

will use the new information in making weather forecasts, since facts gathered by balloons come from a level only about half as high.

MEDICINE

Benemid against TB

➤ **BETTER** treatment for tuberculosis is expected through use of a new chemical called Benemid. The new chemical will step up the effects of PAS, a remedy already giving some beneficial results in treatment of the white plague.

Studies showing the possibilities to be expected from teaming these two chemicals are reported in Philadelphia by Drs. William P. Boger and Forrest W. Pitts of the Philadelphia General Hospital.

PAS, short for para-aminosalicylic acid, is being applied increasingly to the treatment of tuberculosis. It is sometimes used in conjunction with streptomycin. But the dosage of PAS now used, the Philadelphia scientists pointed out, is based on the amount the patients can tolerate, not on what is believed the optimum dose. Some TB specialists believe twice the dose now used would be desirable.

The Philadelphia scientists decided that PAS might be more effective if some way could be found of getting higher concentrations of it in the patient's blood without increasing the dose. One way might be to give a chemical that would slow its excretion from the body. Benemid seems to be the answer.

Tests on seven patients with tuberculosis showed that Benemid enhanced the concentration of PAS in the blood plasma two to four times.

"Therefore," Drs. Boger and Pitts state in their report to the journal *SCIENCE*

The technical report of the research is appearing in the *PROCEEDINGS OF THE INSTITUTE OF RADIO ENGINEERS* (August).

Science News Letter, August 12, 1950

(Aug. 4), "Benemid may extend and greatly increase the efficacy of PAS in the treatment of tuberculosis."

Benemid's chemical name is p-(di-n-propylsulfamyl) benzoic acid. Sharp and Dohme make it under the trademark, Benemid, but it may get the nonproprietary chemical name of probenedicid.

Science News Letter, August 12, 1950

METEOROLOGY

Predict Dry and Warm August for Southeast U. S.

➤ "APPRECIABLY drier and warmer than it was in July." That is what the Weather Bureau says it will be during August for the area east of the Mississippi and south of the Mason-Dixon line. However, New England will have a little better luck, if "slightly below normal" temperatures during August can be called that. Rainfall will be normal in the northeast.

"This was a very difficult forecast to make," Jerome Namias, chief of the extended forecast section of the Weather Bureau, said as he handed out his regular twice-a-month 30-day forecast. "The indications are not clear-cut," he said.

The dust bowl area of the country is in for some relief. The prediction for the Plains and Rocky Mountain states is "abundant showery rainfall." On the west coast, in the south, rainfall will be its usual

normal, which means very little, but the far northwest will have precipitation somewhat above normal.

Temperatures will be lower than normal for the central and northern Rocky Mountain states. Along the Great Lakes and elsewhere in the west, temperatures will be their usual August selves.

Science News Letter, August 12, 1950

Streptomycin is found by one research group to be the best of eight antibiotics for the treatment of the radiation produced by the atomic bomb.

SCIENCE NEWS LETTER

VOL. 58 AUGUST 12, 1950 No. 7

43,300 copies of this issue printed

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*.

Subscription rates: 1 yr., \$5.50; 2 yrs., \$10.00; 3 yrs., \$14.50; single copy, 15 cents, more than six months old, 25 cents. No charge for foreign postage.

Change of address: Three weeks notice is required. When ordering a change please state exactly how magazine is now addressed. Your new address should include postal zone number if you have one.

Copyright, 1950, 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. Science Service also publishes *CHEMISTRY* (monthly) and *THINGS of Science* (monthly).

Printed in U. S. A. Entered as second class matter at the post office at Washington, D. C. under the act of March 3, 1879. Acceptance for mailing at the special rate of postage provided for by Sec. 34.40, P. L. and R., 1948 Edition, paragraph (d) (act of February 28, 1925; 39 U. S. Code 283), authorized February 28, 1950. 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*.

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. STAtE 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, Princeton University; Karl Lark-Harowitz, Purdue University; Kirtley F. Mather, Harvard University. Nominated by the National Academy of Sciences: Harlow Shapley, Harvard College Observatory; R. A. Millikan, California Institute of Technology; L. A. Maynard, Cornell University. Nominated by the National Research Council: Ross G. Harrison, Yale University; Alexander Wetmore, Secretary, Smithsonian Institution; Rene J. Dubos, Rockefeller Institute for Medical Research. Nominated by the Journalistic Profession: A. H. Kirchofer, Buffalo Evening News; Neil H. Swanson, Baltimore Sun Papers; O. W. Riegel, Washington and Lee School of Journalism. Nominated by the E. W. Scripps Estate: H. L. Smithton, E. W. Scripps Trust; Frank R. Ford, Evansville Press; Charles E. Scripps, Scripps Howard Newspapers.

Officers—President: Harlow Shapley; Vice President and chairman of Executive Committee: Alexander Wetmore; Treasurer: O. W. Riegel; Secretary: Watson Davis.

Staff—Director: Watson Davis. Writers: Jane Stafford, A. C. Monahan, Marjorie Van de Water, Ann Ewing, Wadsworth Likely, Margaret Rallings, Sam Matthews. Science Clubs of America: Joseph H. Kraus, Margaret E. Patterson. Photography: Fremont Davis. Sales and Advertising: Hallie Jenkins. Production: Priscilla Howe. In London: J. G. Feinberg.

Question Box

AGRICULTURE

How is the South going to be a rival of the Midwest? p. 107.

ASTRONOMY

What is the shooting star month? p. 98.

MEDICINE

What helps to relieve pain of menstrual periods? p. 104.

Photographs: Cover, the Texas Company; p. 99, Stanford University; p. 101, Nuclear Instrument and Chemical Corporation; p. 103, U. S. Army; p. 106, 107, Myron Davis; p. 112, Celanese Corporation of America.

Where has the worst polio outbreak of the year occurred? p. 104.

ORNITHOLOGY

What bird has royal status? p. 110.

PSYCHIATRY

How is a key linked with marital happiness? p. 104.

Where do children get everything they want? p. 106.