

PHARMACY

Report Pharmacy Advance

Domestic sources of ergot investigated to relieve war shortage. Certain astringents enhance the effect of germicide. Hypodermic unit developed for war use.

➤ **MEDICAL AID** to war-time America may result from research work reported at the meeting of the American Pharmaceutical Association held in Denver.

A report from Oregon revealed that ergot, the valuable drug used in childbirth and to prevent hemorrhage following delivery, was collected there and found to have two to four times the potency of the official standard.

Discussion among pharmacists indicated that research is going on in several sections of the country on ergot, which is a rye smut. Imports from Spain and Russia are practically non-existent and an acute shortage has been developing. One shipload that did make the hazardous journey was reported to be below the standard for these medicines in America.

U. S. Plant Industry Office, National Research Council, and the Committee on Botany and Pharmacognosy have, therefore, all requested investigation of domestic sources.

In the vitamin field, the application of a color method to find the amount of vitamin B₁ (thiamin) in pharmaceutical preparations was reported by Ernst R. Kirch of Chicago, and Olaf Bergeim. The vitamin is reacted with a dye-like chemical and the color extracted with an alcohol. By determining the intensity of the color produced, the pharmaceutical chemist can calculate the amount of vitamin present.

Astringents, chemical substances such as are used in so-called "skin tighten-ers", may enhance the effect of germicides and disinfectants, another paper reported.

Much used but long in ill repute as antiseptics, the astringents now take their place as an adjunct to other antiseptics. The double action of the two is often desired by physicians but the boost given to germ-killing power of antiseptics by the astringents had not been fully realized.

Research evidence presented by Joseph B. Sprowls and Charles F. Poe of Boulder, Colo., indicates that such chemicals as tannic acid, widely used for burns, has a beneficial effect on the action of several common antiseptics.

Development of a single-dose emergency hypodermic unit at the request of the War Department was also reported to the pharmacists by J. D. Hulsmann and F. W. Nitardy of Brooklyn. It is a sterile, airtight, leak- and shock-proof, convenient unit, said to be ideal for use on the field of battle.

Possible use of some of the aminophthalic chemicals as local anesthetics was suggested in a paper by L. W. Rowe of Detroit.

Science News Letter, August 29, 1942

GENERAL SCIENCE

Prisoners Send Models to First Fighter Command

➤ **PRISONERS** in their "free-time" are building airplane models for the First Fighter Command of the U. S. Army, making the men feel that they too can aid America's war effort.

An inmate instructor in industrial arts at one prison has obtained from the Science Clubs of America complete instructions for the building of these models and their production is under way.

Science News Letter, August 29, 1942

INVENTION

New Type Tailless Plane Developed; Wing Tips Move

➤ A **TAILLESS** airplane of a new type is covered by patent no. 2,293,644, issued to M. E. Gluhareff of Stratford, Conn., and assigned by him to the United Aircraft Corporation.

Mr. Gluhareff's plane has a single pusher propeller on the plane's almost non-existent tail, with stabilizing and elevating flaps on the inner trailing edges of the wings. Farther out are the ailerons.

Two novel features are incorporated, in two different designs. One pulls the entire wings forward, changing their angle with the fuselage, to aid in maneuvering. The other has rigid wings, but hinged wing-tips somewhat like the wing-tips of a gull.

Science News Letter, August 29, 1942



SYNTHETIC RUBBER BAGS that can convert ordinary steel boxcars into gasoline carriers, were recently given their first demonstration in Washington, D. C. Here one of them is being examined by J. B. Eastman, Director of Defense Transportation (left) and Reid Gray, inventor of the device.