

for special expeditions. It was hoped that the opening of the Panama Canal would afford the opportunity for concerted research in the Atlantic by the ships taking part in the ceremony, but the war frustrated the plan. Now, it is pointed out, a new opportunity presents itself through the offer for sale of *L'Hirondelle*, the yacht of the late Prince of Monaco, fitted up for oceanographic research in the most complete manner possible. It is proposed that this should be acquired for an expedition embracing all the oceans and lasting perhaps four years, the total cost being reckoned at from £120,000 to £140,000—a sum which, it is held, could be provided by the cooperation of all the countries interested. General approval of the scheme on the part of the International Council was expressed in a resolution passed during the Paris meeting.

THE BIRD SANCTUARY IN THE FARNE ISLANDS

ANOTHER important bird sanctuary, the Farne Islands, off the coast of Northumberland, has been secured in perpetuity for Great Britain. According to an announcement made by Mr. Collingwood Thorp, of Alnwick, the necessary funds for purchasing the islands for the National Trust have now been received or promised.

Earlier in the month Lord Grey of Fallodon had drawn attention to the movement to secure the islands, which are described as one of the most remarkable and wonderful breeding places for sea birds in the British Islands. They are the northernmost breeding place of the Sandwich Tern and the southernmost breeding place of the Eider duck, and without organized protection the islands would, under modern conditions, be destroyed as a breeding place for the rarer species. Now continuous protection is assured, and when the islands have been handed over to the National Trust they will still be managed, financially and otherwise, by a local committee. This body will require funds to provide watchers during the breeding season, and so the existing Farne Islands Association will continue as before.

This will make the fourth sanctuary for birds vested in the National Trust. There are already two other reserves on the east coast, 1,700 acres at Blakeney Point in Norfolk, which is largely used by migratory birds, and Scolt Head, not far away, which comprises some 1,200 acres. These are tracts of wild land and seashore, and during the breeding seasons watchers are maintained to prevent thoughtless interference with the birds. Wicken Fen, near Soham, in Cambridgeshire, is really an insect reserve, but is used by several of the rarer birds.

PROPOSED INVESTIGATIONS IN HEAT TRANSMISSION

THE National Research Council has been requested to undertake investigations in heat transmission, the results of which will provide the designing, operating and research engineer with more reliable information.

Heat transmission is in an unsatisfactory state. There is the greatest need for quantitative information that can be safely generalized, for the sifting and correlation of present knowledge and for laying out a careful program of investigations to secure the information that is lacking. Data is needed by the refrigerating, heating and ventilating, electrical, automotive and mechanical engineers.

In accordance with the general policy of the National Research Council a suitable committee will be organized, which will include experts of all branches. A program will be laid out, and then solicitation will be made to secure the necessary funds and facilities.

An executive committee has been selected consisting of:

F. Paul Anderson, Director, Research Laboratory of American Society of Heating and Ventilating Engineers, at U. S. Bureau of Mines, Pittsburgh, Pa.

W. L. Badger, Professor of Chemical Engineering, University of Michigan, Ann Arbor, Mich.

W. H. Carrier, President, Carrier Engineering Corp., Newark, N. J.

Harvey N. Davis, Professor of Mechanical Engineering, Harvard University, Cambridge, Mass.

H. C. Dickinson, Chief Div. III, Heat and Thermometer, Bureau of Standards, Washington, D. C.

H. Harrison, Brunswick-Kroeschell Company, New York City.

F. E. Mathews, Consulting Mechanical Engineer, Leonia, N. J.

George A. Orrok, Consulting Engineer, 124 East 15th Street, New York City.

T. S. Taylor, Research Physicist, Westinghouse Electric and Mfg. Co., East Pittsburgh, Pa.

A meeting of this committee will be held in the near future and the necessary steps taken to launch the project.

HEAT TRANSFER SYMPOSIUM

THE Division of Industrial and Engineering Chemistry, American Chemical Society, will start the Heat Transfer Symposium of which Professor W. H. McAdams is chairman on Tuesday afternoon, April 22. A large number of papers have been prepared for this symposium among which are the following:

Heat transmission in an inclined rapid circulation type vacuum evaporator: D. J. VANMARLE, Buffalo Foundry and Machine Co.

Evaporator scale formation: W. L. McCABE and C. S.