knowledge of living things as they are in nature.

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SCIENTIFIC EVENTS

THE BRITISH NATIONAL PHYSICAL LABORATORY

The British Department of Scientific and Industrial Research announces that the report of the National Physical Laboratory for the year 1919 has now been issued. It contains among other matter the report of the executive committee for the year 1919, the statement of work proposed for the year 1920–21, a list of papers published by the laboratory during the years 1917–18 and 1919 or communicated by members of the staff to scientific societies or to the technical journals, and the report of the director for the year 1919.

Some particulars of special work done during the war which it was previously necessary to treat as confidential are included, and the descriptions of such work now given will, it is hoped, be found of interest. This special work includes gauge testing carried out for the ministry of munitions, and a large number of special researches carried out by the electricity and metallurgy department and by the William Froude national tank.

The heads of the various departments give accounts of the recent work of the laboratory as follows:

Physics Department.
- I. Heat:
  - (*a*) High Temperature and General Work,
  - (*b*) Thermometer Testing,
  - (*c*) Oil Apparatus Testing.
- II. Optics.
- III. Radium and X Ray work.
- IV. Tide Prediction.
- V. Library.

Electricity Department.
Metrology Department.
Engineering Department.
Aerodynamics Department.
Metallurgy Department.
The William Froude National Tank.

THE FAIRPORT FISHERIES BIOLOGICAL STATION

The new building will be dedicated on October 7. The formal exercises will be divided into two parts—a forenoon session devoted to the immediate service of the station to industries and an afternoon session to consider the functions of the station in the advancement of science and the possibilities of further economic applications of its work. At each session there will be a principal address and three or four brief talks or messages. The speakers will be men of distinction in science and in public service. Opportunity will be afforded for inspection of the establishment, and, at suitable times to be appointed on October 7 and 8, scientists, state officers and other guests in attendance will be invited to confer regarding its purposes and work.

The reservation is on the Mississippi River, twenty miles below Davenport, and nine miles above Muscatine, Iowa. It comprises 60 acres of ground extending from the bank of the river to an elevation of about 200 feet above the river. Principal buildings are the biological laboratory, tank house, pumping station, hatchery (temporary laboratory), shell-testing plant and cottages. There are two water systems—unfiltered river water with storage reservoir of 2,000,000 gallons capacity and filtered water with gravity sand filter and low and high pressure cisterns. There are thirty-one ponds, of which nine are concrete-lined, while the remainder have walls and bottoms of natural earth.

The former laboratory building, opened in 1914, was of frame construction, about 100 by 50 feet, with two full stories, half basement and attic. It was destroyed by fire December 20, 1917, with the loss of a valuable library and many scientific records and specimens. The new building has the same location and approximately the same external dimensions as the old, but experience gained during occupancy of the first building and the resourcefulness and skill of the architect, have combined to make the new one superior in available space, convenience and serviceability.

The present structure, which is of concrete, stone, and brick, has a fully finished basement besides two full stories and a finished third story over the center and larger portion of the building. The present laboratory accommodations for 16 investigators can be extended by conversion of other rooms into laboratories. A well-lighted library, chemical laboratory, photographic room, museum, tank and aquarium rooms are other useful features of the building.

The architect of the building is James M. White, professor of architecture and supervising architect of the University of Illinois, who freely gave his professional services to the national government.

EXPEDITIONS OF THE BISHOP MUSEUM

THREE parties of the Bayard Dominick Expedition from the Bishop Museum are now in the field. The Marquesas Island party consists of Dr. Edward S. Handy, ethnologist; Dr. Ralph Lauton, archeologist; Dr. Forest B. H. Brown, botanist. E. W. Gifford and Wm. C. McKern are conducting an ethnographic survey of the Tonga Islands. R. T. Aitken and John F. G. Stokes, ethnologists, are undertaking an anthropological study of the Austral Island group. Two additional botanists are to be appointed in October.

The scope of the cooperative work of the American Museum of Natural History and the Bishop Museum, under the direction of Dr. L. R. Sullivan, has been expanded to include a comprehensive anthropologic survey of the people of the Hawaiian Islands. It will include studies of the Hawaiians, Japanese, Chinese, Portuguese, Koreans and Anglo-Saxons. Particular attention will be given to full blood and mixed blood Hawaiians and to skeletal remains in ancient burial caves.

It is announced that the Young Collection of Polynesian ethnological material, the result of twenty years' work in the society, Marquesas, Easter and Paumotu Islands by J. L. Young, has been obtained by the Bishop Museum.

SCIENTIFIC NOTES AND NEWS

SIR F. W. DYSON, astronomer royal, Greenwich, has been elected an honorary member of the American Astronomical Society.

PROFESSOR T. D. A. COCKERELL, of the University of Colorado, has been elected an honorary fellow of the American Museum of Natural History in recognition of his distinguished services to science.

DR. WILLIAM MANSFIELD CLARK, physical and biological chemist at the Dairy Division, Bureau of Animal Industry, U. S. Department of Agriculture, has become head of the chemical division of the Hygienic Laboratory.

DR. AMADEUS W. GRABAU, for eighteen years professor of paleontology at Columbia University, has been called by the Chinese government to a professorship at the University of Peking. He also has been appointed a member of the Chinese Geological Survey. Dr. Grabau will remain for three years in China to build up geological research work for the Chinese government.

MR. JAMES T. NEWTON, commissioner of patents, has resigned, after thirty years of service in the Patent Office.

MR. LESLIE SPIER, assistant in anthropology in the American Museum, has been appointed associate curator of the museum of the department of anthropology in the University of California.

DR. RODNEY B. HARVEY, formerly plant physiologist in the Division of Plant Physiological Investigations, Bureau of Plant Industry, who resigned to accept the position of assistant professor of plant physiology in the University of Minnesota and assistant plant physiologist in the Minnesota Experiment Station, has been retained on the rolls of the bureau as collaborator under a cooperative arrangement.

MR. HOYT S. GALE, who recently returned from Bolivia, has resigned from the U. S. Geological Survey, to take up private work.

BENJAMIN RICHARD JACOBS has resigned from the Bureau of Chemistry, U. S. Department of Agriculture, to become director of the