

Coast Guard to Study Icebergs' Home

Oceanography

The birthplace of the icebergs that menace trans-Atlantic shipping, the waters between Labrador and Greenland, will be studied during the coming summer by an expedition sent out by the U. S. Coast Guard. From the observations made it may be possible more accurately to predict the path of these bergs and how and where they drift.

Already their wanderings as they pass southward are fairly well known. This is a result of the International Ice Patrol's regular observations since 1912, when the Titanic disaster focused the attention of the world on their danger. The work to be done this summer is expected to complete the knowledge of their history, by furnishing now unknown facts regarding the conditions at their source.

The expedition will be made in the Coast Guard vessel Marion. It will be under the command of Lieutenant Commander Edward H. Smith. He has had ten years' service in the ice patrol work, and is also a trained oceanographer, for he spent two years in Europe and several more at Harvard University in ocean-

graphic research. Lieutenant N. G. Ricketts is his first officer, and he also has had extensive experience in the ice patrol.

After April 15, 1912, when the White Star liner Titanic struck an iceberg off the Grand Banks of Newfoundland and went to the bottom, with a loss of 1,500 lives, an international convention "for the safety of life at sea" was held at London. From this there resulted the Ice Patrol of the U. S. Coast Guard. Every March two staunch Coast Guard vessels sail from Boston to the ice fields, and remain there until the dangerous season is over, usually about the middle of July. Twice a day these boats broadcast by radio to nearby liners the location of all the ice in the vicinity, so that they can head southward to safety. Since the Coast Guard began this work fourteen years ago only three lives have been lost by collision of a ship with ice.

The science of oceanography has helped to a great degree in solving the problem of making ships more safe in the ice field, Commander Smith told Science Service. "Little

was known," he said, "before 1912-14 regarding the drift of the bergs, their rate of melting, and the degree of danger which they formed to passing traffic; except for the fact that they mostly came from Greenland and that they finally melted in the off-shore waters of the Atlantic, which appeared to be considerable of a mystery.

"Over 3,000 observations," he continued, "have been compiled during the last ten years by the ice patrol vessels. The program has consisted in securing observations of temperature and saltiness at various depths in various positions, carefully selected in the danger area. The ocean currents have been computed from these data in accordance with a mathematical formula. It is based upon the principle that ocean currents are due to differences in the specific gravity of the water. Water will flow from the place where it is relatively light to another region where it is proportionately heavy. This, combined with the fact of earth rotation, permits us to issue regular weekly current maps, similar to the (*Turn to next page*)

Seven-day Weather Forecasts Coming

Meteorology

Weather forecasts for a week in advance may soon be possible. A new system of weather predicting that for 2 to 7 days in the future was right more than seven times out of ten was announced recently by Charles L. Mitchell, Washington district forecaster of the U. S. Weather Bureau.

At present the new system is not used in the daily work of the Weather Bureau, but for nearly a year the improved forecasts have been made experimentally each week and checked in order to determine the value of the method. The storm centers of the whole northern hemisphere for four successive days are charted on a map. Then from his knowledge of the habits of storms, Mr. Mitchell predicts where these storms will be each day for a week in advance. Giving due consideration to the probable severity and other characteristics of the storms, he is then able to issue forecasts for rain and temperature within the eastern half of the United States. For many years the Weather Bu-

reau has issued each Saturday morning an outlook in which is given the probable weather and temperature changes for the coming week, but the forecasters have not been satisfied with the record of verifications made. The new method devised by Mr. Mitchell gives results nearly twice as reliable for some of the weather factors.

The first storm to make a trip around the world, so far as weather records show, was also reported by Mr. Mitchell. It brewed in Montana on February 23, 1925, and after traveling 21,379 miles in encircling the globe dissipated over the Gulf of St. Lawrence on March 23. A recent study of weather data revealed this world's record.

Science News-Letter, July 14, 1928

An ostrich egg would make an omelet for eight people.

Pennsylvania is planning to establish a game farm to breed pheasant and wild turkey.

Birds War on Bears

Zoology

Yellowstone Park ravens and magpies evidently never heard of Elisha; at any rate they certainly have no fear of bears.

Ranger Thad Pound was making his rounds a short time ago when he noticed a great commotion among a flock of ravens and magpies. Upon investigation he found that the center of the disturbance was a very much distressed she bear with a pair of cubs, which were receiving the mauling of their lives from the birds' beaks. The cubs were rolled over on their backs, trying to defend themselves with their paws, while the mother was hard put to it to shield her lustily bawling offspring.

The occasion of the battle was the carcass of a winter-killed elk, on which the birds had evidently been feasting. Interrupted by the bears, they had resented the intrusion and turned to do battle with the uninvited guests.

Science News-Letter, July 14, 1928

There are about 26,000 miles of fishing streams in California.

To Study Icebergs—*Cont'd*

better-known weather maps issued daily by the U. S. Weather Bureau.

"In the course of this work we have secured a quite correct picture of current and ice conditions in the immediate area south of Newfoundland, and near the steamship tracks, but little is known of the wild and unexplored stormy region northward between Labrador and Greenland. Our expedition will enter these foggy waters and, it is hoped, will snatch from them a long-continued mystery."

Does a branch of the Gulf Stream dive to the bottom of the Atlantic Ocean and emerge again far north in Baffin Bay? Is the Labrador Current a continuous overflow from the Arctic Ocean? Does the east Greenland current stretch all the way across to Labrador? Why is the west coast of Greenland so much warmer climatically than Baffin Land in the same latitude?

These are some of the outstanding questions of Arctic oceanography that may be solved during the coming summer as a result of the expedition.

Science News-Letter, July 14, 1928

The world's automobile population is now 29,687,499 cars.

Hot springs are used to supply water for laundries in Iceland.

Staff of Science Service—Director, Edwin E. Slosson; Managing Editor, Watson Davis; Staff Writers, Frank Thone, James Stokley, Emily C. Davis, Jane Stafford; Librarian, Minna Gill; Sales and Advertising Manager, Hallie Jenkins.

Board of Trustees of Science Service—*Honorary President*, William E. Ritter, University of California. Representing the American Association for the Advancement of Science, J. McKeen Cattell, *President*, Editor, Science, Garrison, N. Y.; D. T. MacDougal, Director, Desert Laboratory, Tucson, Ariz.; M. I. Pupin, Professor of Electromechanics, Columbia University, New York City. Representing the National Academy of Sciences, John C. Merriam, *President*, Carnegie Institution of Washington; R. A. Millikan, Director, Norman Bridge Laboratory of Physics, California Institute of Technology, Pasadena, Calif.; Dr. David White, Senior Geologist, U. S. Geological Survey. Representing National Research Council, Vernon Kellogg, *Vice-President and Chairman of Executive Committee*, Permanent Secretary, National Research Council, Washington, D. C.; C. G. Abbot, Secretary, Smithsonian Institution, Washington, D. C.; Harrison E. Howe, Editor of Industrial and Engineering Chemistry. Representing Journalistic Profession, John H. Finley, Associate Editor, New York Times; Mark Sullivan, Writer, Washington, D. C.; Marlen E. Pew, Editor of Editor and Publisher, New York City. Representing E. W. Scripps Estate, Harry L. Smithton, *Treasurer*, Cincinnati, Ohio; Robert P. Scripps, Scripps-Howard Newspapers, West Chester, Ohio; Thomas L. Sidlo, Cleveland, Ohio

THREE-IN-ONE PUBLICATION

The dynamics of instant and extensive publication are enjoyed if you publish in any of the following journals:

Journal of Morphology and Physiology
The Journal of Comparative Neurology
The American Journal of Anatomy
The Anatomical Record
The Journal of Experimental Zoölogy
American Journal of Physical Anthropology
The American Anatomical Memoirs
The Biological Bulletin (M. B. L., Woods Hole, Mass.)
Folia Anatomica Japonica (Tokio, Japan)
The Journal of Parasitology (Urbana, Ill.)
The Australian Journal of Experimental Biology and Medical Science (Adelaide, South Australia)
Stain Technology (Geneva, New York)
Physiological Zoölogy (Chicago, Ill.)

Why?

1. Because the author's abstract of every article is printed immediately and extensively distributed in the Advance Abstract Sheets of The Wistar Institute Bibliographic Service.
2. Because The Wistar Institute Bibliographic Service Card giving the author's abstract and the complete bibliographic reference is published shortly after the Advance Abstract Sheet is issued.
3. Because the complete article then appears promptly in one of the above journals.

Reprints supplied.

Advance Abstract Sheets.....\$3.00 per year
 Bibliographic Service Cards.....\$5.00 per year

ADDRESS

THE WISTAR INSTITUTE OF ANATOMY AND BIOLOGY
 Thirty-sixth Street and Woodland Avenue :: Philadelphia, Pa.

Flag Day in Spain

Travel

E. ALLISON PEERS, in *Santander* (Knopf):

Perhaps he (the stranger) would be more edified by a Spanish flag day, if he is interested in national psychology. There is usually a festival of the flower, as it is called, in Santander during August, though it is a much more alarming event than the foreigner might expect. To say that he is "buttonholed" at an early hour is to describe exactly what happens: a couple of girls will make a dash at that part of his apparel so soon as he appears in the streets, and having successfully pinned a paper flower to it, will calmly await their reward. If he thinks, however, that this will render him immune from attack all the day, he is greatly mistaken. Wherever he goes, he is besieged. As he looks in a shop-window, a flower is slyly pinned in his coat, and another penny requested. As he sits outside a café sipping his drink (a peaceful prisoner, for the shoeblack is cleaning his boots), three more barefaced maidens see their chance, and decorate him further. He

waits for a tram and from behind a giant plane-tree comes another seller of flowers; he dismounts from one and is promptly "flagged" again. Along the Blanca, where there is a flower-seller to every few yards, you may see genial Spaniards with ten, twenty, or even thirty flags of different colours about their person; not only in the lapels of their coats, but all over the coats themselves, waistcoats, hats, and even shirts and ties. I shall always hope some day to meet a philanthropist who has scored a century, and has paper flowers affixed to his boots.

The little flower, then, in Spain, is anything but a badge of immunity; it rather indicates the extent to which the wearer can be imposed upon. This is really peculiarly characteristic of Spain. The idea of giving as much as one can afford at one time has no attraction for people many of whom really prefer giving to a beggar than to a hospital. They give profusely and generously, but they give as they are moved at the moment.

Science News-Letter, July 14, 1928