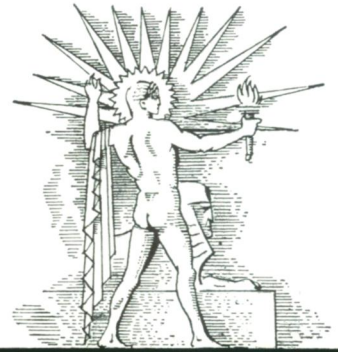


PRICE
15¢

SCIENCE NEWS LETTER

THE WEEKLY SUMMARY OF CURRENT SCIENCE •



May 31, 1941

Vitamin Fed

See Page 339

A SCIENCE SERVICE PUBLICATION

Do You Know?

The average American uses about 250 pounds of *paper* a year.

Some of the armor plate on a 25-ton *tank* is two inches thick.

New England *mistletoe* is so small a plant that botanists overlooked it until 1871.

Long-staple sea-island *cotton* is reported usable for parachutes and airplane wing coverings.

According to recent studies, infectious diseases cause about one-fourth of the *blindness* in this country.

Draperies, carpets and upholstered furniture help to absorb *noise* in rooms and halls that give off hollow sounds.

More than half of the world's *people* live in lands bordering the Indian and Pacific Oceans, a University of California geographer points out.

An old engraving shows the remarkable interior of Ole Worm's *museum* in Copenhagen in the seventeenth century, including an auk, polar bear, flying fish, shells, and other natural wonders.

A new instrument for testing fitness of prospective air *pilots*, described by British scientists, is an electrical multiple-exposure tachistoscope, which measures speed of adjustment of the eyes for change of distance, speed of accommodation and adaptation and which also tests ocular and general fatigue.

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.

AGRICULTURE

What new crop is being grown in Peru? p. 345.

ASTRONOMY

What planets can be seen in June evenings? p. 346.

CHEMISTRY

To whom were fellowships awarded by the Lalor Foundation? p. 344.

ENGINEERING

How can electricity be used to prevent corrosion in submerged pipes? p. 348.

How much of a charge of static electricity forms on a moving automobile? p. 344.

ENTOMOLOGY

Where was a great migratory flight of butterflies observed? p. 344.

GENERAL SCIENCE

How can a delicate balance be stopped from swinging? p. 344.

MEDICINE

What plans have been made for "catastrophe units" in New York City? p. 344.

NUTRITION

What should you eat to be healthy? p. 339. Why do pigs need thiamin in their diet? p. 339.

PHYSICS

What has light falling on a diamond contributed to physics? p. 343.

What sort of tattoo marks are invisible in ordinary light? p. 345.

PLANT PATHOLOGY

What new use has been found for calomel? p. 345.

What new disease of cherry trees has appeared in Oregon? p. 345.

POPULATION

What American republic never saw the census man? p. 343.

PSYCHOLOGY-ANTHROPOLOGY

What group is making a study of food habits in relation to defense? p. 340.

PUBLIC HEALTH

What proportion of heads of low-income farm families are in perfect health? p. 341.

PUBLIC HEALTH-NUTRITION

What proportion of people on relief are aided by the food stamp plan? p. 340.

RESOURCES

Where will quinine come from? p. 345.

Liquid gas is being used to run 69,000 automobiles in Germany, says a report from that country.

In a recent air raid at Leeds, a collection of *birds' eggs* in the city museum survived a 20-foot fall.

One tree 25 inches in diameter brings as much money when sold for *timber* as 24 trees only 13 inches in diameter.

Californians have organized a California *Folklore* Society and will issue a magazine to be published by the University of California Press.

Some of Greenland's *plants* were introduced by Norse colonists in medieval times.

Aristocratic *Indians* of Virginia wore beaver fur, while poorer natives wore deerskins.

After nearly four years of fighting, Japan has gained control of only 20% of *China*, says a Chinese scientist.

"*Enriched*" bread is no more fattening than ordinary bread, because the vitamins and minerals added do not add extra calories.

SCIENCE NEWS LETTER

Vol. 39 MAY 31, 1941 No. 22

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. 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: Scienserve, 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.

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. Smithon, 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.

6 THINGS of Science

unexpected surprising valuable
extraordinary unusual remarkable
informative strange scientific

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.

THE NINE WORDS above, describe the THINGS of science now available, about as accurately as *mere words* can describe this *intriguing* collection. Look at the description in the column at the left for detailed information.

These THINGS of science are now in the hands of members of the new organization of friends of science sponsored by Science Service, the Institution for the Popularization of Science. They are distributed without profit.

There are still a few memberships available before the 1941 roster must be closed. As a reader of SCIENCE NEWS LETTER you are invited to take advantage of the following offer:

Immediately on receipt of your Application (*see coupon below*) we will send you the five units of THINGS of science described at the left. Toward the end of June, we will send you the sixth unit, on "ORES OF STRATEGIC MINERALS."

To conserve expenses in this non-profit organization, members send us the remittance with the Application. Or, you can pay the Postman.

After you have received the units and have seen how they satisfy your intellectual curiosity about a wide range of objects, you will be given an opportunity to extend your membership to the end of 1941 at the same non-profit rate of \$2 for the six units to come, from July through December 1941.

Send in the Application form *promptly*, please. There are only 741 first-half 1941 memberships now available.

This announcement you are reading is now in the hands of more than 35,000 SCIENCE NEWS LETTER readers. So we suggest that you send in your Application *right away*. If you are farther away from Washington than over-night by rail, we suggest that you send your Application BY AIR MAIL!

APPLICATION for THINGS units

To *Things*

2101 Constitution Avenue, Washington, D. C.

I hereby apply for membership in your new science group*. You are to send me the five units described above, *immediately*, and later in June you are to send me the sixth unit.

- I enclose \$2 with this Application. (We pay all postage charges when \$2 is sent with Application.)
- When the Postman delivers the five units, I will pay him \$2 plus the few cents postage charges. The June unit is to follow along a little later in the month, without additional cost to me.

Name _____
Please write plainly

Complete Mailing Address _____

393

* It is understood that the individual sending in this Membership Application is to be given an opportunity to extend his membership upon payment of an additional \$2 before July 1, so that he can receive the six units to be dispatched once each month from July through December, 1941.