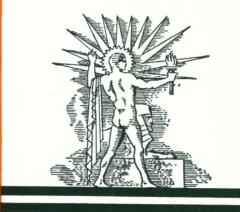
SCIENCE NEWS LETTER

THE WEEKLY SUMMARY OF CURRENT SCIENCE .





FEBRUARY 1, 1936



Never Sees His Shadow See Page 78

SCIENCE SERVICE PUBLICATION

SCIENCE NEWS LETTER

VOL. XXIX No. 773 The Weekly Summary of

Current Science

Published Every Saturday by

SCIENCE SERVICE

THE INSTITUTION FOR THE POPULAR-IZATION OF SCIENCE organized 1921 as a non-profit corporation, with trustees nominated by the National Academy of Sciences, the National Research Council, the American Association for the Advancement of Science, the E. W. Scripps Estate and the journalistic profession.

Edited by Watson Davis

Edited by Watson Davis

Subscription rates—\$5.00 a year postpaid; 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.

Canadian subscribers please add 50 cents a year, foreign subscribers 75 cents a year to regular subscription rate to cover postage.

Members of the American Association for the Advancement of Science have the privilege of subscribing to Science News Letter at the reduced price of \$3 per year. Application for this privilege should be accompanied by privilege card obtained from the Permanent Secretary, A.A.A.S., Smithsonian Institution Building, Washington, D. C.

In requesting change of address, please give your old address as well as the new one in notification to Circulation Department, Science News Letter, 2101 Constitution Ave., Washington, D. C., at least two weeks before change is to become effective.

C., at least two weeks before change is to become effective.

Copyright, 1936, by Science Service, Inc. Republication of any portion of the 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.

Publication Office, 1930 Clifton Ave., Baltimore, Md., Editorial and Executive Office, 2101 Constitution Ave., Washington, D. C. Address all communications to Washington, D. C. Cable address: Scienserve, Washington.

Entered as second class matter October 1, 1926, at the post-office at Baltimore, Md., under the act of March 3, 1879. Established in mimeographed form March 13, 1922. Title registered as trademark, U. S. and Canadian Patent Offices. Advertising rates furnished on application.

Member Audit Bureau of Circulations.

Board of Trustees of Science Service

Beard of Trustees of Science Service

Honorary President, William E. Ritter, University of California. Honorary Vice-President,
Vernon Kellogg, National Research Council. Representing the American Association for the Advancement of Science, J. McKeen Cattell, President, Editor, Science, Garrison, N. Y.; Burton E. Livingston, Johns Hopkins University; Baltimore, Md.; Henry B. Ward, permanent secretary, A.A.A.S. Representing the National Academy of Sciences, W. H. Howell, Vice-President and Chairman of Executive Committee, Johns Hopkins University, Baltimore, Md.; R. A. Millikan, Director, Norman Bridge Laboratory of Physics, California Institute of Technology, Pasadena, Calif.; Harlow Shapley, Director, Harvard College Observatory, Cambridge, Mass. Representing National Research Council, Ludvig Hektoen, John McCormick Institute for Infectious Diseases, Chicago, Ill.; C. G. Abbot, Secretary, Smithsonian Institution, Washington, D. C.; Harrison E. Howe, Editor of Industrial and Engineering Chemistry, Washington, D. C. Representing Journalistic Profession, John H. Finley, Associate Editor, New York Times; Mark Sulliyan, Writer, Washington, D. C.; Marlen E. Pew, Editor of Editor and Publisher, New York City, Representing E. W. Scripps Estate, Harry L. Smithton, Treasurer, Cincinnati, Ohio; Robert P. Scripps, Scripps-Howard Newspapers, West Chester, Ohio; Thomas L. Sidlo, Cleveland, Ohio.

Staff of Science Service

Director, Watson Davis; Staff Writers: Frank Thone, Emily C. Davis, Jane Stafford, Marjorie Van de Water, Robert Potter; Astronomy writer, James Stokley; London correspondent, Donald Caley. Correspondents in principal cities and centers of research. Librarian, Minna Gill; Sales and Advertising Manager, Hallie Jenkins.

DO YOU KNOW?

A flute made of iridium-platinum has been tested and is said to have exceptional purity of tone.

The San Francisco-Oakland Bay bridge is being built at a cost greater than the cost of Boulder Dam.

Chicago's Field Museum has received from Ethiopia a collection of 282 prehistoric tools and weapons, made of flint, quartzite, and obsidian.

Paper is being used instead of wax in making leaves and flowers for museum exhibits, since the paper is cheaper, and just as durable and satisfactory.

Essential raw materials which the United States would lack if blockaded in war include antimony, chromium, manganese, mercury, mica, nickel, rubber, tin, tungsten, and wool.

A French club organized to study caves has explored 600 caves since 1930.

The famous Roman physician Galen, second century A. D., advised moving tuberculosis patients to regions of good

Germany reports a use for the sea ooze or slime that occurs in enormous quantities in shallow seas: it has rustproofing value in paint mixtures.

Certain plant diseases are found to increase and decrease in cycles during periods of years, a discovery which will aid in the farmer's fight against them.

Cleaning 15,000 fossil bones, some representing animals that lived 300 million years ago, is being undertaken at the American Museum of Natural His-

WITH THE SCIENCES THIS WEEK

Most articles are based on communications to Science Service or papers before meetings, but where published sources are used they are referred to in the article.

AGRONOMY

How much cultivated land is on bad slopes?

When was the Caracol restored? p. 69. What did Mayan arches lack? p. 69.

ASTRONOMY

Are telescope parts easy to transport? p. 72.

BIOLOGY

Will animal and plant cells grow together?

CLIMATOLOGY

Where was it coldest in 1935? p. 76.

Can the new dental "desensitizer" be used for toothache? p. 67.

ECOLOGY

What Northerners have stayed South? p. 73.

ENTOMOLOGY

How many wings has a grasshopper? p. 72.

How can branches be pruned quickly? p. 75.

Why is North America sliding westward? p. 76.

MATHEMATICS

When will the next "square" year occur? p.

MEDICINE

What is the cost of care for the tuberculous? p. 73.

What is ketene? p. 73.

METALLURGY

How fine could ancient Indians draw gold wire? p. 77

MINING

How can coal be used without being mined? p. 73.

Music-Physics

What makes a man's voice "ring"? p. 74.

PALEONTOLOGY

When were elephants in Nebraska? p. 72.

How will new non-glare headlights be equipped? p. 77.

What university has the newest atom-smasher? p. 78.

PHYSIOLOGY

Can you "dope" yourself into fitness? p. 72.

PSYCHOLOGY

What is the surest way to win votes? p. 68.

PUBLIC HEALTH

In what states is the National Health Inventory being taken? p. 70.

Is silicosis necessarily fatal? p. 74.

VETERINARY MEDICINE

What is crystal violet? p. 75.

VITAL STATISTICS

How long do Supreme Court justices live? p.

ZOOLOGY-FOLKLORE

How did the Groundhog Day superstition originate? p. 78.