New Machines and Gadgets

THEFT-PROOF billfold, to balk the pickpocket and warn the owner, has a short end made of a stiff material with a bulging friction edging across its top. When inserted properly in the pocket, if the billfold is pulled upward by grasping the top only, the friction edge causes the stiff fold to open and resist withdrawal.

Science News Letter, March 31, 1945

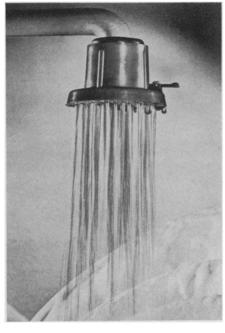
MAGNETIC TOOL, for inserting triangular brads used in holding panes of glass in window frames, is a handle with a depressed magnetized forward end. A raised slot on its under surface receives the rear end of a brad and keeps the brad from being pushed too far into the wood. Science News Letter, March 31, 1945

MILITARY TOOL, usable as a spade, shield, gun rest or wire-cutter, has two complementary half-blades with separate handles. Attached together by a pivot near the blade points, they form a wire-cutting tool when the handles are held apart, and a spade when closed. For other uses the tool is stuck in the ground by pointed ends on the handles.

Science News Letter, March 31, 1945

COMBINATION storm and screen door, in reality two separate doors which open outward and may be swung as a unit or separately, depends for operation on a three-way hinge with one door hung on each of the free arms of the hinge. The storm door may be fastened open in warm weather.

Science News Letter, March 31, 1945



S FAUCET SPRAY of plastic for the kitchen sink delivers a single center stream of water, or a spray suitable for rinsing dishes and washing vegetables. A flick of the finger on a small lever on the side of device, shown in the picture, controls the opening and closing of the center hole.

Science News Letter, March 31, 1945

INDUSTRIAL truck auxiliary, for use on factory floors in handling long articles difficult to maneuver in narrow aisles, is a dolley mounted on casters. It can be moved about manually to a lim-

ited degree and can also be transported rapidly between departments by the electric truck.

Science News Letter, March 31, 1945

SAFETY HEATERS, particularly for laboratory use for heating substances contained in glassware, have electric nickel-chrome heating coils enclosed in an insulated metal housing into which the glass container is put. Heat output, from AC application, may be varied by use of auto-transformer control.

Science News Letter, March 31, 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 252.

BOOKS

SCIENCE NEWS LETTER will gladly obtain any American book or magazine in print for subscribers.

Send check or money order to cover regular retail price. If price is unknown, send \$5 and change will be returned. We will 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

What is the purpose of the auxiliary wing tanks on Army Air Force fighter planes? p. 196.
Where is the world's largest airport? p. 203.

CARTOGRAPHY

What is the "handkerchief map"? p. 199.

CHEMISTRY

How do resins purify water? p. 194. What is the melting point of alumina? p. 201.

ELECTRONICS

How long did it take American scientists to duplicate the German radio vacuum tube?

How will radar be used for safety? p. 196.

What has made it possible for B-17's to fly indefinitely at altitudes of 30,000 feet? p. 197.

MILITARY SCIENCE

How is it possible to be shot at with live ammunition and not be hurt? p. 204. NUTRITION

What makes up the diet of Japanese soldiers? p. 206.

PHOTOGRAPHY

How is it possible to take 8,000 pictures a second? p. 195. PLANT PATHOLOGY

What effect did the use of sodium chlorate as a weed killer have on tomato plants? p. 200.

SOIL SCIENCE What is the chief value of epsom salts as a fertilizer? p. 200.

Where published sources are used they are cited.

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

Date on lower line is expiration of 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.