

## SCIENTIFIC EVENTS

### THE BRITISH NON-MAGNETIC ROYAL RESEARCH SHIP

FURTHER particulars of the royal research ship, to be called *The Research*, which is now being built at Dartmouth by Philip and Son, Limited, to the designs of Sir Stanley Goodall, director of naval construction, have been released by the British Admiralty. According to a report in the *London Times*, this vessel is to carry on the international work of investigation performed by *The Carnegie*, of the Carnegie Institution of Washington, which was destroyed by fire at Samoa about nine years ago. The report calls attention to the generous help afforded by the Carnegie Institution in the loan of personnel and the specifications of *The Carnegie* and the instruments used in her.

Although authorized over three years ago, *The Research* is of such an unusual design that her construction has taken much longer than that of a normal ship. She is to cost about £188,500. The principal object in building her is to investigate the problems of the variation of the earth's magnetic field and atmospheric electricity. It is therefore essential that she should be virtually a non-magnetic ship, and the greatest care is being taken to eliminate, as far as possible, all ferrous material from the hull, machinery and stores.

Much research work was carried out by Messrs. Petters at their Yeovil works in order to reduce the quantity of steel in the Diesel engines. A bronze alloy is being used extensively, and the crankshaft is of special non-magnetic steel. Consideration is also being given to such matters as iron nails in packing cases, tin containers for food and cigarettes, cooking utensils, cutlery, razor blades, drums for paint and oil, and even the ship's typewriter, all of which must be non-magnetic.

The hull is being constructed of teak planks on brass frames, subdivided by eight watertight bulkheads. The keel, stem and stern posts are of teak and Canadian rock elm, copper sheathed. Anchors and cables and wire for the rigging will be of aluminum bronze. The ship will have a loaded displacement of 770 tons, and will be rigged as a brigantine, with a full sail area of about 12,000 square feet. The propelling machinery consists of a Petter atomic Diesel engine of 160 B.H.P., driving a two-bladed feathering propeller, and the auxiliary machinery for the dynamos, refrigerator, air compressor and winch includes one 18 h.p. and two 9 h.p. Diesel engines.

The speed will be  $6\frac{1}{2}$  knots, and with capacity for 14 tons of Diesel oil the ship will have an endurance of 3,000 miles. Over 20 special scientific instruments will be carried, for while the principal work will be in connection with terrestrial magnetism and atmospheric

electricity, the ship will also undertake meteorological work and oceanographical work, for which purposes she will have both observatories and laboratories.

*The Research* will probably be launched next February and will be ready for her first cruise in October, 1939. The scientific men of the expedition will visit the Carnegie Institution at Washington and, after calling at South American ports, will examine an area in the South Atlantic between Tristan da Cunha and Capetown. When this work is completed *The Research* will make a circuit of the Indian Ocean, probably calling at Perth, Cocos Island, Colombo, Seychelles, Mauritius and Durban, where she should arrive about November, 1940. Her complement will include six officers, four scientific men and twenty-two petty officers and men.

### THE FOURTEENTH INTERNATIONAL CONFERENCE ON DOCUMENTATION

THE International Federation for Documentation will hold its fourteenth International Conference on Documentation under the presidency of Sir William Bragg, president of the Royal Society, at Lady Margaret Hall, University of Oxford, from Wednesday morning, September 21, until Sunday, September 25. Afterwards on Monday, September 26, members of the conference will visit the Science Museum, London. Advantage will be taken of the meeting being in England to hold joint sessions on the mornings of Saturday and Sunday with the Association of Special Libraries and Information Bureaus. All those who appreciate the vital importance of the organization of knowledge will realize that the visit of this International Conference to England is an occasion of exceptional moment.

Papers will be read by leading authorities from all countries upon aspects of the following, and other, subjects: Theories of Classification, Cataloguing and Indexing; Methods and Apparatus used in the Organization of Libraries, Archive Repositories, Registering and Filing Centers; Photographic and other Copying Processes in the Application to Bibliographical Problems; The Making of Abstracts from Periodical Literature; possibilities of cooperation—Directories of Information; Exchanges between Publishing Bodies, National and International; The Loan of Books and Documents; principles and possibilities—The Practical Application and Use of Bibliographies. In particular an effort will be made to obtain adequate representation of the varying points of view of workers in diverse fields. At a recent international congress the view was expressed that it was desirable to widen the bases of international bibliography and documentation. At