

## MEDICINE

# Hope for Leprosy Remedy

Beneficial effects of promin treatment give specialists renewed expectations that they may be able to conquer the disease by chemotherapy.

► NEW HOPE for the conquest of leprosy by a chemical remedy appears in a report of beneficial results from promin treatment of leprosy at the U. S. Marine Hospital (National Leprosarium) in Carville, La.

Promin "can be regarded as the most encouraging experimental treatment ever undertaken at the National Leprosarium," Dr. G. H. Faget and associates declare in *Public Health Reports* (Nov. 26), official publication of the U. S. Public Health Service.

Promin is a chemical relative of the sulfa drugs. It has been remarkably successful in combatting experimental tuberculosis in guinea pigs and showed promise in human tuberculosis.

Trial of it in leprosy was started over two years ago. It is not considered a specific cure for leprosy, no case as yet having become arrested under its influence. The progress of the disease, however, has been checked in a considerable percentage of cases. Dr. Faget and associates believe it is an advance in the right direction and that further research may lead to synthesis of a sulfa drug that will succeed "in saving countless lives" threatened by leprosy and other diseases, such as tuberculosis, caused by mycobacteria.

The drug proved too toxic to be given by mouth, but with suitable precautions could be safely given by injection into the patient's veins. It was given daily except Sunday for months, with rest intervals of one to two weeks three times a year. Some patients who showed allergic skin reaction were successfully desensitized to promin and could then continue the treatment.

Eye complications of leprosy, leprosy laryngitis, sores of lips, tongue, gums and palate, and ulcers of the nasal mucous membranes all showed improvement under treatment. One patient who had had leprosy for 12 years improved so much that he was able to play baseball for the first time in three years.

Another drug closely related to promin and which could be given by mouth was also tried and found to check the course of the disease. The beneficial results with both drugs were not, the sci-

entists believed, due to spontaneous remissions in the course of the disease.

Associated with Dr. Faget in the trial of promin were: Dr. R. C. Pogge, Dr. F. A. Johansen, Dr. J. F. Dinan, Dr. B. M. Prejean and Dr. C. G. Eccles, all officers of the U. S. Public Health Service on the staff of the National Leprosarium.

*Science News Letter, December 25, 1943*

## PUBLIC HEALTH

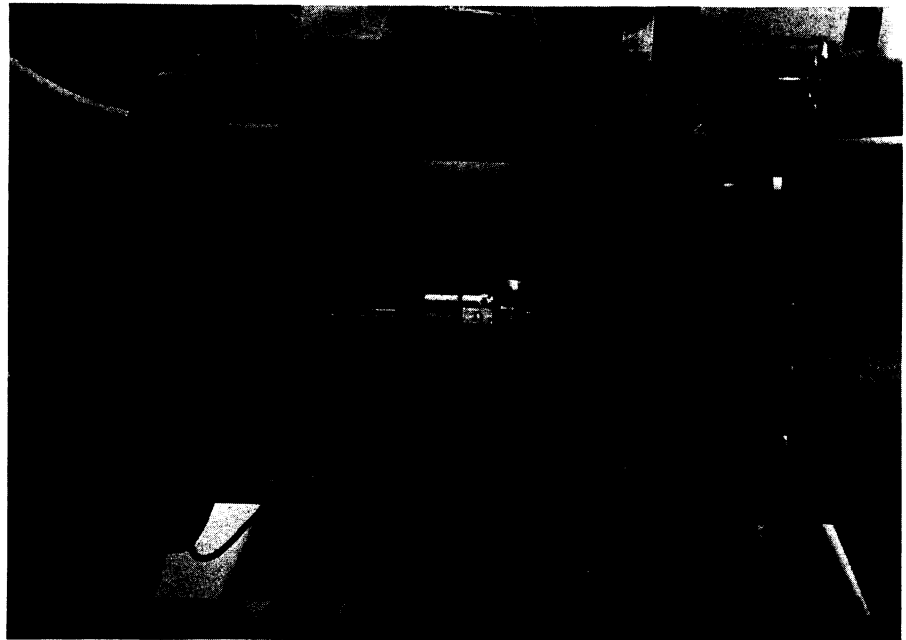
## Home-Canned Foods May Harbor Dangerous Germs

► REPORT that two persons in New York State have died from botulism acquired by eating home-canned egg plant that was not properly prepared should serve as a reminder that a similar dan-

ger may threaten you and your family. Home-canned fruits, meat and fish may harbor the dangerous germs of this disease as well as canned vegetables, unless the canning was done in such a way as to kill not only the germs but their spores.

If you have the slightest doubt about the safety of any home-canned food, boil it for 15 minutes before you even taste it, much less serve it. This 15-minute boiling will destroy the poison produced by the botulinus organism. Count the boiling time from when boiling, not just simmering, actually starts, that is when bubbles are breaking at the top. The food should also be stirred frequently during the boiling so that all parts get the heat.

The sickness may start as soon as two to four hours after eating the poisoned food, but usually does not begin until some 12 to 36 hours have elapsed. The earliest symptom in most cases is a peculiar lassitude or tired feeling, sometimes with headache and dizziness. This may be attributed to constipation, another usually early symptom of the poisoning. Some patients first have an acute digestive upset, with a burning feel-



**TESTING BLOCKBUSTERS**—A bomb fuze is shown in place for testing in one of the highest speed wind tunnels in the world, located at Dover, N. J. Bomb parts can be tested in artificial gales of over 700 miles an hour. Pieces of the bomb parts which may rip off are driven into a recovery room where they are examined. An unusual feature of the equipment is that it is possible to read directly the wind speed in miles per hour. A furnace on the site of Picatinny Arsenal, which houses the new wind tunnel, turned out solid iron shot for George Washington's Continental Army.

ing in the abdomen, nausea, vomiting and diarrhea.

The characteristic symptoms of botulism, however, are those showing disturbance of the central nervous system. Among these are double vision, drooping of the upper eyelids from paralysis and dilated pupils. Soon the patient will have trouble in swallowing and talking. There is usually no fever. Even though

the patient may be unable to talk, his mind usually is clear up to a short time before he dies and he can often write his wishes or needs.

Death usually comes from failure of the breathing apparatus and usually occurs within three to six days after eating the poisoned food. Some patients do recover.

*Science News Letter, December 25, 1943*

many of the Army camps in September and October, 1918, during the very days when the number of influenza cases was shooting rapidly toward the peak, he pointed out.

While weather conditions seem to have little if any effect on influenza itself, they may influence liability to and gravity of complications caused by germs that invade in the wake of the influenza virus, this same authority stated.

Further evidence of how little the weather affects influenza is seen in mortality figures he cited. These showed

#### MEDICINE

## Penicillin Helps Wounds

Reports from Army hospitals show 164 out of 209 patients improved. Mold chemical fails to have beneficial effects against malaria.

► RESULTS of penicillin treatment of infected wounds in U. S. Army hospitals in the United States where the potent germ-killer from mold has been used since April 1, 1943, are summarized in a report by Major Champ Lyons, M.C., A.U.S. (*Journal, American Medical Association*, Dec. 18)

Of 209 patients treated, 164 improved, 13 died and in 32 the treatment had no effect.

Hope that penicillin might prove a potent weapon against malaria is not borne out by the report. The mold chemical failed in four cases of malaria due to *Plasmodium vivax*, and two other patients developed recurrent malaria under treatment.

Penicillin can produce "dramatically successful" results in treating septic gunshot fractures but, Major Lyons emphasized, its position is supplemental in the overall surgical program. To get these dramatically successful results, the surgeon must combine penicillin with effective blood transfusions and conservative surgical procedures according to the condition of each patient.

Important advantage of penicillin is that it helps fight anemia in chronically infected battle casualties. Part of this seems to be due to the increased appetite the patient develops while under penicillin treatment, enabling him to eat more blood-building food, and part to the fact that penicillin controls the infection.

This regeneration of hemoglobin, the blood's red coloring matter, proceeds too slowly under penicillin treatment alone, however, in view of the need to economize on penicillin and to reduce the time the patient must spend in the hospital. Consequently blood transfusions must be resorted to. Whole blood is best for this and the quantities needed for each patient are estimated at from one and one-half to three quarts.

The results reported by Major Lyons cover experiences with penicillin in 11 Army hospitals where every detail of the treatment was studied with great care so that as much as possible might be learned about the drug, effective doses, conditions that would be helped and those that would not, and the like.

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#### PUBLIC HEALTH

## Weather Won't Check Flu

► THE POPULAR notion that the present cold weather over most of the country will check the influenza epidemic might well be called "wishful thinking," for there does not seem to be any scientific evidence to support it. Nor is there any reason to suppose that milder weather will affect the course of the epidemic.

During the 1918 pandemic, influenza

was prevalent at about the same time in such widely separated regions as the United States, Brazil, India, South Africa and New Zealand. This "is sufficient to prove a high degree of independence of the weather," wrote the late Edwin O. Jordan, University of Chicago professor who made an exhaustive study of the 1918 pandemic.

Fine autumn weather prevailed in

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