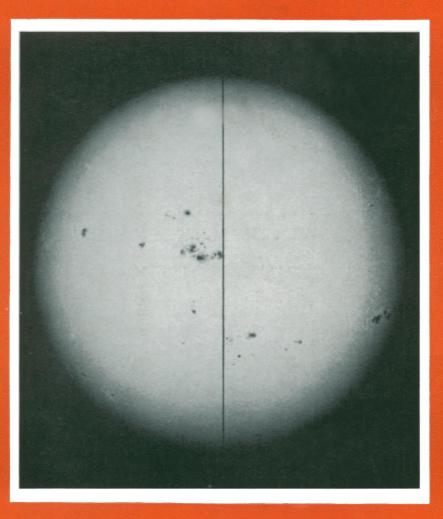
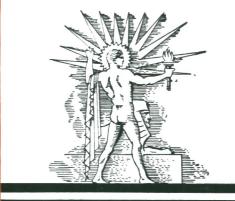
SCIENCE NEWS LETTER

THE WEEKLY SUMMARY OF CURRENT SCIENCE.





FEBRUARY 20, 1937



Turbulence

See Page 117

A SCIENCE SERVICE PUBLICATION

SCIENCE NEWS LETTER

No. 828

Vol. XXXI Summary of The Weekly

Current Science

Published Every Saturday by SCIENCE SERVICE 2101 Constitution Avenue Washington, D. C.

THE INSTITUTION FOR THE POPULARIZATION OF SCIENCE organized 1921 as a nonprofit 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

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.

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 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.

Copyright, 1937, 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.

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 13, 1922. Title registered as trademark, U. S. and Canadian Patent Offices.

Advertising rates furnished on application. Member Audit Bureau of Circulations.

Advertising rates furnished on application. Member Audit Bureau of Circulations.

Board of Trustees of Science Service

Board 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. Pinley, Associate Editor, New York Times; Mark Sullivan, Writer, Washington, D. C.; Representing E. W. Scripps Estate, Harry L. Smithton, Treasurer, Cincinnati, Ohio; Robert P. Scripps, Scripps-Howard Newspapers, West Chester, Ohio; Warren S Thompson, Miami University, Oxford, Ohio. versity, Oxford, 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. Correspondents in principal cities and centers of research. Librarian, Minna Gill; Sales and Advertising Manager, Hallie Jenkins.

DO YOU KNOW?

People in the United States are eating more citrus fruit than they did ten years ago, but not so many apples, grapes, or bananas.

Why vegetables grow well in California is being investigated by a visiting British agriculturist, who reports that Britons are eating more and more vegetables.

Some dairymen paint dairy barn walls with aluminum paint to repel house flies, but recent experiments indicate that this has no particularly repelling value.

Gay Indian designs on rubber mats at entrances to the new Interior Department Building in Washington are the work of Indian art students at various schools.

Before 1891, Death Valley, California, was considered practically barren of life; but since then over 500 species of plants and over 100 of birds have been found there below sea level.

To travel the length of the North American desert is a 2,500 mile journey, from Washington State to Sonora, Mexico, and south to Puebla.

Due to modern interest in relationship of weather and air conditions to disease, the new Palace of Soviet Medicine in Moscow will have a large experimental meteorological station.

George Washington knew the farming problem of gullying soil and erosion, and he used such methods as he could to check erosion on his Virginia

Yellowstone Lake is so large that its water follows the curvature of the earth and is 57 feet above a straight line projected from one beach to the other.

In the seventeenth century Paris was so dark at night that there was a regular business of renting lanterns and bearers to conduct people about the streets.

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.

AGRICULTURE

What is hydroponics? p. 121.

ANATOMY

At what age do you grow up? p. 120.

ANTHROPOLOGY

How old is the Steinheim skull? p. 127.

ARCHAEOLOGY

Did Aksum, Ethiopia, once have its sky-scrapers? p. 121.

How many books did the ancient Mayas leave behind? p. 118.

ASTRONOMY

Do sunspots accompany a solar eclipse? p. 118.

How large are the spots that have been appearing on the sun? p. 117.

Where was the Daniel comet? p. 121.

How does the ultracentrifuge aid in the study of viruses? p. 120.

CHEMISTRY

Can vapors be turned into solid wealth? p. 125.

Does wood hold another source of wealth besides cellulose? p. 122.

Engineering-Entomology

What are ant hills good for? p. 121.

GENERAL SCIENCE

How is a 70-year retirement law affecting French science? p. 121.

GEOGRAPHY

How has the explorer Prof. Schmidt been honored? p. 117.

MEDICINE

Can one disease be used to protect against another? p. 120.

What dye means life to those infected with streptococci? p. 115.

What new remedy has been found for pyorrhea? p. 120.

METEOROLOGY

How heavy were the January rains? p. 127.

ORNITHOLOGY

What use have birds' wings besides in flying? p. 120.

PHENOLOGY

Are plants indiscreet about opening their buds? p. 127.

PLANT PHYSIOLOGY

Does a plant need its vitamin, too? p. 121.

PUBLIC HEALTH

Why must trainloads of food be destroyed in the flood area? $p.\ 124.$

VITAL STATISTICS

How long do Supreme Court justices live on the average? p. 116.