spinal arthritis. Such cases illustrate the need for both doctors and laymen paying more attention to arthritis, it was pointed out.

#### Vaccine Questionable

The value of vaccines in treatment of arthritis appeared questionable on the basis of experiments reported by Drs. D. Murray Angevine, Russell L. Cecil and Sidney Rothbard of New York City.

Vaccines have been used with the idea that some cases of arthritis were due to germ infections, specifically streptococcus germs.

The three New York doctors reported that they could produce the same arthritis-like changes in the joints of animals by injections of streptococci whether the animals were immune to these germs, sensitized to them or normal.

#### Growing Pains

So-called growing pains in children are not necessarily rheumatic in origin, Dr. M. J. Shapiro of Minneapolis pointed out. No cause other than rheumatic fever has yet been proved for this condition but evidence is growing that it might also be due to such conditions as stretched muscles, stretched nerves and fast growth of the bones at their growing ends.

Science News Letter, June 25, 1938

MEDICINE

### Modern Operation For TB Is Not a Panacea

ODERN operative procedure for treating tuberculosis, of which the lung collapsing treatment is perhaps the most spectacular part, represents no panacea for the "white plague" and should not displace the rest, fresh air and good food treatment for the disease, Dr. F. M. Pottenger, clinical professor of medicine at the University of Southern California, told members of the American Sanatorium Association.

"These trends must be recognized as only one way of treating cases and must not be permitted to destroy the clinical idea of securing the best possible result with the least possible damage for every patient who presents himself to the physician for treatment," he warned.

Periodic return of patients to the sanatorium for a week's check-up to make sure that arrested cases of the disease do not relapse was urged by Dr. Everett Morris of Auberry, Calif.

Science News Letter, June 25, 1938

OCEANOGRAPHY

## Icebergs in North Atlantic Are Numerous This Year

# Although Only 530 Were Predicted for 1938, 700 Have Already Been Observed; Steamers Take Southern Route

GIANT icebergs are still pouring down from Arctic waters into the steamer lanes of the North Atlantic, reports the Hydrographic Office of the U. S. Navy. Already the year 1938 has seen over 700 bergs reported by the International Ice Patrol Service.

This is nearly 50 per cent. more than the average number of bergs, per year, since 1900. This average is 421. Originally the number of bergs forecast for 1938 was 530 but this number was exceeded before the first of June. Since then the bergs have kept coming down from the north and are "still very heavy," state the Hydrographic officials.

The current influx of ice menace means that European-bound steamers to northern ports must still, for some weeks, take the more southerly path which takes them off the "tail" of the Grand Banks of Newfoundland, rather than the quicker great circle path which penetrates the center of the iceberg danger area.

Many bergs, this year, are reported within a few miles of the fatal spot at latitude 41 degrees, 46 minutes north, and longitude 50 degrees, 14 minutes west, where the Titanic sank on that tragic night of April 14, 1912.

### Titanic a Spur

It was the Titanic disaster which spurred international cooperation that has since made the Ice Patrol possible. Four times each day the tiny ships of this patrol send, by wireless, the positions of icebergs sighted.

There have been only three years since 1900 in which more than 1,000 icebergs have been sighted. In 1909 and 1912 some 1,020 bergs were reported and in 1929 the figure reached the modern peak of about 1,350 bergs. Nearly 900 bergs were reported in 1935 and the totals for 1938 may approach this magnitude before the coming of summer causes the retreat of the white and deadly marine hazards late in June and early in July.

Three great ocean currents meeting off the Grand Banks form the crucial zone of iceberg menace, states the Hydrographic office. From far at the north end of Greenland comes the West Greenland current. Along the frigid shores of Baffin Land comes the famous icy Labrador current which joins with the ice-clogged outpourings of the St. Lawrence. Finally there is the warm Gulf Stream which meets these cold waters and forms the temperature blockade which prevents the further southward march of the icebergs.

### "Cold Wall" Warning

Besides radio reports from the Ice Patrol, masters of North Atlantic steamers rely greatly for iceberg warning on the passage of their ship through the famous "cold wall," a sharp boundary layer between the cold and warm ocean currents. In a ship's length the water temperature may change from 54 degrees to 32 degrees. Not only is the temperature of water thus vastly different but even the color of the water is changed. The Arctic water is olive, or bottle, green, while the Gulf Stream is blue.

The marked temperature contrast means, meteorologically, that fogs may often prevail over the region. And it is this fog hazard which makes the icebergs so deadly.

In a dense fog lookouts on mastheads are almost useless. A lookout in the bow often gets the first visible indication of an iceberg by the gentle lapping of waves at its base. If the sun is shining above, while the fog obscures the sea, an iceberg takes form as a luminous white mass that can be seen only about 100 yards away. At night it appears close aboard as a dark, sombre shape.

Science News Letter, June 25, 1938

### Radio

Every Friday at 7:30 p. m. EDT, 6:30 p. m. EST, 5:30 p. m. CST, 4:30 p. m. MST, or 3:30 p. m. PST, Science Service cooperates with the Columbia Broadcasting System in presenting over the Columbia coast to coast network a new series of "Adventures in Science" presenting dramatizations of important scientific advances and discussions by eminent scientists.