

SCIENCE NEWS LETTER



THE WEEKLY SUMMARY OF CURRENT SCIENCE • SEPTEMBER 26, 1942



Rough Water Test
See Page 200

A SCIENCE SERVICE PUBLICATION

Do You Know?

In 42 years America has produced 86,000,000 motor vehicles.

Iron and steel rank next to cotton and jute as India's top industries.

Thirty percent of passenger cars on farms are 10 years old or older.

The mines of Alaska produced in 1940 over \$28,000,000 worth of minerals

Experiments are being conducted to find a practical method of extracting wax from filter cake, a sugarcane product.

Brazilian civilian aviation clubs now claim a membership of 10,000, of whom about 600 have already completed flight instruction courses.

Successful "planting" of fish depends on food, cover, spawning areas, water level and the amount of dissolved oxygen in the water to be stocked.

Among hundreds of war products now produced by the automotive industry are cantonment furnaces, gas mask components, and incendiary bomb noses.

An estimated 2,000,000,000 pounds of household fats are thrown away every year; each pound would make enough glycerine to fire four anti-aircraft shells.

From glands and viscera of meat animals, once waste products of packing houses, come such products as sausage casings, gold-beaters' skins, and perfume bottle caps.

Question Box

Page numbers of Questions discussed in this issue:

AERONAUTICS

What new "eyes" are now ready for the U. S. Navy? p. 200.

AGRICULTURE

How are agricultural experts giving aid to China? p. 195.

ASTRONOMY

How can a furnace be used to study the composition of stars? p. 200.

What objects have been mistaken for new comets or nova? p. 196.

What planet will come into view again in the October evening skies? p. 202.

Where is a new exploding star visible in the heavens? p. 196.

CHEMISTRY

How can the steel of cans be protected from the corrosion effects of the lacquers applied to them? p. 197.

How long do butyl tires last on the road? p. 204.

EDUCATION

How are the Chinese universities continuing their work beyond Japanese lines? p. 199.

ENTOMOLOGY

What sorts of insect pests are tormenting the farmers in the United Statets? p. 197.

ETHNOLOGY

What can Indian workers use in place of birth certificates for getting war jobs? p. 204.

INVENTION

What new method has been devised for making vitamin B₁ more cheaply? p. 196. What new use has silver in industry? р. 201.

MEDICINE

How have the army of cancer fighters broadened the scope of their work? p. 198. What "harmless pest" may be spreading dysentery in tropical regions? p. 195.

What is the advantage of using X-rays rather than radium in treating cancer? p. 198.

What new use has been found for the anti-blood clot chemical, heparin? p. 203.

Why are men entering the Army suffering with venereal diseases not likely to infect healthy soldiers? p. 196.

METALLURGY

How can air bubbles serve to save metal from low-grade ores? p. 201.

MILITARY SCIENCE

Where is the first breech-loading rifle ever used in battle? p. 204.

PHARMACY

In what new region can opium be grown?

What ingredients are taking the place of sugar in the druggist's syrups? p. 200.

PHYSIOLOGY

How are the Germans attempting to get more eggs? p. 205.

POPULATION

How long are we living nowadays? p. 206.

What war fear means more to young children than does the fear of death? p. 201.

RADIO

What is believed to be the cause of magnetic storms? p. 200.

RESOURCES

How deep are the ancient tin mines now being reopened? p. 199.

How many houses will be needed each year after the war, according to present estimates? p. 198.

What sort of priority applies to lumber for making airplane models for the Army? p. 201.

STATISTICS

How many lives are lost by accidents? p. 206.

TOPOGRAPHY

Where is the highest mountain of Europe? p. 200.

TYPOGRAPHY

What changes have been made in the SCIENCE NEWS LETTER type dress? p. 204.

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.

SCIENCE NEWS LETTER

SEPTEMBER 26, 1942

The Weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N St., N. W., Washington, D. C. NOrth 2255. 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.

least two weeks before change is to become effective.

Copyright, 1942, 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.

Cable address: Scienservc, Washington.

New York office: 310 Fifth Avenue, CHickering 4-4565.

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.

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, 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 Observa-

tory; W. H. Lewis, Wistar Institute. Nominated by the National Research Council: Ross G. Harrison, Yale University; C. G. Abbot, Sectary, 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. 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: Wotson Davis Watson Davis.

Staff—Director: Watson Davis. Writers: Frank Thone, Jane Stafford, Marjorie Van de Water. Morton Mott-Smith, Glenn Sonnedecker. Science Clubs of America: Joseph H. Kraus, Margaret E. Patterson. Photography: Fremont Davis. Librarian: Page Secrest. Business Manager: Alvin C. Stewart. Sales and Advertising: Hallie Jenkins. Correspondents in principal cities and centers of research centers of research.