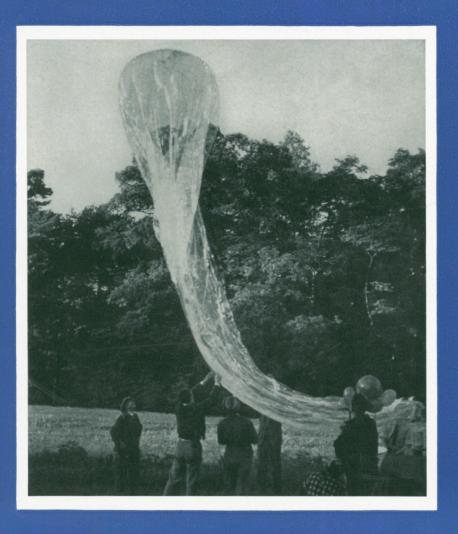
SCIENCE NEWS LETTER

THE WEEKLY SUMMARY OF CURRENT SCIENCE .





JULY 4, 1936



Stratosphere Craft

See Page 12

A SCIENCE SERVICE PUBLICATION

SCIENCE NEWS LETTER

Vol. XXX

The Weekly

No. 795

Summary of

Current Science

Published Every Saturday by

SCIENCE SERVICE 2101 Constitution Avenue Washington, D. C.

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

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 33 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, 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.

Cable address: Scienserve, Washington.

Entered as second class matter at the post-office at Washington, D. C., under the act of March 3, 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

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. Finley, Associate Editor, New York Times; Mark Sullivan, 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; Warren S. Thompson, Miami University, 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?

Genuine mahogany grows in the United States only in far southern Florida.

Carpet beetles were brought to the United States from Europe about a century ago.

Opium poppies grown experimentally in Denmark on land formerly planted in barley have yielded high morphine con-

Italian rubber manufacturers are working experimentally with artificial rubber and have exhibited some of their products.

A London hospital has constructed a pollenarium in which to study grass pollens that are used in treating hay

Suspected of having a missing door key concealed in its interior, a valuable stork in an Illinois zoo was recently fluoroscoped and radiographed, but no key was found.

New houses can be made resistant to termites by adding about two per cent to construction cost.

Thomas Jefferson when President lent his support to establishing smallpox vaccination as a public health measure in this country.

Philadelphia finds that its planetarium is the second most popular sight for visitors to the city, outranked only by the Liberty Bell.

Scientists are experimenting with fruits grown commercially in Great Britain to find more ways of using fruits in wines, summer drinks, and other products.

Dutch engineers are trying out a new system of constructing an ice skating rink: brine is admitted to the basin in streams rather than through pipes, powdered metal combined with binding cements is squirted over the brine, and then water as a top layer forms an ice

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.

What honor has been given to two stratosphere voyagers? p. 6.

How do the planets help to make their own weather? p. 9.

Why has Saturn lost his rings? p. 8.

Can molecules be "graded" for size? p. 9. Can the bitterness be removed from quinine? 8.

CHEMISTRY-ANTHROPOLOGY

Can scientists today learn what were the blood types of men in the Old Stone Age? p. 6.

CONSERVATION

What effect does air in the soil have on flood waters? $\,\mathrm{p.}\,$ 13.

Does the shade given by trees indicate their ripeness for timber? p. 14.

ENTOMOLOGY

Where is the battle against the grasshoppers raging? p. 8.

GENERAL SCIENCE

Should scientific investigations always have immediate usefulness? p. 15.

GENETICS

Is cancer due to a single mendelian factor in the heredity? p.~9.

INVENTION

What invention did Abraham Lincoln patent? p. 3.

What new treatment for diabetes has been developed by one of the discoverers of insulin?

Why is it a good idea to have moles removed? p. 9.

Will a powerful electric shock save a man from death? p. 7.

METEOROLOGY

Is a lightning flash continuous? p. 8.

OCEANOGRAPHY

Does the Hudson river valley go out to sea? p. 6.Where is an 18th century royal dwelling to be used for scientific research? p. 7.

ORNITHOLOGY

Which eagle is the national bird of the United States? p. 14. $\,$

PHYSICS

Does it cost much to send a balloon to the

stratosphere? p. 12.

How powerful will be the huge X-ray tube now under construction? p. 5.

For what practical purpose will the new University of Michigan atom smasher be used? p. 5.

PHYSICS-MEDICINE

What may be the advantage of neutron rays for biological study? p. 4.

Physiology

Can human bone marrow be grown outside the body? p. 7.

Why is it important to measure the pressure of bile in the human body? p. 8.

SAFETY ENGINEERING

Is it safer to ride in an automobile or an airplane? p. 10.