## New Machines and Gadgets

SHINY METAL cylinders were found by the Marines on Guadalcanal. Cautious inspection proved them to be water filters, but quite different from our own rapid sand filters. Pressure forces water through porous clay to clarify it and apparently makes it pure enough for Jap consumption.

Science News Letter, June 5, 1943

SUPPLEMENTARY gasoline tanks for aircraft, which can be dropped when the contents are used, are now made of laminated wood in the shape of an elongated egg. Baffles to prevent sloshing of the fuel strengthen the tanks. The inside is given a special coating to withstand the chemical reactions of high-test gasoline.

Science News Letter, June 5, 1943

A PLASTIC flashlight strong enough to be used as a club will operate under water and at temperatures from 40 degrees below zero to 175 degrees above. The bottom is a cup to hold an extra bulb.

Science News Letter, June 5, 1943

THE CHANNEL-TREAD tire shown in the picture has recently been developed for planes. Greater safety and heavier loads are possible in sand and soft landing surfaces of all kinds. Higher, stiffer sidewalls give greater area of contact with the ground.

Science News Letter, June 5, 1943



& A NEW roller-coating device has been developed to apply resin-oil emulsion wall paints. It consists of a wood roller covered with a resilient cushion to hold the paint.

Science News Letter, June 5, 1943

TAMDEN CONTROLS for as many as a dozen electric circuits are now provided on a single shaft. The new device is designed particularly for certain radio and electronic needs. Control sections for individual circuits are fitted to nest compactly on the shaft.

Science News Letter, June 5, 1943

Science News Letter, June 5, 1943

shaped, light and durable, are claimed to hold shoes in shape without flattening out the soles. They are ventilated so that air circulates within the shoes, preventing moisture from being absorbed by the leather.

Science News Letter, June 5, 1943

If you want more information on the new things described here, send a three-cent stamp to SCIENCE NEWS LETTER, 1719 N St., N. W., Washington, D. C., and ask for Gadget Bulletin 159.

MEDICINE

## Man With Soldier's Heart Discharged for Second Time

THE UNIQUE case of a man being discharged from the same army in two wars for the same physical disability, neurocirculatory asthenia, is reported by Major Louis F. Bishop, Jr., and Lieut. Robert W. Kimbro, Medical Corps, Army of the United States (Journal, American Medical Association, May 8).

Known also as soldier's heart, neurocirculatory asthenia is characterized by such symptoms as giddiness, shortness of breath and pain in the heart. It may be difficult to detect in the routine examination of candidates for induction into the Army, Major Bishop and Lieut. Kimbro point out. It is not until the physical and emotional strain of war makes itself felt that the person with this condition becomes incapacitated.

Discharged from the U. S. Army in 1918 with a certificate of disability and a diagnosis of neurocirculatory asthenia, the patient took up farming and got along fairly well. But his condition did not change, and soon after being inducted into the Army in 1942 he developed the same symptoms of pain in the heart, shortness of breath and the like that he had had in the last war, which led to his second discharge.

Science News Letter, June 5, 1943

MEDICINE

## Sigma Delta Epsilon Gives Fellowship Award

THE NATIONAL organization of women in scientific research, Sigma Delta Epsilon, has just selected Dorothy Marie Ziegler of St. Louis to receive their fellowship award of \$1,000.

Miss Ziegler will use the award to further her research at the Barnard Free Skin and Cancer Hospital in St. Louis, under the direction of Dr. Edmund V. Cowdry. New techniques are being used to study changes in the top skin layer comparing the harmless and malignant cells.

Science News Letter, June 5, 1943

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