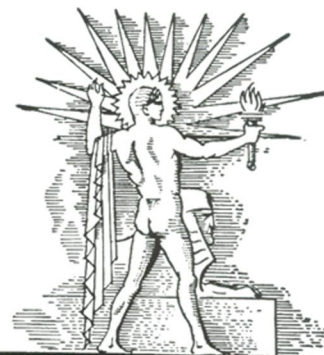
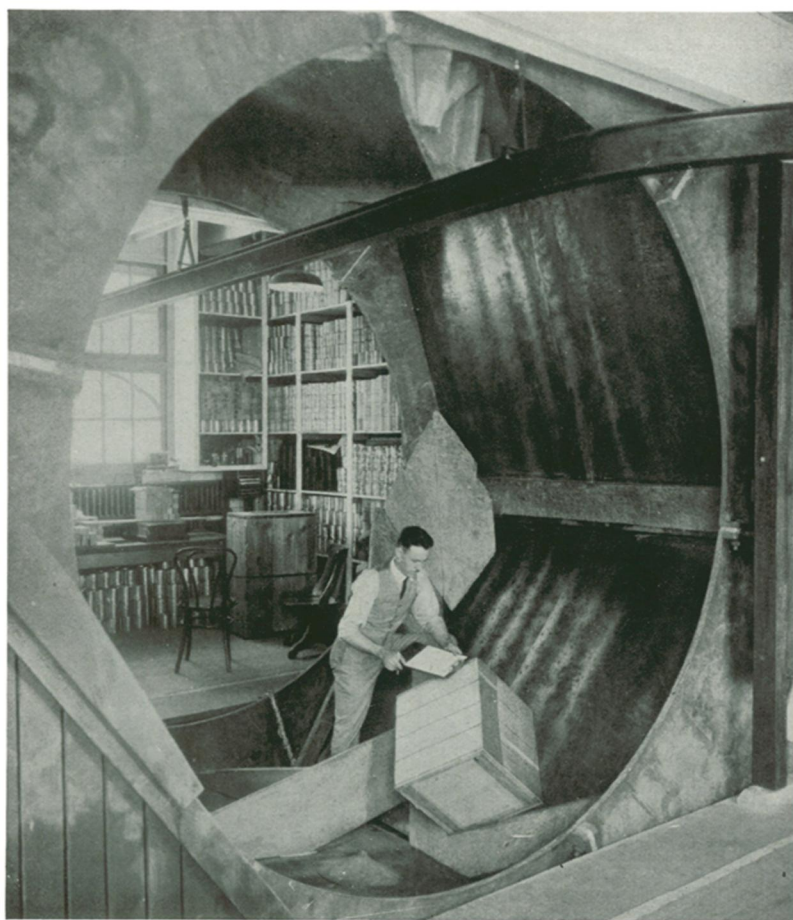


PRICE
15¢

SCIENCE NEWS LETTER

THE WEEKLY SUMMARY OF CURRENT SCIENCE ●



DECEMBER 16, 1933

Mechanical Baggage Man

See Page 392

A

SCIENCE SERVICE PUBLICATION

SCIENCE NEWS LETTER

VOL. XXIV

No. 662

The Weekly  Current
Summary of Science

Published by

SCIENCE SERVICE

The Institution for the Popularization of Science organized under the auspices of the National Academy of Sciences, the National Research Council and the American Association for the Advancement of Science.

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 and foreign subscribers please add two dollars (\$2.00) per year to regular subscription rates to cover postage.

In requesting change of address, please give your old address as well as the new one in notification to Circulation Department, SCIENCE NEWS LETTER, 21st and Constitution Ave., Washington, D. C., at least two weeks before change is to become effective.

Advertising rates furnished on application.

Board of Trustees of Science Service

Honorary President, William E. Ritter, University of California. 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.; Raymond Pearl, Director, Institute for Biological Research, Johns Hopkins University, Baltimore, Md. 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.; David White, Senior Geologist, U. S. Geological Survey. Representing National Research Council, Vernon Kellogg, *Secretary Emeritus*, National Research Council, Washington, D. C.; C. G. Abbot, *Secretary*, Smithsonian Institution, Washington, D. C.; Harrison E. Howe, *Editor of Industrial and Engineering Chemistry*. 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, *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, J. W. Young; Librarian, Minna Gill; Sales and Advertising Manager, Hallie Jenkins.

Copyright, 1933, by Science Service, Inc. Reproduction of any portion of the SCIENCE NEWS LETTER is strictly prohibited since it is distributed for personal, school, club or library use only. Newspapers, magazines and other publications are invited to avail themselves of the numerous syndicate services issued by Science Service, details and samples of which will gladly be sent on request.

Members of the American Association for the Advancement of Science have the privilege of subscribing to the 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.

Publication Office, 1930 Clifton Ave., Baltimore, Md., Editorial and Executive Office, Constitution Ave. at 21st St., N. W., Washington, D. C.

Address all communications to Washington, D. C. Cable address: Scienservc, 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 trade-mark, U. S. and Canadian Patent Offices.

DO YOU KNOW?

A common pigweed plant may yield as many as 117,000 seeds.

The turkey, an American bird, was carried to Europe in 1519 by a Spanish explorer.

A chemical preparation is being substituted for a hot iron in branding cattle in Germany.

It is estimated that 20 per cent. of the poverty in normal times is attributable to chronic illness.

Wood gas may be employed as a motor fuel in Czechoslovakia, if tests prove successful.

John Mayow of England published in 1674 the first comprehensive treatise on the atmosphere.

Government scientists have developed a method of determining in advance the relative effects of age on different types of paper.

The depth to which metal is "bruised" when the surface is machined can be detected by X-rays.

The oldest drug prescription known is a stone tablet of 3700 B. C. bearing directions for making an inhalant for treating a head cold.

A warm bathing beach in Poland was transformed into a winter scene one day when carbon dioxide shot up from an oil well and descended in the form of snow.

A bird-killing spider with an eight-inch leg spread is described by Dr. R. L. Ditmars, of the New York Zoological Park, who observed it in tropical America.

Quinine bark was named chinchona in honor of the Countess Chinchon, but the botanist Linnaeus wrote the word without the first h, and it has been scientifically misspelled, "cinchona," ever since.

WITH THE SCIENCES THIS WEEK

ANTHROPOLOGY

Did Stone Age man live in a cave? p. 393.

ARCHAEOLOGY

When was cannibalism practised in Britain? p. 393.

Where is the Lost City of Nevada? p. 387.

What trace remains of the Indians who lived in the Everglades before the Seminoles? p. 389.

ASTRONOMY

Why is life considered impossible on most of the planets? p. 391.

CRIMINOLOGY

What evidence does a revolver leave upon the person who uses it? p. 388.

ENGINEERING

How many people drive faster than 55 miles per hour? p. 387.

Why does a railway roadbed have to be washed? p. 391.

GENETICS

Is goiter hereditary? p. 388.

MATHEMATICS

Can truth be three-sided and still be logical? p. 397.

MEDICINE

What may explain the increase in the diabetes death rate? p. 396. *Diabetes—Benjamin F. Smith—Appleton, 1930, \$2.*

METEOROLOGY

Are the winters becoming less severe? p. 390.

NEUROLOGY

What is sleep? p. 392.

OCEANOGRAPHY

How much food does a cubic meter of "ocean soup" contain? p. 394. *Biological Chemistry and Physics of Sea Water—H. W. Harvey—Macmillan, 1928, \$4.25.*

ORNITHOLOGY

Which are the poets' favorite birds? p. 392.

PALEONTOLOGY

When did beaver as big as bear live in North America? p. 393.

PHYSICS

How much does a pound of "heavy water" cost now? p. 387.

PHYSIOLOGY

How do weight-reducing drugs cause the body to lose weight? p. 397.

PSYCHOLOGY

How does the little piccaninny respond to a drum? p. 398.

PSYCHOLOGY—ENGINEERING

Does "very moderate drinking" by automobile drivers increase the probability of accident? p. 390 and 387. *Alcohol and Human Efficiency—Walter R. Miles—Carnegie Inst. of Washington, 1924, \$3.*

PUBLIC HEALTH

Are teen-age girls more susceptible to tuberculosis than boys? p. 392.

TESTING MATERIALS

Where are the jolts of a 1000-mile journey concentrated into ten minutes? p. 392.

ZOOLOGY

What pest has invaded Australia from Europe? p. 391.

Where was the home of the Norway rat? p. 399. *Uninvited Guests—David Causey—Knopf, 1932, \$2.*

These curiosity-arousing questions show at a glance the wide field of scientific activity from which this week's news comes. Book references in italic type are not sources of information for the article, but are references for further reading. Books cited can be supplied by Book Dept., Science News Letter, at publishers' prices, prepaid in the United States.