the empire caused by fungoid diseases of plants.

A Canadian estimate places the loss in the year 1917, in the prairie region of Canada alone, at 100,000,000 bushels, worth from £25,000,000 to £50,000,000. For the same year, the loss in the five chief cereals of the United States due to this fungus was placed at 400,000,000 bushels. The annual loss on Indian wheat is estimated in millions of rupees.

A proposal was adopted for the establishment of a central organization to encourage and coordinate work throughout the Empire on fungi in relation to agriculture. The Colonial Office has brought the necessary negotations to a successful issue, and has now formed a mycological bureau supported by contributions from the various self-governing Dominions, India, Egypt, the Sudan, and the nonself-governing Colonies and Protectorates. The precedent of the Imperial Bureau of Entomology has been followed, and the new institution is to be managed by a committee of experts under the chairmanship of Lord Harcourt. The headquarters of the bureau are to be at Kew, and it is to work in close association with the Royal Botanic Gardens, where there are already a magnificent library, laboratories, and a department for fungi in the museum.

CERAMIC INVESTIGATIONS BY THE UNITED STATES BUREAU OF MINES

A NEW ceramic laboratory, in which investigative work regarding the clays of the Northwest will be conducted, is to be installed at the Northwest Experiment Station of the United States Bureau of Mines on the campus of the University of Washington at Seattle.

The laboratory work in connection with a general study of the clays of Washington has been completed, and a bulletin on the subject of Washington clays is now in course of preparation.

At the Northwest Experiment Station an attempt is being made to remove iron and silicon from kaolin to produce either sillimanite or the oxide of aluminum. Clay was

melted in an arcing furnace in presence of carbon; some silicon and iron were volatilized and some reduced to metal. The products contained less iron oxide and silica and more alumina than previously, but not in sufficient amounts to be sillimanite. The refractoriness of these products is to be determined by the ordinary tests.

A cooperative agreement has been effected between the United States Bureau of Mines and the Central of Georgia Railway for an investigation by the Ceramic Experiment Station, Columbus, Ohio, of the white clay and bauxites through central Georgia along the railroad right-of-way. R. B. Gilmore, formerly ceramic chemist with the Vesuvius Crucible Co., Swissvale, Pa., and H. M. Kraner, formerly ceramic assistant of the Bureau of Mines, have been assigned to this work. Preliminary tests on the effects of low calcination temperatures on the colloidal content of Georgia white clays have been made. By calcining Georgia clay to from 500° to 600° C. the adsorptive properties were reduced to those of the English china clay, without materially reducing its plasticity.

A microscopic examination of the mineral constituent of kaolins is being conducted at the Ceramic Experiment Station at Columbus.

THE BIOLOGY CLUB OF THE OHIO STATE UNIVERSITY

DURING the academic year of 1920-21, the Biology Club of the Ohio State University held monthly meetings from October to May, inclusive. The club, organized in 1891, is one of the oldest organizations of the university. It is composed of members of the science faculties, graduate students, and those interested in scientific research. Opportunity has been given the past year for discussions of scientific experimentation and investigation by members of the faculties, and reports of research by graduate students. The following papers were presented:

Oct. 11. Reports on a survey of Ohio fishes.

1. "Distribution of Ohio fishes," Professor R. C. Osburn.

2. "Food of the large mouth bass," E. L. Wickliff.

3. "Algal food of the gizzard shad," L. H.

Tiffany. Nov. 2. "The Hessian fly in Ohio," Professor T. H. Parks.

- Dec. 6. "Some new factor relations in barley," Professor J. B. Park.
- "Effect of environment on expression of characters in hybrid oats," D. M. Lutz.
- Jan. 10. "The vegetation of the Lake Okoboji (Iowa) region" (lantern slides), Professor A. E. Waller. Feb. 14. "The inferior vena cava of man and
- mammals---its abnormalities and their interpretation from the standpoint of their development," Professor C. F. McClure, Princeton University. (Joint meeting with the O Chapter of the Society of the Sigma Xi.) (Joint meeting with the Omega
- 7. 7. "The origin and development of the prairie," Professor H. C. Sampson. 11. "Some measurements of emotional Mar. 7.
- Apr. 11. states," Professor H. E. Burtt. "Parasites on aphids," E. A. Hartley.

- May 2. "Some recent applications of physics to biological problems," Professor Alphaeus W. Smith.
 - "Experimental work with mealy bugs," W. S. Hough.

The president of the club for the year was Dr. C. H. Kennedy, of the department of zoology and entomology; the vice-president, Dr. J. W. Bridges, of the department of psychology, and the secretary, Dr. L. H. Tiffany, of the department of botany.

DR. CARL L. ALSBERG AND THE BUREAU OF CHEMISTRY

In formally accepting the resignation of Dr. Carl L. Alsberg as Chief of the Bureau of Chemistry, Secretary Wallace wrote him as follows:

Permit me, in formally accepting your resignation, once more to express my sincere regret that the government and this department will no longer have the benefit of your services.

Your nine years in the department have been fruitful years. You have attained a leadership in scientific work not alone in this department, but in the larger field seldom reached by men of your years. The tender of the important position which you have accepted is evidence of this.

Your administration of the food and drugs act has been characterized by tactfulness, fearlessness, justice, and common sense, and you have, therefore, commanded the confidence and respect both of those who have come under the law and of the great public whose health you have so zealously protected. Your work in this field has been an inspiration which I hope will continue with us.

It is not often that one attains such outstanding eminence in both research and administrative work.

We shall all miss you here; especially I shall

miss your wise and sane counsel from which I have profited very much in the rather trying task of undertaking to qualify for a difficult and important work. I wish that you might still be within call.

Notwithstanding our regret that you are leaving the department, all of us here rejoice in the opportunity that has opened for you to pursue important research in a field in which you have such a great heart interest. We are expecting much of you; we are confident that you will make large and valuable contributions to the national welfare.

I know that I express the feelings of every one in this department when I say that our very best wishes go with you, and if at times you find that we can be of help in the work you are now undertaking, we shall expect you to call upon us with full assurance of a prompt and sympathetic response.

SCIENTIFIC NOTES AND NEWS

THE American Chemical Society held last week its sixty-second meeting at Columbia University, New York City, under the presidency of Dr. Edgar Fahs Smith, provost emeritus of the University of Pennsylvania. The principal events of the program have already been recorded in SCIENCE and we hope to print in subsequent numbers accounts of the business transacted and abstracts of the papers before the sections.

THE Second International Eugenics Congress meets at the American Museum of History, New York City, next week under the presidency of Dr. Henry Fairfield Osborn, with Dr. Alexander Graham Bell as honorary president. The opening meeting will be held in the Hall of the Age of Man on September 22, when addresses will be made by Dr. Osborn, Dr. Charles B. Davenport and Major Leonard Darwin.

AT the meeting of the British Association for the Advancement of Science, held at Edinburgh from September 7 to 14, a joint discussion before the sections of mathematical and physical science and of chemistry on "The structure of molecules" was opened by Dr. Irving Langmuir, of the research laboratory of the General Electric Company. Others taking part in the discussion were Profes-