

which French scientists have been developing and investigating before and during the war, seem to point toward even greater future success in relieving allergic sufferers.

Mayo Clinic scientists reporting on

benadryl are: Drs. T. W. McElin, Bayard T. Horton, P. A. O'Leary, F. M. Farber, G. A. Koelsche, L. E. Prickman, H. M. Carryer, H. L. Williams, G. B. Logan, and C. F. Code.

*Science News Letter, December 15, 1945*

## ELECTRONICS

## Locates Storm Areas

**Static Direction Finder, using cathode tube similar to radar and perpendicular receiving loops, locates storms within a radius of 2,000 miles.**

► STORM areas within a radius of 2,000 miles may be located by a new special electric equipment called a Static Direction Finder, which was used with success in the Pacific war theater, it is now revealed. The apparatus consists of a cathode-ray indicating tube similar to those used in radar and television, and two mutually perpendicular receiving loops and amplifiers.

For a long time it has been known that certain types of storms are accompanied by severe electrical disturbances, which, incidentally, are responsible for the crackling and grinding noises often heard by radio listeners. In the Static Direction Finders, called Sferics for short, these disturbances give a visual indication of a storm's direction.

An incoming static signal to the direction finder produces a straight-line flash on the face of the cathode ray tube. The angular position of this flash gives the direction of origin of the static crash. Several stations in a network taking observations at the same time on the same flashes can locate their source and spot the storm position within a 2,000-mile radius.

In its advance stages of development the direction finder was tested at the Army Air Force Center, Orlando, Fla. Although finding its first use in warfare, Sferics began as a scientific project at the University of Florida in 1934. At that time, Dean Joseph Weil at the college of engineering started work on tracking hurricanes by means of the static associated with them. Similar work was also undertaken on thunderstorms both in this country and abroad.

The U. S. Weather Bureau and the U. S. Navy soon became interested in the work and helped obtain funds and equipment to carry on the study. Apparatus built by the English National Physical Laboratory was secured through

the Navy. A network of stations in Florida and Cuba was put into operation with improved equipment constructed at the University.

Eighteen of these Static Direction Finders saw action during the war. They proved of high value, Army officials state, in securing information of weather and bombing conditions over enemy territory, and in routing planes around storm areas.

*Science News Letter, December 15, 1945*

## ASTRONOMY

## Comet Friend-Peltier To Become Brighter

► THE COMET Friend-Peltier will pass nearest the sun on Dec. 17, according to an orbit computed by Dr. L. C. Cunningham, of Aberdeen Proving Grounds, and reported to Harvard Observatory Clearing House. This is the comet discovered by amateur astronomer Clarence Friend of Escondido, Calif., on Nov. 22 and independently observed by Leslie C. Peltier of Delphos, Ohio, two days later.

Indications are that the comet will become brighter than it was at discovery, when it was of the seventh magnitude, just below the limit of naked eye visibility. It is approaching so close to the sun in the sky, however, that it will practically be impossible to observe for several weeks to come. Its brightness after that time cannot be predicted with any certainty.

The present path of the comet is carrying it southward from the constellations of Corona and Hercules, where it was when discovered, into Ophiuchus and Sagittarius. It will pass the perihelion point in its orbit, when it will be nearest the sun, on Dec. 17, and after that time will be observable, if at all, in the southern hemisphere.

The apparent path of the comet as computed by Dr. Cunningham, when plotted on a map of the sky, swings in an arc shortly after the comet has gone south of the ecliptic. Probably the path of the comet through the latter part of December and the early part of January will nearly parallel the ecliptic, and the comet will take some time to get far from the sun. By then its distance from the earth will have increased considerably. At perihelion the comet will be about 18,000,000 miles from the sun but many times this distance from the earth.

*Science News Letter, December 15, 1945*

## SCIENCE NEWS LETTER

Vol. 48 DECEMBER 15, 1945 No. 24

The weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N St. N. W., Washington 6, D. C. North 2255. Edited by WATSON DAVIS.

Subscriptions—\$5.00 a year; two years, \$8.00; 15 cents a copy. Back numbers more than six months old, if still available, 25 cents. Monthly Overseas Edition: By first class mail to members of the U. S. Armed forces, \$1.25 a year. To others outside continental U. S. and Canada by first class mail where letter postage is 3 cents, \$1.25; where letter postage is 5 cents \$1.50; by airmail, \$1.00 plus 12 times the half-ounce airmail rates from U. S. to destination.

Copyright, 1945, by Science Service, Inc. Reproduction of any portion of 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.

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 18, 1922. Title registered as trademark, U. S. and Canadian Patent Offices. Indexed in Readers' Guide to Periodical Literature, Abridged Guide, and the Engineering Index.

The New York Museum of Science and Industry has elected SCIENCE NEWS LETTER as its official publication to be received by its members.

Member Audit Bureau of Circulation. Advertising Representatives: Howland and Howland, Inc., 393 7th Ave., N.Y.C., Pennsylvania 6-5566 and 360 N. Michigan Ave., Chicago, STAt 4439.

## SCIENCE SERVICE

The Institution for the Popularization of Science organized 1921 as a non-profit corporation.

**Board of Trustees**—Nominated by the American Association for the Advancement of Science: Edwin G. Conklin, American Philosophical Society; Otis W. Caldwell, Boyce Thompson Institute for Plant Research. Nominated by the National Academy of Sciences: Harlow Shapley, Harvard College Observatory; Warren H. Lewis, Wistar Institute; R. A. Millikan, California Institute of Technology. Nominated by the National Research Council: C. G. Abbot, Smithsonian Institution; Hugh S. Taylor, Princeton University; Ross G. Harrison, Yale University. Nominated by the Journalistic Profession: A. H. Kirchhofer, Buffalo Evening News; Neil H. Swanson, Executive Editor, Sun Papers; O. W. Riegel, Washington and Lee School of Journalism. Nominated by the E. W. Scripps Estate: Max B. Cook, Scripps Howard Newspapers; H. L. Smithton, Executive Agent of E. W. Scripps Trust; Frank R. Ford, Evansville Press.

**Officers**—President: Harlow Shapley. Vice President and Chairman of Executive Committee: C. G. Abbot. Treasurer: Frank R. Ford. Secretary: Watson Davis.

**Staff**—Director: Watson Davis. Writers: Frank Thone, Jane Stafford, Marjorie Van de Water, A. C. Monahan, Martha G. Morrow. Science Clubs of America: Joseph H. Kraus, Margaret E. Patterson. Photography: Fremont Davis. Sales and Advertising: Hallie Jenkins. Production: Dorothy Reynolds.