

ing countries was made in the first instance for five years only, in case the publication of the catalogue should fail financially or in other ways. It was also decided to spend £100 in making the catalogue known, and to take steps to invite the cooperation of other countries not yet represented on the council, *e. g.*, Spain, the Balkan States, South American Republics, etc.

The proposal to publish additional volumes upon, *a*, medicine and surgery; *b*, agriculture, horticulture and forestry; *c*, technology (various branches) was discussed, and it was decided that the executive committee should take the suggestion into fuller consideration and bring it under the notice of the international convention in July, 1905. It was also resolved that all alterations in the schedules should be collected and edited by the central bureau prior to submission to the regional bureaus for their opinions, and that the schemes should be edited by a special committee before being submitted to the international convention.

A. LIVERSIDGE.

INAUGURATION OF THE MAGNETIC SURVEY OF THE NORTH PACIFIC OCEAN.

As announced in a previous issue of SCIENCE, the brig *Galilee* of San Francisco, a wooden sailing vessel, built in 1891, of length 132.5 feet, breadth 33.5 feet, depth 12.7 feet, displacement about 600 tons, has been chartered by the department of terrestrial magnetism of the Carnegie Institution of Washington for the purpose of making a magnetic survey of the North Pacific Ocean. After the various necessary alterations, *e. g.*, substitution of the steel rigging by hemp rigging, etc., were made, the vessel entered upon her duties early in August. Magnetic observations were made at various places on the shores around San Francisco Bay and the most suitable place for 'swinging ship' by their aid determined. The ship was 'swung' with the aid of a tug on August 2, 3 and 4 in San Francisco Bay between Goat Island and Berkeley, California, and the various deviation coefficients were determined.

On August 5, the *Galilee* sailed from San

Francisco, secured magnetic observations daily to a greater or less extent according to conditions of the weather and sea, 'swung' twice under sail, and arrived at San Diego, August 12. This first short cruise was an experimental one, various instruments and methods having been subjected to trials under the direction of the writer, who accompanied the expedition as far as San Diego. The deflection apparatus devised by the writer for determining horizontal intensity has proved successful. In a future paper the methods, instruments and results will be more fully described.

After further alterations had been made at San Diego, and the deviation coefficients having been redetermined, the *Galilee* again set sail, on September 1, this time for the Hawaiian and Midway Islands and is expected to return to San Francisco about December 1. After these two experimental voyages, she is to sail from San Francisco early in 1906 on a more lengthy cruise—one embracing the entire circuit of the North Pacific Ocean.

The scientific personnel at present consists of Mr. J. F. Pratt, commander; Dr. J. Hobart Egbert, surgeon and magnetic observer; Mr. J. P. Ault, magnetic observer, and Mr. P. C. Whitney, magnetic observer and watch officer. The sailing master is Captain J. T. Hayes, who has made some record sailing trips in the *Galilee*—one a voyage of 3,000 miles from the South Pacific Islands to San Francisco in fifteen days and having made as much as 308 miles in one day.

L. A. BAUER.

DEPT. TERRESTRIAL MAGNETISM,
CARNEGIE INSTITUTION,
WASHINGTON, D. C.,
September 11, 1905.

EXPERIMENTAL STUDIES IN YELLOW FEVER AND MALARIA AT VERA CRUZ.

THE U. S. Public Health and Marine Hospital Service has published a bulletin on the experimental work done by assistant surgeons M. J. Rosenau, Herman B. Parker, Edward Francis and George E. Beyer, the conclusions of which are as follows: The cause of yellow fever is not known. The *Myxococcidium*