

to study in a brain, and that it takes considerable time and costs several hundred dollars to "run one through."

The originator of the collection, Dr. Wilder, so inspired his students that many of them voluntarily signed a bequest form which he drew up as follows:

"Recognizing the need of studying the brains of educated persons rather than those of the ignorant, criminal, or insane, in order to determine their weight, form, and fissural pattern, the correlations with bodily and mental powers of

various kinds and degrees, and the influences of sex, age, and inheritance, I hereby declare my wish that, at my death, my brain should be intrusted to the Cornell Brain Association or to the curator of the collection of human brains in the museum of Cornell University for scientific uses, and for preservation, as a whole or in part, as may be thought best. It is my hope that my family and friends may not oppose the fulfillment of this my earnest wish."

*Science News Letter, February 17, 1945*

#### MEDICINE

## Beriberi Cure Rapid

Americans rescued from Jap prison camp should recover quickly from this poor-diet disease; treatment will probably be doses of thiamin.

► CURE of beriberi, from which Americans rescued from the Cabantuan prison camp are said to be suffering, is usually very rapid. Improvement will come in a matter of hours after treatment is started, if the rescued men have not suffered irreparable damage to nervous system or heart.

The treatment will doubtless consist in giving large doses of thiamin, also known as vitamin B<sub>1</sub>. This chemical, which is both cure and preventive of beriberi, was first synthesized by an American scientist, Dr. Robert R. Williams of the Bell Telephone Laboratories, as a result of studies on beriberi which he started in the Philippines in 1910.

Long before the vitamin had been isolated and synthesized, it was known to occur in foods and beriberi was known as a disease resulting from a poor diet. Ironically, one of the first persons to advocate that beriberi resulted from poor diet was the Surgeon General of the Japanese Navy, Takaki. In 1884 he was able to wipe out beriberi in that navy almost completely by changing the ration. It is reasonable to assume that the rations of Japanese sailors and soldiers today contain plenty of the anti-beriberi vitamin.

Oriental living chiefly on rice are likely to get beriberi because they eat polished rice. The polishing removes the thiamin from the rice, just as thiamin is removed from wheat in the processing of our fine white flour. To overcome this, our bread is now enriched by addition of thiamin as well as other vitamins and iron.

Beriberi has been considered relatively rare in the United States, but one au-

thority writing in 1943 stated that this is not true. The symptoms of the disease vary greatly. They include neuritis, muscle weakness and wasting, loss of coordination and of sensation, dropsy, and, when the heart is affected, difficulty in breathing, pain around the heart, blue color of the skin and rapid pulse.

Treatment of beriberi includes feeding a good diet as well as giving doses of the vitamin, thiamin. In this country, persons who had been eating such a poor diet that they got beriberi would probably also suffer from lack of other B vitamins. In the Orient, the poor diet that leads to beriberi apparently does not lead to other vitamin deficiencies.

For the people rescued from Cabantuan, the diet may consist in frequent small feedings of concentrated foods, but they are more likely to be given as much as they can eat. The danger of overfeeding is not the same for these malnourished persons as for men rescued from a life raft who have had nothing to eat for 30 days. Such persons cannot eat a lot all at once, probably because their digestive functions have been impaired. That is not so true in cases of vitamin deficiency and general malnutrition.

*Science News Letter, February 17, 1945*

#### INVENTION

## Casein Curds Floated Out By Use of Carbon Dioxide

► FOR AN improvement in the method for extracting casein, milk's principal protein, E. L. Fritzberg of Minneapolis has been granted patent 2,368,919, which he has assigned to General Mills, Inc.

The conventional way of getting case-

in out of milk involves adding acid, which produces heavy curds that sink to the bottom. Subsequent handling renders the casein unfit for human food, so that it has to be diverted to lower-priced industrial uses. In Mr. Fritzberg's method, carbon dioxide or some other gas is introduced into the milk during the acidulating process, which results in the formation of bubbly curds that float to the top and can be mechanically skimmed off in cleaner condition, suitable for eventual incorporation into food products.

*Science News Letter, February 17, 1945*

## SCIENCE NEWS LETTER

Vol. 47 FEBRUARY 17, 1945 No. 7

The weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N St., N. W., Washington 6, D. C. North 2255. Edited by WATSON DAVIS.

Subscriptions—\$5.00 a year; two years, \$8.00; 15 cents a copy. Back numbers more than six months old, if still available, 25 cents. Monthly Overseas Edition: By first class mail to members of the U. S. armed forces, \$1.25 a year. To others outside continental U. S. and Canada by first class mail where letter postage is 3 cents, \$1.25; where letter postage is 5 cents, \$1.50; by airmail, \$1.00 plus 12 times the half-ounce airmail rates from U. S. to destination.

Copyright, 1945, by Science Service, Inc. Republication of any portion of SCIENCE NEWS LETTER is strictly prohibited. Newspapers, magazines and other publications are invited to avail themselves of the numerous syndicate services issued by Science Service.

Entered as second class matter at the post-office at Washington, D. C., under the Act of March 3, 1879. Established in mimeographed form March 18, 1922. Title registered as trademark, U. S. and Canadian Patent Offices. Indexed in Readers' Guide to Periodical Literature, Abridged Guide, and the Engineering Index. The New York Museum of Science and Industry has elected SCIENCE NEWS LETTER as its official publication to be received by its members.

Member Audit Bureau of Circulation. Advertising Representatives: Howland and Howland, Inc., 393 7th Ave., N.Y.C., Pennsylvania 6-5566 and 360 N. Michigan Ave., Chicago STAt 4439.

#### SCIENCE SERVICE

The Institution for the Popularization of Science organized 1921 as a non-profit corporation

**Board of Trustees—Nominated by the American Association for the Advancement of Science:** Edwin G. Conklin, American Philosophical Society; Otis W. Caldwell, Boyce Thompson Institute for Plant Research; Henry B. Ward, University of Illinois. **Nominated by the National Academy of Sciences:** Harlow Shapley, Harvard College Observatory; Warren H. Lewis, Wistar Institute; R. A. Millikan, California Institute of Technology. **Nominated by the National Research Council:** C. G. Abbot, Smithsonian Institution; Hugh S. Taylor, Princeton University; Ross G. Harrison, Yale University. **Nominated by the Journalistic Profession:** A. H. Kirchofer, Buffalo Evening News; Neil H. Swanson, Executive Editor, Sun Papers; O. W. Riegel, Washington and Lee School of Journalism. **Nominated by the E. W. Scripps Estate:** Max B. Cook, Scripps Howard Newspapers; H. L. Smithton, Executive Agent of E. W. Scripps Trust; Frank R. Ford, Evansville Press.

**Officers—President:** Edwin G. Conklin. **Vice President and Chairman of Executive Committee:** Harlow Shapley. **Treasurer:** C. G. Abbot. **Secretary:** Watson Davis.

**Staff—Director:** Watson Davis. **Writers:** Frank Thone, Jane Stafford, Marjorie Van de Water, A. C. Monahan, Martha G. Morrow, Robert N. Farr. **Science Clubs of America:** Joseph H. Kraus, Margaret E. Patterson. **Photography:** Fremont Davis. **Sales and Advertising:** Hallie Jenkins. **Production:** Dorothy Reynolds.