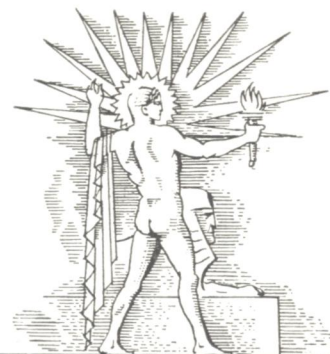
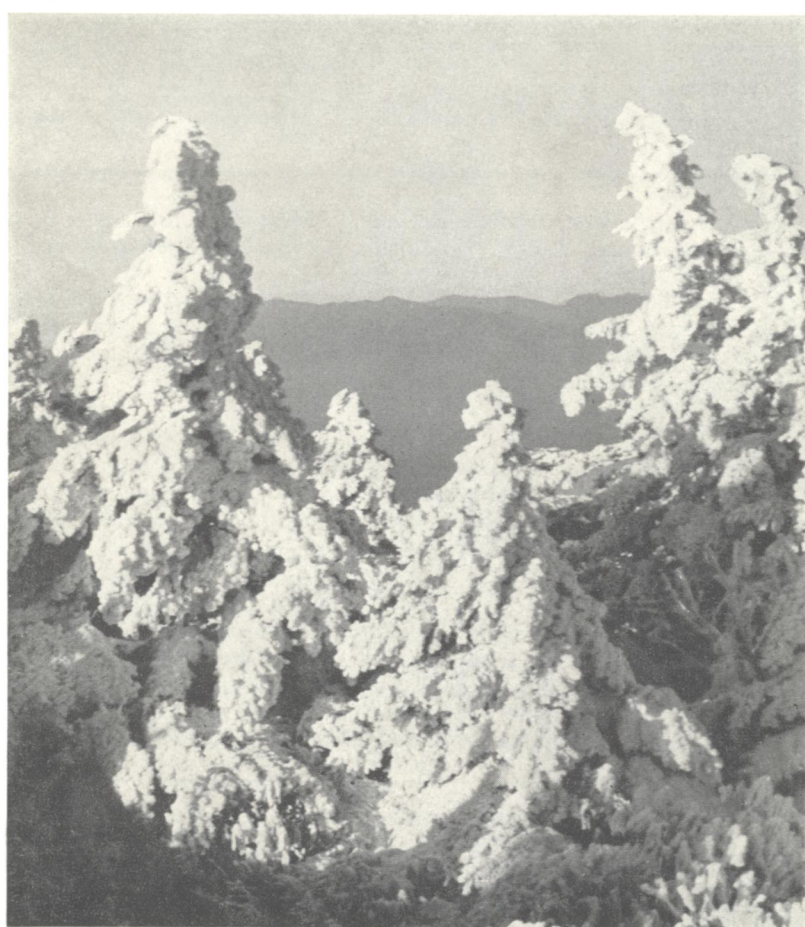


PRICE
15¢

SCIENCE NEWS LETTER

THE WEEKLY SUMMARY OF CURRENT SCIENCE ●



January 3, 1942

Winter Beauty

See Page 9

A SCIENCE SERVICE PUBLICATION

Do You Know?

The British War Office finds that about one suggestion in every 400 submitted by *inventors* is useful.

Germany is expected to get the bulk of Spain's present *orange crop*, which is 30% smaller than last year.

A new type of *porcelain* is introduced as a substitute for plastics, aluminum and hard rubber in many situations.

Ohio claims more *greenhouse acreage* than any other state, mainly because of its vegetables grown under glass.

A part wool *blanket* should contain at least 25% wool to be noticeably warmer than an all-cotton blanket.

Brown University's *defense courses* include Russian, cryptanalysis, map reading and construction, and gunnery.

The *crowned pigeon* of New Guinea is as big as a small turkey and is distinguished by its fan-shaped bluish crest.

A way has been found to put up natural, unprocessed Swiss and American *cheese* in pound packages, so that it is protected against mold.

Thick blue *paint* on porthole window glass and a dark, muddy-colored gray paint on the hull are found useful in making ocean liners inconspicuous.

Oyster shells are made of aluminum, calcium, copper, iron, magnesium, manganese, silica, zinc, water, chlorine, carbon dioxide, and nitrogen, with traces of other ingredients.

QUESTIONS DISCUSSED IN THIS ISSUE

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.

CHEMISTRY

How can boron crystals be obtained in pure form? p. 15.

ENTOMOLOGY

What foreign invader is attacking American beans? p. 8.

GENERAL SCIENCE

How can normal persons learn to "hear" things where there is no sound? p. 7.

How does temperature affect evolutionary changes? p. 12.

Why is it that those fighting for freedom now do not face greater risks than did our forefathers? p. 3.

MEDICINE

How can anti-freeze be used to prevent influenza? p. 11.

What new clue has been found which may lead to a killer of tuberculosis germs? p. 11.

PHYSICS

How can objects too small to be seen with a microscope be viewed in three dimensions? p. 5.

PHYSIOLOGY

How do dogs sweat? p. 8.

How does the time of drinking affect drunkenness? p. 9.

PLANT PATHOLOGY

What new disease is attacking the roots of orange trees? p. 10.

PSYCHOLOGY

On what should peace be based in order to be lasting? p. 4.

Through what agency can a community improve its diet without outside aid? p. 4.

What attitude of the Japanese people may hinder their defeat? p. 6.

Why should some American children be taught Spanish early? p. 4.

PSYCHOLOGY—MEDICINE

How can scared feeling and tearfulness be cured in 30 minutes? p. 4.

PUBLIC HEALTH

What disease may strike Japan if crowded cities are bombed? p. 7.

VETERINARY MEDICINE

What happens when a chicken is given an overdose of sulfanilamide? p. 5.

Mothers are the least well-fed members of the low-income family, Canadian nutritionists report.

An Egyptian *thimble* 2,300 years old is among historic sewing implements exhibited at New York's Cooper Union Museum.

Coffee substitutes in Nazi-controlled Denmark contain such ingredients as grains, chicory root, dried sugar beet, peas, and "husks," the U. S. Department of Commerce learns.

As a source of *alcohol* needed in making smokeless powder, the U. S. Government has stored 10,000,000 bushels of surplus corn, with another 10,000,000 bushels in reserve for later use, if needed.

Methods of making wall board from *seaweed* have been developed in Ireland.

A *tank destroyer* designed for the Army is a tractor-like machine which carries a 75mm. cannon at 75 mile-an-hour speed.

Stones from the size of pebbles to rocks have been found in *stomachs* of the seal, walrus, and sea lion, but scientists do not agree as to the reason.

A report from Moscow says that, preparing for *winter fighting*, soldiers in the Moscow area have practised marching on skis over rough terrain, tossing grenades and shooting from various positions on skis; and first aid detachments on skis have been organized.

SCIENCE NEWS LETTER

Vol. 41 JANUARY 3, 1942 No. 1

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

Subscriptions—\$5.00 a year; two years, \$7.00; 15 cents a copy. Ten or more copies to same address, 5 cents a copy. Back numbers more than six months old, 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, 1942, 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: Scienservice, Washington.

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.

Members of the American Association for the Advancement of Science have privilege of subscribing to SCIENCE NEWS LETTER, at \$3 a year.

The New York Museum of Science and Industry has elected SCIENCE NEWS LETTER as its official publication to be received by its members.

Advertising rates on application. Member Audit Bureau of Circulation.

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; William

H. Howell, Johns Hopkins University. Nominated by the National Research Council: Ross G. Harrison, Yale University; C. G. Abbot, Secretary, Smithsonian Institution; Harrison E. Howe, Editor, Industrial and Engineering Chemistry. Nominated by the Journalistic Profession: O. W. Riegel, Washington and Lee School of Journalism; A. H. Kirchofer, Buffalo Evening News; Neil H. Swanson, Baltimore Evening Sun. 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. Science Clubs of America: Joseph H. Kraus, Margaret E. Patterson. Photography: Fremont Davis. Librarian: Minna Gill. Business Manager: Alvin C. Stewart. Sales and Advertising: Hallie Jenkins, Austin Winant. Correspondents in principal cities and centers of research.