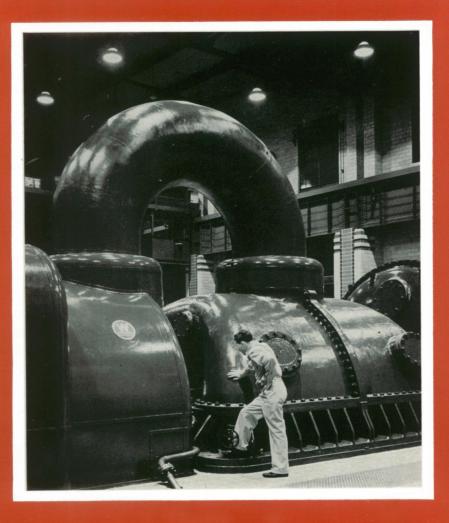
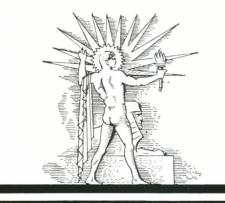
# SCIENCE NEWS LETTER

THE WEEKLY SUMMARY OF CURRENT SCIENCE.





June 14, 1941



Steam Turbine

See Page 376

A SCIENCE SERVICE PUBLICATION

# Do You Know?

Soybeans may provide fiber material for automobile upholstery.

Only three states had *cancer control* programs in 1935, but now 16 states have them.

*Machine tools* produced in the United States this year will have a value of \$750,000,000.

Ceylon has 1,100,000 acres of *coconut* palms, believed to be 14% of the world's acreage of these trees.

A *bomb destruction pit* lined with sandbags has been constructed by the Indianapolis police department.

New additions to the *herb garden* of the Metropolitan Museum of Art are wild flax, acanthus, feverfew, and woad.

Storing clothes at temperatures near freezing will not kill *moth larvae*, but the larvae will not feed while at such cold temperatures.

Germany could theoretically get as much oil as she wants from coal, says a British scientist, but the process is extravagant and the synthetic plants are highly vulnerable to air attack.

An *ordnance* expert says that military priorities call for airplanes first, vessels second, then machine and anti-aircraft guns and ammunition, then anti-aircraft weapons and fire control, then tanks, and finally combat cars and some large guns.

## 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.

#### AERONAUTICS

How can Army flyers be protected by plastic bubbles? p. 374.

#### ARCHAEOLOGY

Where are scientists looking for signs of the Wild West of 10,000 years ago? p. 376. ASTRONOMY

#### How hot is the sun? p. 374.

#### ENGINEERING

How can a vacuum cleaner be used to keep a locomotive dry? p. 377.

#### FORESTRY

Who has been honored as one of the greatest tree planters in the world? p. 373.

#### LINGUISTICS

Who doubts that Moses was meek? p. 376.
MEDICINE

How can the cost of dried blood plasma be reduced? p. 381.

How is gold being used to treat arthritis? p. 372.

What drug has made possible the complete control of one of the most serious of venereal diseases? p. 371.

What new treatment helps sinus diseases? p. 382.

Which of the sulfa drugs is a remedy against dysentery? p. 376.

Why is there a shortage in medical instruments? p. 379.

#### MILITARY SCIENCE

What is the range of Uncle Sam's new 155-millimeter guns? p. 378.

#### PHYSIOLOGY

How is the vitamin biotin linked with cancer? p. 376.

#### PUBLIC HEALTH

How can liquor be made to carry a warning of the dangers of excess? p. 375.

#### WILDLIFE

How many bighorn sheep are there in the United States? p. 377.

A young *eel* is so transparent that print may be read through its body.

In the Far North, in *Greenland*, the growing season for plants lasts barely two months in the year.

In a check-up of 101 crippled young people who took vocational *rehabilitation* training to earn a living, 70 were found still employed after two years.

Originated by the U. S. Department of Agriculture, a *strawberry* called the Fairmore is pronounced finer in flavor than the well-known Blakemore.

Outer leaves of California *lettuce*—often discarded by truck gardeners and housewives—are reported to be three times as rich in calcium as inner leaves.

More than half the *tin* used in the United States goes into making cans.

French experiments with *photographic* printing on fabrics are reported thus far successful with cotton only.

Settlement of the boundary dispute between Thailand and French Indochina left the famous *Angkor ruins* in the latter country.

Many of China's children are said to suffer from *vitamin deficiencies*, causing such conditions as night-blindness, rickets, and beri-beri.

A new *varnish* to prevent books from molding in warm, damp places contains turpentine, castor oil, camphor, shellac, ethyl alcohol and mercury bichloride.

# SCIENCE NEWS LETTER

Vol. 39 JUNE 14, 1941

No. 24

The Weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 2101 Constitution Avenue, 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, 1941, 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. Entered as second class matter at the postoffice 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.

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 Ournalism; A. H. Kirchhofer, 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, Emily C. Davis, Jane Stafford, Marjorie Van de Water, James Stokley. 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,



THE MANY THINGS of science pictured above and described at the right can be yours. They demonstrate the unusual collections of new substances and hard-to-get materials received by the recently organized membership group sponsored on a non-profit basis by Science Service.

There are a few memberships available, so as a reader of Science News Letter you are invited to take advantage of the following offer:

Immediately on receipt of your Application we will send you the five units of THINGS of science described at the right. Toward the end of June we will send you the sixth unit, on "Fossils of the Past."

Since this is a non-profit organization, THINGS does not attempt to make money, so the membership charge for the six units has been set at \$2.

You are invited to become a member and it is recommended that you send in your Application coupon *promptly*. There are less than 500 First-half 1941 memberships now available.

# MAIL THIS APPLICATION

### To Things

2101 Constitution Avenue, Washington, D. C.

I hereby apply for membership in your new science group and enclose \$2 for the six units described. Five units are to be dispatched to me *immediately*, and toward the end of June you are to send me the sixth unit.

Signature	
Mailing Address	
City & State	393A

#### **FABRICS UNIT**

You get a piece of cloth made from salt, coal, lime and air. You get a piece of textile woven from fibers of spun glass. You get a small piece of synthetic fur made from cat tails. You get a small piece of synthetic wool made from milk, produced in Italy and Germany for use in clothing. You get a piece of paper that looks and feels like cloth. All this in the FABRICS unit of THINGS.

#### **BIMETALLIC UNIT**

You get a disc and a strip of metal, each of which looks like one metal but is actually composed of layers of two! You get instructions for three surprising experiments with them. In your own home such bimetal is now in use in from ten to fifty pieces of equipment! In your car bimetal is used for as many as 13 functions!

#### **METEORITE UNIT**

You get two actual meteorite specimens certified to be actual fragments from the heavens such as can usually be viewed only in museums. You get some of the sand pulverized by the tremendous *impact* of one of the largest meteorites ever to hit the earth.

#### **FINGERPRINT UNIT**

You get an inkless fingerprinting outfit with material good for many impressions. Included are two purse fingerprint cards that may some time be useful to you in cashing a check, two official fingerprint record documents, and full experiment instructions, with information how to classify the arches, loops, whorls and composites in your own or any fingerprint.

#### SYNTHETIC RUBBER UNIT

You get a piece of rayon web treated with the magic plasticized poly-vinyl chloride which makes it waterproof. You get a piece of synthetic rubber made from oil, soap, natural gas and air. You get, for purposes of comparison, a piece of natural rubber. You get instructions for experiments with each of these products.