

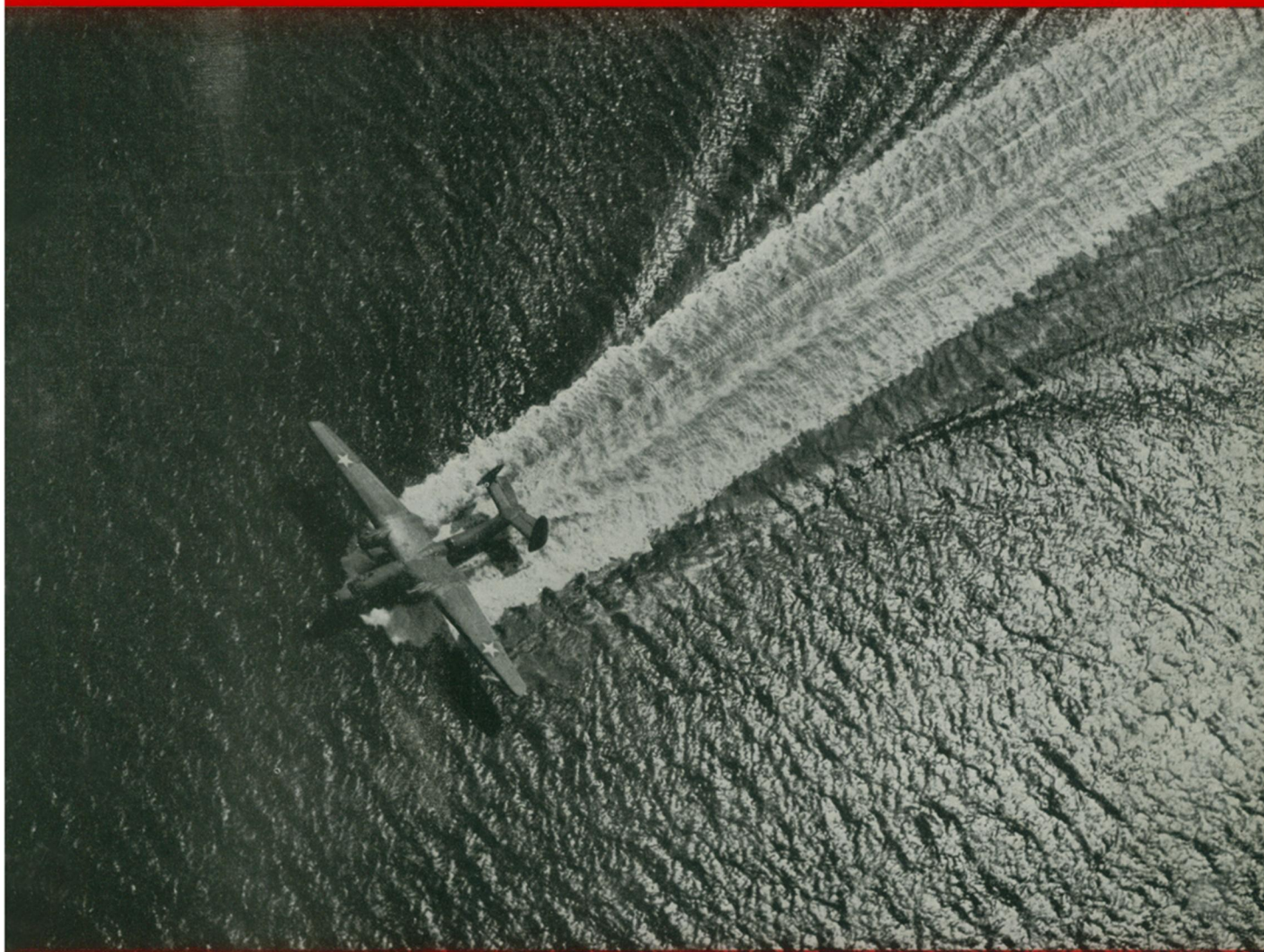
15¢



SCIENCE NEWS LETTER



THE WEEKLY SUMMARY OF CURRENT SCIENCE • OCTOBER 30, 1943



Watcher of the Seas

See Page 278

A SCIENCE SERVICE PUBLICATION

Do You Know?

Holland this year suffered from a plague of *fleas*, due probably to drought conditions.

American civilians ate more *food* per capita in 1941 and 1942 than ever recorded before.

Germans are reported to have used powder in *hand-cannons* in 1361; the guns could be fired about once an hour.

Fighting men in training camps in the United States are now eating about four times as much fresh *fish* as average citizens.

Over 49,000,000 pairs of silk and nylon *hosiery*, weighing nearly 2,500,000 pounds, have been contributed by American women for use in the war effort.

Japan is reported to have an artificial "*meat*" made from proteins, vitamins and other substances extracted from wheat-stalks, sweet potatoes and various materials.

Cold welding or mechanical lacing is now used very largely in repairing *cracked engines*; cracks are drilled and tapped, interlocking studs inserted, and a special sealing compound applied.

England, Scotland, Wales and North Ireland, with an area about the same as Iowa and Indiana combined, produced last year 50% more wheat, twice as much hay, and more beef, eggs, and milk than these two agricultural states together.

Question Box

Page numbers of Questions discussed in this issue:

AERONAUTICS

What revolutionary new plane will soon enter combat? p. 279.

ARCHAEOLOGY

What are some of the archaeological discoveries made recently in Latin America? p. 284.

ASTRONOMY

What comet has been rediscovered as predicted? p. 286.

What telescope has been used more than any other in the U. S.? p. 277.

Why is Mars unusually bright in November? p. 282.

BACTERIOLOGY

How many years did plague germs survive in a test tube? p. 277.

BIOCHEMISTRY

What microbe extract accidentally turned out to be a rodent poison? p. 275.

CHEMISTRY

How can chicken feathers be salvaged? p. 280.

Of what are synthetic sapphires made? p. 275.

What flower extract is helping the Army control mosquitoes overseas? p. 276.

DENTISTRY

How can tooth-wear be measured? p. 281.

ENGINEERING

How can shoal-water craft have their propellers protected and yet have deep-draft "bite"? p. 285.

GENERAL SCIENCE

Why did a group of culture leaders of the Western Hemisphere meet? p. 281.

GEOLOGY

How does hot water help mine potash? p. 276.

Why is Hell's Mouth being explored by Mexican geologists? p. 279.

INVENTION

What new ironing board has been invented? p. 281.

Most articles which appear in SCIENCE NEWS LETTER are based on communications to Science Service, or on papers before meetings. Where published sources are used they are referred to in the article.

MEDICINE

How can welders' eyes be better protected from "flash" exposures? p. 278.

How may beef plasma be made safe for human transfusion? p. 280.

What new kind of tubing is being used instead of rubber in blood transfusions? p. 280.

METALLURGY

How does a new high-voltage electric device aid arc welding? p. 281.

METEOROLOGY

How easily can infra-red rays penetrate a smoky atmosphere? p. 276.

NUTRITION

What are the characteristics of the protein extracted from grass? p. 287.

What vitamin was abundant in 19th century buns? p. 281.

ORDNANCE

Where did the Nazis probably get the idea of using plane-mounted rocket guns? p. 283.

How is a stratosphere chamber being used to test aircraft cannon? p. 285.

What new invention has the gunsmith Garand just had patented? p. 287.

PUBLIC HEALTH

If noise gets on your nerves, what are some possible remedies? p. 286.

What three things are under suspicion as possible carriers of infantile paralysis? p. 286.

RESOURCES

Where in the U. S. is wild rubber-producing guayule growing? p. 280.

SOCIOLOGY

How can post-war job-planning be started now? p. 278.

SPORTS

What are a trackman's chances of running a four-minute mile? p. 280.

ZOOLOGY - ANTHROPOLOGY

How have bears been associated with man throughout the ages? p. 287.

Irish moss is rich in gelose; from it gelatin is produced and used in making chocolate and toilet preparations.

Seven per cent of Canada's *meat* supply is from wild birds and game; in the United States 1.4% is from this source.

SCIENCE NEWS LETTER

Vol. 44 OCTOBER 30, 1943 No. 18

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.

In requesting change of address, please give your old address as well as the new one. at least two weeks before change is to become effective.

Copyright, 1943, by Science Service, Inc. Reproduction 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.

Cable address: Scienservc. Washington.
New York office: 310 Fifth Avenue, CHickering 4-4666.

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 in the Engineering Index.

The Science Observer, established by the American Institute of the City of New York, is now included in the SCIENCE NEWS LETTER.

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., PEEnsylvania 6-5566; and 360 N. Michigan Ave., Chicago. STAtE 4439.

SCIENCE SERVICE is 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: Henry B. Ward, University of Illinois; Edwin G. Conklin, American Philosophical Society; J. McKeen Cattell, Editor, Science. Nominated by the National Academy of Sciences: R. A. Millikan, California Institute of Technology; Harlow Shapley, Harvard College Observatory; W. H.

Lewis, Wistar Institute. Nominated by the National Research Council: Ross G. Harrison, Yale University; C. G. Abbot, Secretary, Smithsonian Institution; Hugh S. Taylor, Princeton University. Nominated by the Journalistic Profession: O. W. Riegel, Washington and Lee School of Journalism; A. H. Kirchhofer, Buffalo Evening News; Neil H. Swanson, Executive Editor, Sun Papers. Nominated by the E. W. Scripps Estate: Frank R. Ford, Evansville Press; Warren S. Thompson, Miami University, Oxford, Ohio; Harry L. Smithton, Cincinnati, Ohio.

Officers—Honorary President: William E. Ritter. President: Edwin G. Conklin. Vice President and Chairman of Executive Committee: Harlow Shapley. Treasurer: O. W. Riegel. Secretary: Watson Davis.

Staff—Director: Watson Davis. Writers: Frank Thone, Jane Stafford, Marjorie Van de Water, Morton Mott-Smith, A. C. Monahan, Martha G. Morrow, Jerome Harris. Science Clubs of America: Joseph H. Kraus, Margaret E. Patterson. Photography: Fremont Davis. Sales and Advertising: Hallie Jenkins. Business Manager: Columbus S. Barber. Correspondents in principal cities and centers of research.