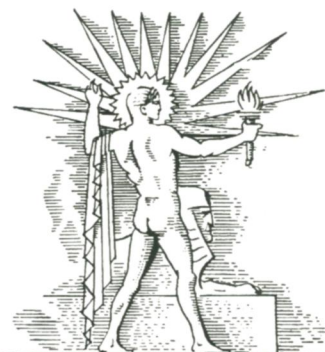


PRICE
15¢

SCIENCE NEWS LETTER

THE WEEKLY SUMMARY OF CURRENT SCIENCE •



July 6, 1940

Non-Poisonous Gas

See Page 4

A S C I E N C E S E R V I C E P U B L I C A T I O N

Do You Know?

Ceylon produces over 1,500,000 pounds of *citronella* oil in a year, and sells nearly 40% to the United States.

The Netherlands Indies have almost a monopoly on the world's supplies of natural *quinine*, but a good deal is made synthetically.

The world's speed record for *house painting* was broken at Omaha, when 110 workmen painted a house in 4 minutes, 14 seconds.

Oil experts say that only the heavier *asphaltic oils* are really black, while others are greenish, dark reddish, or even straw colored.

A German report says that Norwegian archaeologists, with German assistance, have resumed excavation of the grave sites of *Viking* kings near Oslo, where once the famous Oseberg ship grave was uncovered.

Popular with visitors was a recent National Park Service exhibit which invited any one to identify nine mounted *hawks* by plugging connections on an electrical punch board, with the reward of a buzzer sound when the right name was punched.

Oil men were interested to learn that when Hollywood wanted to show Robert Fulton's 1807 steamboat, the Clermont, they did not duplicate a pioneer engine but installed a hidden *diesel* tractor and made steam of compressed air and oil vapor and smoke from a hidden smudge pot.

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

For what sort of work does the United States Government need chemists? p. 9.

How are the rubber boats inflated that were used by Germans over water defenses? p. 4.

What sort of "soap" may be used as a weapon against germs? p. 12.

Why did scientists isolate the active principle of marihuana? p. 6.

ENTOMOLOGY

Where can you get fruit flies for experimental purposes? p. 9.

GENERAL SCIENCE

What has happened to German scientific refugees in England? p. 9.

What is the attitude of scientific workers toward American aid to the Allies? p. 8.

Who has asked rescue for the German scientific exiles in France? p. 8.

Who is listing scientists and physicians as an aid to the Government's defense program? p. 14.

MEDICINE

How do the vertebral veins contribute to spread of cancer? p. 3.

How many hospitals and medical schools are organizing hospitals in preparation for defense? p. 14.

What antidote has been found for a scorpion's sting? p. 7.

What common substance may be a defense against lead poisoning? p. 6.

What sort of skin disease has been reported caused by "elasti-glass" wrist watch bands or garters? p. 6.

METEOROLOGY

What new evidence has been found of a relation between weather on the earth and solar activity? p. 8.

MILITARY SCIENCE

Why are the mines laid at the Panama Canal no danger to navigation? p. 8.

NUTRITION

What new sort of food is being sent by the Red Cross to Europe? p. 10.

What terrible crisis may be faced by Japan in the fall? p. 5.

PALEONTOLOGY

What trace was found of an ancient beast who was yellow with black spots? p. 15.

PHOTOGRAPHY

What invention has made it possible for you to have stereoscopic movies in your own home? p. 7.

PHYSICS

What important discovery in physics is reported from Japan? p. 9.

What is "phission"? p. 3.

TEXTILES

How are shoe linings made antiseptic? p. 12.

Tests indicate that apple tree prunings make good *cigarette paper*.

Some new-type *life boats* are propelled, not by oars, but by hand levers that turn a propeller.

Using a new *radiophone*, parachuting fire fighters in national forests can keep in touch with the plane pilot and headquarters after landing.

Among fighting scenes more than 1,000 years old, painted on caves in central India, is a picture of four men fighting from the top of an *elephant*.

No country is entirely self-sufficient in *minerals*.

New *booster engines* for trucks are designed to give an extra push in hill climbing.

Why *earthenware* dishes sometimes crack and craze: the body and glaze do not expand and contract at the same rate with heat.

When Pliny over 2,000 years ago wrote about wormy apples, he was doubtless complaining about *codling moths*, says an entomologist.

SCIENCE NEWS LETTER

Vol. 38 JULY 6, 1940 No. 1

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, 1940, 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.

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

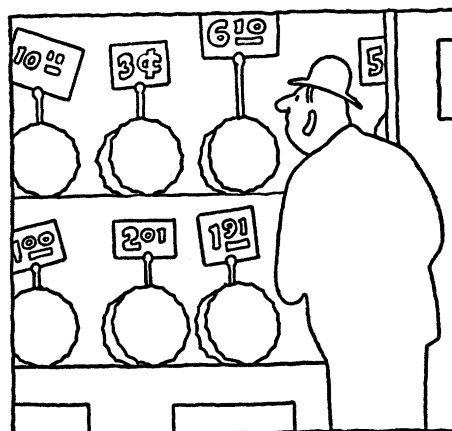
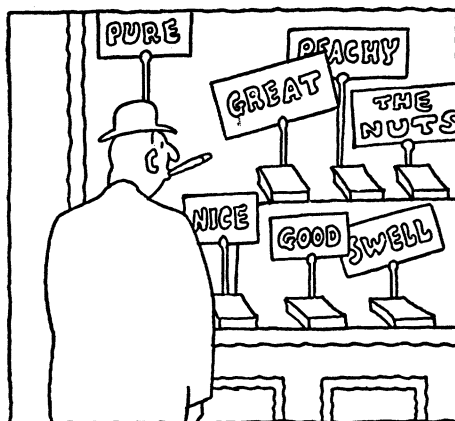
Shapley, Harvard College Observatory; William H. Howell, Johns Hopkins University. Nominated by the National Research Council: Ross G. Harrison, Yale University; C. G. Abbot, Secretary, Smithsonian Institution; Harrison E. Howe, Editor, Industrial and Engineering Chemistry. Nominated by the Journalistic Profession: O. W. Riegel, Washington and Lee School of Journalism; A. H. Kirchhofer, Buffalo Evening News; Neil H. Swanson, Baltimore Evening Sun. Nominated by the E. W. Scripps Estate: Karl Bickel, E. W. Scripps Co.; Warren S. Thompson, Miami University, Oxford, Ohio; Harry L. Smith-ton, Cincinnati, Ohio.

Officers—Honorary President: William E. Ritter. President: Edwin G. Conklin. Vice-President and Chairman of Executive Committee: Harlow Shapley. Treasurer: Harry L. Smith-ton. 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. Sales and Advertising: Hallie Jenkins, Austin Winant, Howard Bandy. Correspondents in principal cities and centers of research.

WATCH OUT MISTER

DO YOU BUY BY PRICE? ►



◄ DO YOU BUY BY BRAND?

—THAT'S NO JOB FOR AN AMATEUR!

MAYBE it used to be. Maybe—in simpler days—buying was a job that anyone could do reasonably well. But it just ain't so any more. Not when there are 4,500 brands of canned corn alone on the market. Not when conflicting advertising claims conduct daily blitzkriegs on your common sense.

The fact is that the market place has been getting more and more complicated. The most honest of advertising can't help the consumer much in making comparative selections. And price, as the economists have been showing, has in numerous cases almost lost meaning as a guide to quality.

Particularly now—in a time of war—is the lot of the consumer not a happy one. Prices rise, quality declines. The all-wool blanket you bought two months ago may, two months from now, be 25% rayon and two inches smaller. Maybe you'll be told about the change, maybe you won't.

FOR 85,000 FAMILIES all over America, Consumers Union is providing answers to the questions which grow out of these facts. For 85,000 families Consumers Union has become a guide through the maze of the market place—a guide which was never more valuable than right now.

Consumers Union offers you a way to get what you want and to know what you're getting. Consumers Union cuts through advertising claims, gets to the truth about products. Consumers Union gives you—simply, readably, directly—the findings of unbiased technical tests and examinations.

Consumers Union has one job to do. It won't help you evaluate the course of the war. It won't try to make up your mind about a Presidential choice. But it will help you to make your money go further—it will help you to buy both wisely and well. And we submit that in these days that's a job worth our doing—and your supporting.

HERE IS WHAT YOU GET

Look over this partial list of reports in the current (June) issue of *Consumers Union Reports* (the information given you in a single one might save you enough to pay for a year's membership):

PORTABLE RADIOS

Just how good are they as radio sets? An answer to this question and ratings of 15 widely-sold models.

GINGER ALE AND CLUB SODA

Ratings of 20 brands of club soda and 26 brands of ginger ale.

NYLON STOCKINGS

A comparison—under the camera—of nylon, the new Gotham cotton, and a standard silk hose.

ELECTRIC FANS

Test results on 47 models of 15 widely-sold brands, with comparative data on general efficiency.

MEN'S SUMMER SUITS

Some notes on popular types of fabrics to guide you in the selection of a summer suit.

TALCUM POWDERS

Ratings of 49 brands and results of a highly revealing "smell test".

CANNED TOMATO JUICE

How 69 leading brands rate as to price and quality, based on U. S. Government tests of 208 samples.

HAY FEVER

Some things you ought to know about the treatments, helpful and otherwise.

Along with a year's issues of the monthly Reports, each CU member gets the confidential Buying Guide—a compact volume containing a veritable storehouse of ratings and buying information. New members now get the 1940 Buying Guide Supplement just published and—later this year—the 1941 Guide.

COMING!

SPECIAL PHOTOGRAPHIC REPORTS

In the next few months Consumers Union members will get reports on:

EXPOSURE METERS
ROLL FILM TANKS
35 MM. FILM

FINE GRAIN
DEVELOPERS
MOVIE PROJECTORS

CONSUMERS UNION of United States, Inc.
17 UNION SQUARE WEST, NEW YORK, N. Y.

I hereby apply for membership in Consumers Union.

I enclose
☐ \$3.50. Please send me CONSUMERS UNION Reports for one year, plus the new *Buying Guide Supplement* and the 1941 *Buying Guide* when it is published. I agree to keep confidential all material so designated.

SIGNATURE.....6SNO
ADDRESS.....