

# • New Ideas and Gadgets •

Ask for Gadget Bulletin 1227 for sources of new things described. Send a self addressed envelope to SCIENCE SERVICE, 1719 N St., N.W., Washington, D. C. 20036. To receive this Gadget Bulletin without special request each week, remit \$1.50 for one year's subscription.

⚙️ **METAL PROTECTING OIL** helps prevent steel from rusting while in transit and during temporary indoor storage. Especially developed to protect steel from corrosion and yellow-line stain, the oil can be applied by dipping, brushing, wiping, rolling and spraying. The easily removable thin protective film formed on the surface does not detract from the appearance of the metal and will not attract dust or dirt.

• Science News Letter, 84:400 Dec. 21, 1963

⚙️ **AUTOMATIC ROTISSERIE BASTER** keeps the meat continuously basted and speeds up cooking time. Consisting of a chain of gold plated links, the baster which is placed around the meat dips into the fat as the roast rotates. The links pick up the drippings spreading them over the entire surface of the meat to assure uniform cooking.

• Science News Letter, 84:400 Dec. 21, 1963

⚙️ **FLOATING ANCHOR ROPE** is made of braided polypropylene. The anchor rope is strong and tough and so light it floats. It is completely resistant to mold, mildew, gasoline, oil, salt or fresh water and many chemicals. Low in cost, it is available in 30-foot and 50-foot hanks.

• Science News Letter, 84:400 Dec. 21, 1963

⚙️ **BABY'S FOLDING BATHTUB** that locks safely on the top of any standard



bathtub makes bathing the baby easier and avoids water splashing problems. Made of white, high impact polystyrene, the contour-shaped tub, provided with a canvas hammock, fills directly from the tub faucet and drains into the large tub. Its rigid tubular steel frame is braced securely at points of stress and will fold for storage in closet or drawer.

• Science News Letter, 84:400 Dec. 21, 1963

⚙️ **GIANT MAIL BOX** is large enough to hold the largest magazines and newspapers flat, dry and unturned inside the box. Made of heavy gauge aluminum with a baked-on enamel finish, it is 16 inches high and 11½ inches wide. It is available in white, brass, black or embossed aluminum. Accessories such as engraved name plate, numbers and lock and keys are available separately.

• Science News Letter, 84:400 Dec. 21, 1963

⚙️ **FOLDING MICROFILM READER** permits rapid examination of the entire microfilm area at one time. The 10 x 10 inch screen is grainless black, giving a maximum of image contrast for easy reading without eye strain. Made for table top use, it can be used in normal room light on any voltage from 110 to 230 AC or DC. Standard aperture cards are automatically centered. A separate carrying case is available for field use.

• Science News Letter, 84:400 Dec. 21, 1963

⚙️ **HOME FIRE STATION** is a compact fire extinguisher housed in a bright red leatherette case suitable for any room in the home. A decorative brass hammer hangs from a chain on the glass enclosed door which swings open instantly. Small in size, it can be mounted on the wall in its case or used separately for cars and boats. It will withstand corrosion, deterioration and failure for up to 20 years.

• Science News Letter, 84:400 Dec. 21, 1963

# • Doctors Are Reading •

## Lung Ventilation Poor in Heavy Smokers

➤ **STALE AIR** tends to remain in the lungs of heavy smokers.

Habitual cigarette smokers at Scott Air Force Base, Ill., were found to have "significantly lower average ventilatory capacities and increased residual volumes as compared with 50 nonsmokers." The otherwise healthy men also had chronic coughs and were short of breath. Tests were made on a group of 163 officers, ranging in age from 38 to 57, of whom 113 were smokers, two U.S. Air Force physicians reported in the *Journal of the American Medical Association*, 186:885, 1963.

Lt. Col. Nestor M. Hensler and 1st Lt. David J. Giron who made the study said the differences in the two groups cannot be explained on the basis of any factor other than smoking habits.

Measurements were made with respirometers and other instruments. The physicians consider it an inescapable conclusion that smoking in Air Force men, whose environment on flights is free of ordinary workers' environmental hazards, can result in "airway obstruction and airtrapping."

## Allergy to Penicillin Dangerous

Dangerous reactions to penicillin that could cause death or severe brain damage were reported by Dr. Sheldon B. Cohen of Emory University, Atlanta, Ga., in *JAMA*, 186:899, 1963.

A young woman and an older man were examined by Dr. Cohen in the Psychiatric Out-Patient Clinic of Grady Memorial Hospital, Atlanta, because of chronic brain damage due to penicillin allergy.

The man also had an infection that resisted penicillin treatment. The young woman had treated herself for a cold with a penicillin tablet at home although she had previously been warned of her allergy. Dr. Cohen warned both physicians and patients of the danger on indiscriminate use of this antibiotic.

To detect penicillin hypersensitivity, four Navy medical officers at Great Lakes, Ill., reported in the same issue of the *Journal* that they had used penicillin derivative as a skin test for 1,022 recruits.

Lt. Michael W. Rytel, Lt. Franklin M. Klion, Lt. Thomas R. Arlander and Capt. Lloyd F. Miller reported that they had carried out tests because of the high incidence of streptococcal infections among military populations.

The risk of rheumatic fever as a result of strep infections has led to mass penicillin preventive programs at Great Lakes Naval Training Center and in some other military recruit training camps.

The penicillin derivative they used for testing allergy was penicilloyl-polylysine, which they said is promising.

## Drugs and Breast Feeding

Nursing mothers can take alcohol, codeine, barbiturates, morphine, aspirin, antibiotics and nicotine without causing their milk to affect their babies. But bromides, senna, cascara, aloe, ergot and atropine may cause toxic reactions, warns Dr. Arthur L. Haskins of Baltimore in answer to a query published in *JAMA*, 186:965, 1963.

• Science News Letter, 84:400 Dec. 21, 1963