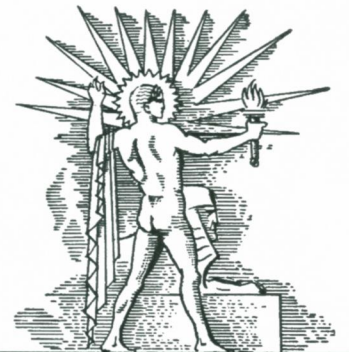
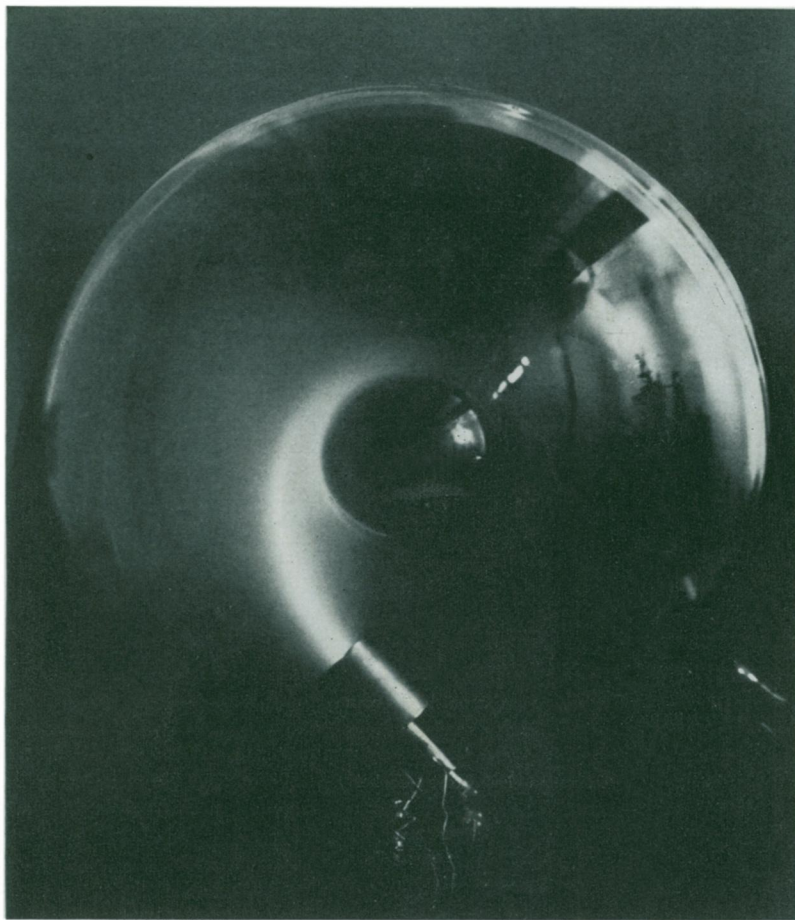


PRICE  
15¢

# SCIENCE NEWS LETTER

THE WEEKLY SUMMARY OF CURRENT SCIENCE ●



JULY 18, 1936

Cosmic Ray Path

See Page 45

A SCIENCE SERVICE PUBLICATION

# SCIENCE NEWS LETTER

Vol. XXX

No. 707

The Weekly  Summary of

## 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 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 \$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, 1936, by Science Service, Inc. Reproduction 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.

### 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?

Chinese alchemists devised formulas for producing a pill of immortality.

The new Railway Museum in Tokyo has on exhibit the first locomotive that drew the first train in Japan.

A clay produced in Wyoming has proved to be one of the best spreaders for the insoluble copper sprays that are used as insecticides.

A new laboratory and greenhouses at Pennsylvania State College will be used in studying ways of improving pasture lands of northeastern states.

Snapshots on cloth are being attempted in Russia, using silk and canvas soaked in special emulsion instead of the usual photographic paper.

Parents of school children in New York State have rated elementary school subjects in the following order, so far as their value is concerned: arithmetic, spelling, English, reading, writing, health, physical education, music, art, sciences, safety, fire prevention, manual training, geography, household arts, history, social studies, civics.

One historian estimates that there were probably 150,000 Spaniards in the New World in 1574.

Improper tire inflation affects not only the wear of a tire but also the fuel consumption of the vehicle.

Solomon, says one archaeologist, was one of the first great copper kings, and copper was his main export in trade.

Tons of ammunition, some of it unexploded, are still being recovered from French ground where World War battles were fought.

The world's speeding up of armament construction is causing great demand for such metals as tungsten and cobalt, used in toughening steel.

An expedition digging in southern Palestine has found papyrus documents of 566 A.D., and pronounces them the first papyrus found in Palestine.

Because some gardeners dislike the yellowish residue left on leaves after they are dusted with sulfur, a sulfur dust dyed green has been produced.

## 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

Is the winter wheat crop safe? p. 38.

### ANTHROPOLOGY

How can we tell what prehistoric man looked like? p. 42.

### ASTRONOMY

What new distinction has Nova Cephei? p. 38.

### BOTANY

How old is Oregon's state flower? p. 41.

### CHEMISTRY

Can "wool" be made from milk? p. 38.

### CHEMISTRY-PHARMACY

How can the sun be used as a preservative? p. 39.

### CLIMATOLOGY

Where is the "dust bowl" now? p. 36.

### ENTOMOLOGY

What western state is relatively free of grasshoppers? p. 40.

### GENERAL SCIENCE

Why does human distress sometimes follow progress of scientific knowledge? p. 45.

### GEOGRAPHY

Is there a "lost world" in Canada? p. 41.  
Why is the prairie fire not a danger in the present drought? p. 36.

### PHYSIOLOGY

Do sunflowers cause hayfever? p. 40.  
How do cells of the body drink? p. 39.  
In what way does fright affect the heart? p. 41.

Will a gland transplantation in an individual affect future generations? p. 38.  
Why has it been difficult to measure the electric currents accompanying nervous processes in the body? p. 37.

### PLANT PHYSIOLOGY

Can plants live in heavy water? p. 41.  
What "social" effect has blue light on plants? p. 40.

### PUBLIC HEALTH

How is meningitis controlled in CCC camps? p. 40.

### VITAL STATISTICS

Is the danger of being killed by lightning very great? p. 44.

### WILDLIFE MANAGEMENT

Is American wildlife endangered by the drought? p. 36.