New Machines and Gadgets ·

ROTOTILLERS may replace plows and harrows in tilling American farms. They dig up, churn and crumble the soil with steel picks rotating like paddlewheels, preparing a seed bed in one operation. Used for years in Switzerland, the Rototiller is now made and used in America.

Science News Letter, February 24, 1945

RE-INKING device for typewriter ribbons applies ink uniformly as the ribbon is passed from a spool to be rewound on a reel. The ribbon is run between two pads which are inked from a reservoir, and then between rollers that spread the ink and force it into the fabric. Science News Letter, February 24, 1945

ACID-PROOF apron for heavy duty is made of a treated fabric combined with a new plastic by a special calendering process which makes material acid-proof throughout. It can be washed and cleaned without injury to the acid-proofing qualities.

Science News Letter, February 24, 1945

PRUNING SHEARS, operated by fluid pressure from a power cylinder mounted on the lower end of a pole, close and cut when the compressed air or other fluid carried in a tank is released to the cylinder by means of a push-button valve. The cutting blades are opened by a spring.

Science News Letter, February 24, 1945

HEELS for ladies' shoes shown in the picture have an outside covering of



thermoplastic evenly distributed about a sixteenth of an inch thick and without seams. The plastic slightly impregnates the wooden core to form a permanent bond. Dull or shiny finishes in many colors are available.

Science News Letter, February 24, 1945

TOBACCO PIPE with a grate and ash pit, recently patented, gives a clean, cool smoke, it is claimed, and keeps moisture away from tobacco and pipestem. The grate is a perforated disk in the bottom of the bowl; the ash pit is a horizontal tube below, into which the stem fits. A plug at the rear permits cleaning.

Science News Letter, February 24, 1945

LAMP CHANGER for elongated electric discharge lights of the fluorescent type is a grasping device on a long pole permitting the user to stand on the floor. With it he grasps the tube, rotates it 90 degrees, and pushes a hand-grip attached to a rod inside the pole that operates the releasing device.

Science News Letter, February 24, 1945

NON-SPLITTING nail, for thin molding strips and other fine woodwork, has two sharpened cutting edges forming a V-shaped groove across the end instead of the ordinary wedge-shaped point. These edges cut the fiber as the nail is driven.

Science News Letter, February 24, 1945

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 6, D. C., and ask for Gadget Bulletin 247.

Books

WHEN you need a book in a hurry and can't find a copy—SCIENCE NEWS LETTER will gladly locate it for you!

Send check or money order to cover the regular retail price. If price is unknown, send \$5 and change will be returned. We pay postage in the United States. When publications are free, send 10c for handling.

> **Book Department** SCIENCE NEWS LETTER 1719 N Street, N.W. Washington 6, D. C.

AERONAUTICS

For what will the six new planes be used? p. 118. How fast is the new British Spitfire? p.

ASTRONOMY

What four planets will be visible at the end of March? p. 122.

CHEMISTRY

What is the "stink bomb" for sharks? p. 119.

ENGINEERING

What does the new air position indicator do? p. 115.

INVENTION-PHYSIOLOGY

What is the new "walk-around" oxygen unit? p. 123. MEDICINE

How may patients taking penicillin in the future be given the drug? p. 119.

How successful has penicillin been so far in the treatment of undulant fever? p. 121.

What are the five signs of impending death from apoplexy? p. 115.

NUTRITION

How is a beverage made out of fermented grass leaves? p. 127.

PHOTOGRAPHY

How is it possible to take pictures of enemy installations at night without the use of a flash bomb? p. 116.

PSYCHIATRY

Why will the man who has adjusted well to military life have more trouble than the NP in fitting back into civilian life? p. 117.

What is the Research Board for National Security? p. 126.

Where published sources are used they are cited.

imprint to the right is mailing address for your Science News Letter.

Date on lower line is expiration of your subscription.

Renew early to avoid lapse in service.

In requesting change of address please give your old address as well as the new one, at least two weeks before change is to become effective.