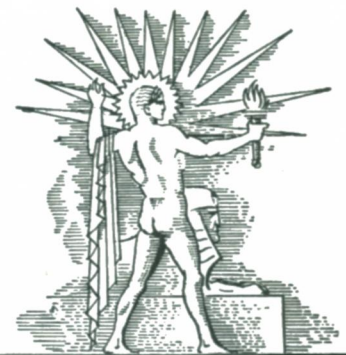


# SCIENCE NEWS LETTER

THE WEEKLY SUMMARY OF CURRENT SCIENCE ●



APRIL 23, 1932

Industry's Seamstress

See Page 261

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SCIENCE SERVICE PUBLICATION

# SCIENCE NEWS LETTER

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## SCIENCE SERVICE

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## DO YOU KNOW THAT

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At the request of the Salvation Army, government nutrition specialists have made a number of suggestions for increasing the variety and nutritive value of meals served to homeless men.

Three stone martens from the mountains of Czechoslovakia have been bought for use at the Government's fur-animal experiment station at Saratoga Springs, N. Y.

A new electrical device, which controls heat for hotbeds, is said to cause plants to take root in half the time normally required.

The Academy of Natural Sciences in Philadelphia has in its museum a piece of rock that bends without breaking; a porous kind of sandstone called "itacolumite."

Like the salmon, the reindeer returns to the place of its birth to bear its young.

Over half of the meat consumed in the United States last year came from hogs.

Felt-coated steel, developed at Mellon Institute of Industrial Research, opens up interesting new commercial possibilities.

Forty years ago diphtheria was one of the most dreaded children's diseases, more than half of the cases being fatal.

The Colorado National Forest has been re-named in honor of President Roosevelt.

Two ruined cities have been discovered in the great desert of southern Arabia, by H. S. Philby, English explorer.

Bats appear to have better control in flight than birds, being able to turn sharply, to stop abruptly, and to fly fast or slow with great flexibility.

With a view to lessening the early-morning noise of rattling milk bottles, a rubber company has devised rubber-covered milk carriers.

Glazed building bricks are being made in lavender, yellow, and pink.

## WITH THE SCIENCES THIS WEEK

**C**URIOSITY-AROUSING questions are prepared concerning the most interesting and important news in each issue. These questions should be a mental stimulant for the adult reader and a boon to the teacher who uses the Science News Letter to add zest to her classroom instruction.

Book reference in italic type is not the source of information of the article, but a reference for further reading on the subject of the article. Books cited can be supplied by Librarian, Science Service, at publisher's price, prepaid in U. S.

### ARCHAEOLOGY

How does the Pyramid of Cholula compare in size with the Pyramid of Cheops? p. 261  
How does the sun-hole calendar operate? p. 267

### BOTANY

What is the "One in Ten" rule for wild flower picking? p. 260. *Fieldbook of American Wild Flowers*—F. Schuyler Mathews—Putnam, 1927, \$3.50.

### CHEMISTRY

How many isotopes has copper? p. 256. *The Story of Copper*—Watson Davis—Century, 1924, \$3.  
What is the formula for rotenone? p. 255. *Insecticides and Fungicides*—O. G. Anderson and F. C. Roth—Wiley, 1923, \$3.

### COSMOGONY

In the new solar theory, what causes the sun to rotate? p. 258.

### INVENTION

What did General Washington say to John Fitch about steam-propelled boats? What was the difference between the methods of Fitch and Rumsey regarding the application of steam to vessels? p. 262

### MANUFACTURING

What new use has been found for soy bean oil? p. 261

### MEDICINE

How many people in America die from cancer each year? p. 261. *Cancer*—Albert Soiland—Appleton, 1928, \$1.50.  
What causes the brain disease of horses which has been attacking man? p. 255

### METEOROLOGY

What place have balloons on the Ice Patrol boat, Pontchartrain? p. 260. *Meteorology for Aviator and Layman*—Richard Whatham—Stokes, 1930, \$3.

### METEOROLOGY-VOLCANOLOGY

What happens if volcanic ash gets above the highest cloud level? p. 256. *Volcanoes*—G. W. Tyrrell—Holt, 1931, \$1.25.

### PHYSICS

What is the average duration of an atom's "excited state"? p. 260.

### PHYSICS-PHOTOGRAPHY

What is Kirchhoff's Law? p. 257.

### PHYSIOLOGY

What is the chief difference between the firefly's light-producing process and the reaction involved in ordinary respiration? p. 264

### PUBLIC HEALTH

Who discovered thallium? What are its effects on animals? p. 256

### ZOOLOGY

Is the mole blind? p. 267.

# The Public's Way to Science

**S**CIENCE SERVICE is the unique institution established for the purpose of disseminating scientific information to the public. It acts as a liaison agency between scientific circles and the world at large. It interprets original research and reports the meetings of learned societies in a way to enlighten the layman. The specialist is likewise a layman in every science except his own and he, too, needs to have new things explained to him in non-technical language. Scientific progress is so rapid and revolutionary nowadays that no one can keep up with it without some means of keeping in close contact with its new ideas and discoveries. Science Service provides life-continuation courses in all the sciences for newspaper readers without tuition fees or entrance examinations.

In a democracy like ours it is particularly important that the people as a whole should so far as possible understand the aims and achievements of modern science, not only because of the value of such knowledge to themselves but because research directly or indirectly depends upon popular appreciation of its methods. In fact the success of democratic institutions, as well as the prosperity of the individual, may be said to depend upon the ability of people to distinguish between science and fakes, between the genuine expert and the pretender.

Science Service spares no pains or expense in the endeavor (1) to provide the best possible quality of science popularization (2) to get it to the largest possible number of people. If in doing this it makes both ends meet, so much the better. If not, it does it anyway.

Through the endowment by the late E. W. Scripps, Science Service has been assured of such financial support as to insure its independence and permanence. Mr. Scripps' long and wide experience as a newspaper editor and proprietor convinced him of the importance of scientific research as the foundation of the prosperity of the nation and the guide to sound thinking and living. He realized the need for an independent agency that would bring the results of research to the attention of the entire people so these could be applied to the solution of their personal, social or political problems.

Science Service was organized in 1921 as a non-profit-making corporation. Science Service is conducted on busi-

ness principles and all receipts are devoted to the diffusion of knowledge and the developing of promising methods of popular education.

Science Service is under the control of a board of trustees composed of nine scientists and six journalists. The leading national organizations of all the sciences, the National Academy of Sciences, the National Research Council, and the American Association for the Advancement of Science, appoint three trustees each.

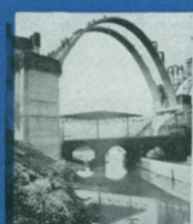
Science Service enjoys the cooperation of scientists and scientific institutions throughout the world. It welcomes suggestions and information. Although not a medium for the primary publication of original research, Science Service desires to receive copies of research reports, addresses and papers. When communication is urgent, any scientist is authorized to telegraph Science Service, Washington, D. C., using press rate collect.

Science Service invites editors of newspapers, magazines and other publications to avail themselves of its product. It invites individuals of the public to cooperate by reading the newspapers and other publications using Science Service. Teachers, students, and individuals specially interested in science are invited to subscribe for the SCIENCE NEWS LETTER and utilize Science Service records and other services that may be made available.

For feeling and reporting the pulse of science day by day, Science Service has a staff of scientist-writers at its headquarters in Washington. Science Service contributors of scientific competence are located in the centers of research in America and abroad. The principal national and international science meetings here and abroad are reported by staff or other scientist-writers. A working information file and library provides quickly the necessary background to the current happenings in science.

Science Service occupies offices in the magnificent building of the National Academy of Sciences and the National Research Council, opposite the Lincoln Memorial, in Washington.

Science Service is not under the control of any clique, class or commercial interest. It is not under the control of any particular publisher or syndicate. It is not a governmental institution, but it is in close contact with the num-



erous governmental bureaus of research. It is not the organ of any single scientific association. It serves all the sciences. It engages in no propaganda, unless it be called propaganda to urge the value of research and the usefulness of science.

In fulfilling its function as the institution for the popularization of science, Science Service operates as a news-

paper syndicate specializing in the field of science, provides science copy to other newspaper agencies, edits books for publishers, provides science articles for magazines, publishes the SCIENCE NEWS LETTER, arranges radio programs, sponsors lectures, produces phonograph records on science, and sponsors research and reporting in the field of seismology, archaeology and cosmic data.

## The Activities of Science Service

### Newspaper Services

**Daily Mail Report**—A daily syndicated service to newspapers, consisting of brief non-technical news articles on discoveries, inventions and events in the various fields of science, with special reference to their application to industry, commerce and daily life.

**Daily Wire Report**—Spot news such as new inventions and discoveries, earthquakes, comets, explorations, etc., and the meetings of the larger scientific societies here and abroad are covered by dispatches telegraphed daily to newspapers.

**Interpretive Articles**—Short, concise articles, interpretive of science today and suitable for editorial or feature page use are issued thrice weekly.

**Science Shorts**—An assortment of interesting and authoritative short items on science, old and new, issued as a daily feature or for use as fillers.

**Feature Series**—Sequences of six to ten articles on important and timely subjects, written by eminent scientists or staff writers. Recent subjects of these feature series include: The fight against drugs, Manchurian backgrounds, depression diets, the next greatest invention, etc.

**Map of the Stars**—A monthly chart of the heavens which enables the layman to understand and enjoy the beauties of the night sky. Descriptive text accompanies map which is furnished in matrix form.

**Preparedness**—A preparedness file or "science morgue" is supplied each newspaper using Science Service. This contains authoritative background stories that the course of the news may at any moment make timely.

(The seven newspaper services listed above are supplied newspapers as a unit 7-in-1 service and constitute a complete and authoritative coverage of current science.)

**Why the Weather**—A daily series of brief authoritative explanations of meteorological phenomena, syndicated to newspapers.

**Feature Articles**—A weekly Science Service release of a newspaper feature article illustrated with photographs and

drawings is distributed as a part of Every-Week Magazine for Sunday newspapers.

**Special Newspaper Features**—Important events of a scientific nature, such as eclipses, expeditions, explorations, etc., are covered for newspapers in special articles distributed by mail and telegraph.

**Other Syndicate Features**—Other newspaper features are offered from time to time, either produced by the Science Service staff or in cooperation with outside authors.

### Books, Radio, Records

**Radio**—Each Friday afternoon under the auspices of Science Service an eminent scientist talks over the nation-wide network of the Columbia Broadcasting System. Each week more than fifty independent radio stations use a science news talk prepared by Science Service. Science Service has been engaged in the presentation of radio talks on science continuously since the early days of broadcasting.

**Phonograph Records**—As a new educational tool, Science Service has introduced phonograph records of talks by eminent scientists. These records are long playing, faithful reproductions of the voice and are furnished teachers and others at a cost that should allow their wide use.

**Books**—Science Service is engaged in writing, editing, revision and criticism of manuscripts for many publishers.

**Magazine Articles**—Science Service is prepared to supply periodicals of any kind with readable and accurate articles on scientific subjects, written either by its staff or the investigators themselves in any specified style and length and illustrated if desired.

**Photographs**—Science Service carries in stock for immediate mailing to individuals and newspapers portraits of men and women working in science and a large collection of other scientific photographs.

### Research Activities

**Seismological Reporting**—Instrumental data upon earthquakes recorded at more than thirty seismological stations through-

out the world are collected telegraphically by Science Service. These are made available to the U. S. Coast and Geodetic Survey and the Jesuit Seismological Association for the prompt determination of the epicenter and for further investigative use.

**Cosmic Data**—Science Service receives daily reports from Mt. Wilson Observatory on sunspots, from the U. S. Coast and Geodetic Survey observatory at Tucson, Ariz., on magnetic conditions, from Smithsonian Institution on solar constant, from College of Agriculture and Mines, College, Alaska, on aurora, and from U. S. Bureau of Standards on Kennelly-Heaviside layer heights. These are transmitted by U. S. War Department radio to Science Service, assembled into an urigram message and distributed by U. S. Navy radio throughout the world.

**Archaeological Investigations**—Leading archaeologists, anthropologists and geologists throughout the country constitute a corps of "minute men" who investigate for Science Service reported archaeological and anthropological discoveries. In this way authentic information on important finds is made available to the public and erroneous reports are corrected.

**Research Announcements**—The results of Science Service research activities are summarized in mimeographed research announcements issued as necessary and sent gratis to cooperating scientists.

### Science News Letter

Each week the current progress of science is summarized in the fully illustrated pages of this concise, easily read and authoritative magazine. It is a quickly read story of what is newest in science. Rarely more than 16 pages large, it restricts the size of its articles to save the time of its readers. It reprints classics of science, reviews new books and serves scientists and non-scientists alike. Its subscription price is \$5 a year, special introductory offer, 17 weeks for \$1.

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Watson Davis, Managing Editor.

