

tribute through firms already in this business.

Science News Letter, March 24, 1945

Doctors Worried

► WITH THE release of penicillin for general civilian use, physicians are beginning to worry over its possible indiscriminate use, particularly if and when it becomes available in forms the layman can give himself. These may include pills, lozenges, chewing gum, dental paste, vaginal jelly, face creams, shaving pastes and similar products.

Two physicians, Lieut. Leslie A. Falk, of the Army Medical Corps, and Dr. Herman Goodman, of New York, have already written to the editor of the *Journal of the American Medical Association* on the subject. Their letters appear in the March 17 issue of the journal.

Development of a sense of false security is perhaps the greatest danger, in the opinion of Lieut. Falk.

"Penicillin is of no use in many diseases, and in others there is danger from inadequate dosage," he points out. "For example, it is not hard to visualize that a patient with a chancre would hear that penicillin cures syphilis, would get hold of some, take it (or have it administered) in inadequate dosage, see his chancre dis-

appear, feel that he has been cured of the disease, and then develop cerebrospinal or cardiovascular syphilis many years hence. Numerous other examples can be imagined, and some have probably already occurred."

Danger of inadequate dosage is also stressed by Dr. Goodman. He suggests that not only will sick people in such cases fail to get well but that "a large army of infection carriers" may develop from persons who have not had enough of the mold chemical to eradicate the germs.

A person treating his own strep sore throat with penicillin cough drops or chewing gum is probably one example of what Dr. Goodman fears. Such a person might absorb enough penicillin to make him feel better but not enough to clear up the infection and he would go around spreading it to others.

Continuing research on best methods of using penicillin, and prevention of its abuse by the industry, medical and pharmaceutical professions and government agencies are urged by Lieut. Falk. He also stresses the need to retain enough government control to prevent development of shortages through misuse of the precious material and to prevent a "riot of commercial penicillinization of our population."

Science News Letter, March 24, 1945

sight to the target is the direction in which the plane is pointed, a slip or skid may cause the rocket to travel at 600 miles an hour at an angle of 45 degrees to the target. These factors, and others, must be taken into consideration by fighter pilots who are also gunners and rocketeers.

Science News Letter, March 24, 1945

Dogfish shark, the liver of which is now America's chief source of vitamin A, is so called because of its great appetite for fish; the Pacific dogfish, closely related to the Atlantic variety, is a four-foot gray shark.

SCIENCE NEWS LETTER

Vol. 47 MARCH 24, 1945 No. 12

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, 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, American Philosophical Society; Otis W. Caldwell, Boyce Thompson Institute for Plant Research; Henry B. Ward, University of Illinois. **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: Edwin G. Conklin. **Vice President and Chairman of Executive Committee:** Harlow Shapley. **Treasurer:** C. G. Abbot. **Secretary:** Watson Davis.

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

ORDNANCE

Rockets Prove Themselves

► THE TREMENDOUS destructive power of rockets has proved these new offensive weapons as effective against enemy ground units and moving targets. A report on the results of 323 sorties in which 1,117 rockets were expended showed that 35 locomotives, 85 tanks, 15 armored cars, 164 motor transports, 19 gun positions, 9 aircraft hangars, 6 warehouses and factories, 36 good cars and 2 ships had been destroyed in the European theater of war, by one squadron over a period of two months. This means that a total of 362 items were destroyed by rockets. About 35% of the rockets were destructive hits.

An analysis of these figures, prepared at the Fighter Gunnery school of the Army Air Forces at Foster Field showed that an average of three or less rockets are fired to get one of them accurately knocking out an enemy locomotive, a motor transport or a gun position. About five rockets are expended for each tank knocked out, tanks being such small tar-

gets that they are harder to hit.

Rockets have terrific penetration effect, but little fragmentation effect on enemy targets. A five-inch rocket launched from a P-47 or a P-38 can cut through three feet of reinforced concrete and four feet into semi-reinforced concrete. This is equivalent to the fire power of a Navy five-inch gun. Rockets thus turn a fighter plane into flying battleship.

Trained fighter pilots learn to launch rockets and fire bullets from swift combat ships at this school under the direction of Col. H. H. Van Auken, a veteran of 17 years' service with the Army Air Forces. The actual firing of machine guns and rockets by flyers is accomplished at Matagorda Peninsula on the Gulf of Mexico.

Launching a rocket from a plane is no simple procedure. Rockets are affected by the airspeed of the plane, dives, maneuvers and other factors. Slipping or skidding a plane can cause a rocket to completely miss its target. While the line of