

SCIENTIFIC EVENTS

THE OCEANOGRAPHIC VESSEL *CULVER*
OF THE BERMUDA BIOLOGICAL
STATION

THE oceanographic vessel *Culver* has arrived at the Bermuda Islands from England for a five-year survey in cooperation with the Bermuda Biological Station and the Woods Hole Oceanographic Institution to measure the oscillation of the Gulf Stream. It is hoped that the survey may help to avert the next great drought in the United States Mid-West, predicting it in time to avert disastrous results to United States farming, and that it may also prove an aid to commercial fishermen in determining movements of fisheries in European waters.

The *Culver* is especially equipped for the Biological Station. It was purchased and refitted with a grant from the Development Commission of Great Britain. Through the Royal Society of London an additional grant may be made for the next five years for the operation of the vessel.

Professor Walter Garstang and Dr. Robert Gurney, of the University of Oxford, spent some time at the Bermuda Biological Station three years ago and returned to England impressed with the possibilities of the station for oceanographic work.

Professor Garstang is reported to have said:

We went back to England with the thought that the English people ought to be told something about the features of the Bermuda colony which they seemed to have forgotten. We told them that Bermuda was a beautiful island perched on a pinnacle in the middle of the most interesting of all oceans, surrounded by deep waters which could be reached within an hour or less from the laboratory. We have been able to prove what we said. We caught a little creature—of no practical importance but very important scientifically—which had been caught only once before on a German ship which made an expedition into the Indian Ocean and southern Atlantic.

When Dr. Garstang and Dr. Gurney first returned they thought that if a small vessel could be obtained to be used more or less as a tender for the station, it would suffice. However, the Royal Society and the Development Commission favored a larger scheme, with the result that an ocean-going vessel was acquired.

The *Culver* is a converted yacht, 83 feet overall, with a beam of 19 feet, 3 inches. A spacious saloon will serve for a wardroom and a laboratory, and there are accommodations for three scientific men, the captain and the engineer, with crew quarters forward. The displacement of the vessel is 100 tons, and she is equipped with a new Diesel engine as an auxiliary to her sails. There is a large winch, operated from the vessel's main engines, for biological work. On the winch's cable is wound 3,500 fathoms of wire. For

the hydrographic work there is an electrically driven winch forward—also with 3,500 fathoms of wire. The larger winch will be used for the nets; the smaller one will be used to let down water bottles in which samples of the ocean and temperatures, at various depths, will be taken.

The *Culver* will begin her work in the Gulf Stream. A double program, consisting of chemical and physical work and purely biological work, is planned. The former will be done in conjunction with the *Atlantis* within an area of sixty miles from Bermuda; the scientific men aboard the *Culver* will investigate local off-shore currents. Quarterly cruises are planned for at least three or four years. The *Culver* will not be away from the station more than a week at a time, as it is necessary to get specimens into the laboratory quickly, and she will not go more than 100–150 miles from the islands. Entirely apart from the local aspects of the work are the hydrographic observations. Probably once a fortnight, but certainly once a month, the *Culver* will go to one or two defined stations, possibly 100 to 150 miles out, on this side of the Gulf Stream.

FARM RESEARCH LABORATORIES OF THE
U. S. DEPARTMENT OF AGRICULTURE

DIRECTORS for the four farm research laboratories to be established by the Department of Agriculture to search for new and wider industrial outlets and markets for agricultural commodities have been announced by Dr. Henry G. Knight, chief of the Bureau of Chemistry and Soils. Dr. H. T. Herrick was recently appointed assistant chief of the bureau, having general supervision of the chemical and chemical engineering work in all four laboratories.

Each laboratory will have a broad circle of important contacts with industries, institutions and agricultural experiment stations. These will be largely in the hands of the individual directors. Included in the laboratory staff, which will be composed of several hundred people, there will be experts in many branches of science and technology, as well as fairly large business and service departments.

Dr. Knight pointed out that "The importance of the scientific studies undertaken in these laboratories demands that the director be a man with a record of successful research achievements plus the ability to inspire work of the highest professional character in others," and that "The men named have shown during their years of service with the department that they possess these desirable qualifications." They are as follows:

Northern Laboratory

The laboratory for the northern area, which includes the states of Illinois, Indiana, Iowa, Kansas, Michigan,