SCIENTIFIC EVENTS

THE ROYAL RESEARCH SHIP "RESEARCH"

THE Royal Research Ship, Research, the non-magnetic vessel which has been built to the order of the British Admiralty, was launched on April 4. According to the London Times, the ceremony was performed by Mrs. H. Spencer Jones, wife of the Astronomer-Royal, in the presence of a large gathering. The religious service customary at the launching of a warship was conducted by the Rev. A. Shell, of Dartmouth. Lieutenant Commander D. H. Fryer, who will be captain of the Research, has received special leave from the Admiralty to make a voyage to Australia in one of the few remaining grain ships to gain experience of sailing ships in preparation for his new work.

In the meantime, the *Research* in brigantine rig will have made a voyage under sail to the United States to show herself to the Carnegie Institution, which was responsible for twenty years of similar work, and to begin her work where the American research ship *Carnegie* left off.

The heavy-oil engines, made by Petters, Limited, have been in course of construction for three years and are of bronze and aluminium—unfamiliar materials in Diesel engines—and much time has been taken and a great deal of money has been spent in obtaining satisfactory substitutes for the steel and iron which more generally go to the making of heavy-oil engines.

The task allotted to the *Research* demands that she shall be virtually non-magnetic. She has been built practically without iron or steel fittings. There are no steel cables. The cooking utensils are of aluminium. The baths are of teak. The ship's company of thirtyone persons will be required to submit their clothing and gear to inspection so that they may not take unwittingly on board any metal buttons or other possessions likely to affect the delicate magnetic instruments. With the engines likewise, it has been necessary to secure for them iron constitutions without using the ordinary magnetic iron and steel.

From 1909 to 1929 work was done on the *Carnegie*, which took readings and compiled records. That work still remains to be finished. The new wooden ship, with her non-magnetic engines, gear and, in the strictly physical sense, crew, will work in all the oceans, from the edge of the ice in the north to the edge of the ice in the south. She will endeavor to cross the tracks of the *Carnegie* where that ship recorded observations, and will make parallel records for comparison. The work may take a decade or more.

During the past three years the work of making four non-magnetic engines, three of which are for auxiliary duties, has proceeded. The fourth engine, which drives the propellers, develops 160 h.p.

The Research is a 770-ton sailing ship rigged as a

brigantine with auxiliary engine. She will gather data on magnetic variation on behalf of the Admiralty, and the charts compiled will be made available to all nations in the interests of safe navigation for ships and aireraft. In the event of war the *Research* would carry letter of marque, signed by the Powers to protect her from attack. For her construction Booth and Company, of Birmingham, have supplied some of the heaviest non-ferrous sections produced by extrusion.

THE PUGET SOUND ENTOMOLOGICAL SOCIETY

ENTOMOLOGICAL workers in western Washington gathered at the University of Washington, Seattle, on March 10 and organized the Puget Sound Entomological Society. The objectives of the society are to promote the study of insects, arachnids and terrestrial arthropods in western Washington, and to promote the mutual welfare of the members through the exchange of ideas at meetings and field trips. Membership is open to persons of good character who are engaged in entomological activities. The society will hold two regular meetings annually, in February and October, the precise time and place to be determined by the executive committee, which is composed of three elective officers. The present officers are: Professor Trevor Kincaid, University of Washington, president: S. E. Crumb, entomologist, Bureau of Entomology and Plant Quarantine, vice-president, and Dr. E. P. Breakey, entomologist, Western Washington Special Experiment Station, secretary-treasurer. meetings may be called by the executive committee at such time and place as it may determine.

The organization of the Puget Sound Entomological Society was the result of a movement initiated in the autumn of 1938 by Dr. Breakey. Thirty-two persons with entomological interests, both professional and amateur, gathered in Puyallup on November 18, 1938. Many spent the afternoon visiting the Western Washington Experiment Station and the U.S. Bureau of Entomology and Plant Quarantine Field Stations in Puyallup and Sumner. In the evening the group gathered for dinner, after which a discussion was held on the desirability of forming a permanent organization. Dr. Breakey was elected provisional chairman and Charles F. Doucette, Bureau of Entomology and Plant Quarantine, Sumner, provisional secretary. The chairman appointed a committee on organization, Professor Melville H. Hatch, University of Washington, chairman, to present a constitution and by-laws for discussion and approval at the next meeting. A nominating committee, W. W. Baker, Bureau of Entomology and Plant Quarantine, chairman, was also appointed. The October meeting is to be held in Puyallup.