers in this century so full of scientific development. Their names are not so well known to the general public as those of Doliond, Herschel and Ramsden. Nevertheless the men whose work I have briefly described did an immense amount to popularize science and to raise the standard of scientific instrument craftsmanship. How world-wide this reputation for good work became is best seen by the number of instruments of English eighteenth century workmanship treasured in the Continental museums.

SCIENTIFIC EVENTS

THE INTERNATIONAL VETERINARY CONGRESS

THE International Veterinary Congress, which met in London during the first week in August, passed resolutions covering most of the subjects discussed on the previous days.

Delegates decided to accept the invitation of the American Veterinary Medical Association to hold the next congress in the United States in 1934, probably at Boston. Cheers greeted the announcement that the Budapest Prize, a gold medal, richly wrought, which was instituted when the congress met in that city, had been awarded to Professor Hutyra and Professor Marek, of Budapest, for the best work on veterinary science since the last congress. This consisted of a revised edition of a volume on the "Pathology of the Internal Diseases of Domesticated Animals." Professor Hutyra, who responded on behalf of himself and his colleague, is president of the permanent committee of the congress, rector of the Royal Hungarian Veterinary High School, and a member of the Upper House, Budapest.

Resolutions were carried with acclamation thanking the British Government and many individuals for their hospitality to delegates, and to Sir John McFadyean, of Leatherhead, for presiding. It was decided to increase the personnel of the permanent commission from 25 to 40.

In a resolution on foot-and-mouth disease, the congress urged that every country should determine the type of virus present in each outbreak. The most efficient disinfecting agents were moist heat and sunlight, and the chemical agents potassium, sodium hydrate and formalin. The value of passive immunity, according to the resolution, had been established, and its use in practice under favorable circumstances should be encouraged. It was desirable that all possible efforts should be made to discover an efficient method of active immunization.

The wide-spread occurrence of infectious abortion of cattle in all civilized countries led the congress to suggest an international scientific investigation within the purview of the International Bureau for Animal Diseases in Paris. The congress recommended the creation of a special section for meat and milk in the next congress. It also emphasized the necessity of state regulation for the control of the health of domestic animals, and for the title of veterinary surgeon to be protected by a recognized diploma.

The next resolution expressed the view that sufficient knowledge of practicable methods was now available to eradicate rinderpest within a reasonable period of time in any country which would provide adequate facilities for their application, and the congress urged all governments to cooperate to this end.

Resolutions were also carried concerning the teaching of zootechnics; the need for establishing in every country an organization similar to the German for combating diseases of the new-born animals, and the urgency for drawing up rules for the control and standardization of veterinary biological products.

INTRODUCTION INTO THE UNITED STATES OF PLANTS RESISTANT TO DISEASE

A STATEMENT given out by the U. S. Department of Agriculture states that two explorers of the department, H. L. Westover and K. A. Ryerson, are in North Africa looking for wilt-resistant alfalfas and fruits adapted to the United States. They will later continue their exploration in Spain.

Mr. Westover, a forage crop specialist, is now making preliminary surveys in the principal alfalfa-

growing districts of Morocco, Algeria and Tunisia, in order to return to Spain for the first portion of his collection trip. He will return later to these countries to collect the seeds from the harvest which is not yet ready. He made a similar exploration in southwestern Asia, the heart of the alfalfa district, last year, and brought back many varieties of alfalfa now being tested by the department for wilt resistance.

Mr. Ryerson, head of the Office of Foreign Plant Introduction, is looking for varieties of peaches and other fruits that will be of value in this country. He seeks particularly to recover some American varieties of peaches that have disappeared from production in this country after having become established abroad. He originally planned to join Dr. Frederic T. Bioletti, professor of viticulture at the University of California, who has been conducting an exploration for grapes and apricots for the department and the university in North Africa.

Professor Bioletti's illness has caused some alteration of these plans, so that Mr. Ryerson will have to take charge of the completion of his work. The preliminary work in connection with apricots has been completed, and there remains only the harvest of the seeds and scions. The grape work has not reached so advanced a stage but it is well under way.

Four or five years ago bacterial wilt appeared in the heart of the alfalfa belt and threatened to exterminate this crop. The San Joaquin Valley of California has suffered heavy losses from wilt. Losses in Kansas in 1927–28 amounted to about 15 per cent. and for the last three years in Iowa and Missouri to about 25 per cent. In Minnesota, Nebraska and Missouri wilt has worked hand in hand with crown rot, combining to bring losses up to 50 per cent. of the crop. In Colorado it is the most destructive disease of alfalfa, one field suffering loss of 80 per cent. of the plants. Wherever prevalent, wilt has done its greatest damage in humid climates and on irrigated lands.

THE NATIONAL INSTITUTE OF HEALTH

THE National Institute of Health has issued the following statement:

By the act of Congress approved May 26, 1930, entitled "An act to establish and operate a national institute of health, to create a system of fellowships in said institute, and to authorize the government to accept donations for use in ascertaining the cause, prevention and cure of disease affecting human beings, and for other purposes," the Hygienic Laboratory will hereafter be known as the National Institute of Health of the United States Public Health Service. The author of this measure was Senator Joseph E. Ransdell, of Louisiana.

The general purposes of the act are to provide large facilities for investigations of diseases of man and matters pertaining to the public health, to encourage research and the training of individuals engaged therein, to enable the government to accept bequests in aid thereof, and to bring about cooperation with scientific institutions in the prosecution of research work.

Public health investigations by the Public Health Service were first authorized in 1901. Since then substantial progress has been made and many new facts have been discovered which have had an important bearing on the prevention and control of disease. The necessity for this work far outstripped the facilities for its conduct. Under the above-mentioned authority, these facilities may be greatly enlarged.

In its development the new institute will have the advantage of the traditions of the Hygienic Laboratory. In reality the Hygienic Laboratory becomes the National Institute of Health which, with enlarged facilities, will be devoted to investigations of the underlying problems not only of communicable diseases but of degenerative diseases and environmental conditions affecting health.

In aid of this work the Secretary of the Treasury may hereafter accept gifts to be held in trust and used for the purposes mentioned; the expenditures to be safeguarded in all respects as are other governmental funds. These gifts may also be used for the establishment of fellowships to encourage individual scientists.

Appointments and services under these fellowships will be governed by laws and regulations affecting the United States Public Health Service. Individual ability is the most valuable asset of a people of a country. The object is to encourage postgraduates of extraordinary ability and to aid them to follow permanently their scientific bent in the interests of humanity.

In order that those who make gifts may have a living part in the development of the institute, provision is made whereby donations of $500,000 or over will be acknowledged permanently by the establishment within the institute of suitable memorials.

The Secretary of the Treasury has recently accepted a gift of $100,000 offered by the Chemical Foundation, Inc., through its president, Francis P. Garvan, under the provisions of the act of May 26, 1930, which authorizes the government to accept donations and to create a system of fellowships, etc., in the National Institute of Health. The condition is made that the income from this fund be used for one or more fellowships in basic chemical research in matters pertaining to public health, the details of which are left to the Surgeon-General and his advisory committee. The act provides that conditional