

• New Ideas and Gadgets •

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⚙️ **DRY LATEX CONCRETE** makes patching cracks and crevices in damaged concrete easier. The powder is simply mixed with water to the right consistency and then applied to the desired area. The material bonds easily to any clean, sound masonry without chipping, priming or curing. Waterproof, it is actually tougher than concrete and the latex bonding strength makes it long lasting. It is available in five- and ten-pound bags.

• Science News Letter, 87:128 February 20, 1965

⚙️ **POLARIZED LIGHT KIT** for teacher or student contains materials and directions for experiments with both linearly and circularly polarized light which can be performed in school or at home. Useful as a teaching aid, the kit includes a sheet of mica, cellophane, boracic acid and polarizing films for various experiments outlined in the accompanying explanatory booklet.

• Science News Letter, 87:128 February 20, 1965

⚙️ **PORTABLE MAGNETIC LAMP** that operates either on 12-volt d.c. in a car or boat, or on 110-volt a.c. in home, office or factory has a telescopic arm that extends from five inches to 16 inches and a reflector shade that swivels a full 360 degrees. Its tiny bulb throws a glare-free white beam equivalent to 150 watts of illumination and its magnetic base clings securely in any position to any iron or steel surface.

• Science News Letter, 87:128 February 20, 1965



⚙️ **RAIN GAUGE**, shown in photograph, is made of transparent plastic and enables farmers, ranchers, gardeners and hobbyists to accurately measure local rainfall. Having a capacity of five inches of rain, the sturdy gauge comes with a rustproof bracket and can be easily installed on fence or post. Easy-to-read graduations are shown in black at one-half-inch intervals.

• Science News Letter, 87:128 February 20, 1965

⚙️ **SHAKER TOP** that fits over any tumbler transforms glass into a shaker for whipping up milkshakes or making a flour-water mixture for gravies or sauces. Made of anodized aluminum, the top has a smooth, rolled lip making it useful also as a cup. To use, the desired ingredients are placed in a glass, the top fitted securely over it and the unit shaken vigorously.

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⚙️ **DRAFTING MACHINE** for designers, builders or engineers weighs only six ounces and can be attached without screws, nuts or bolts to a pad of paper or drawing board up to 16x21 inches in size. The instrument, which can be folded for storage in briefcase or desk, includes a 360-degree protractor and 6x9-inch aluminum square. It is available with or without a board.

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⚙️ **REVERSIBLE "S" BRACKETS** for homeowner or apartment dweller is a decorative item that can be installed so that the "S" is either above or below the shelf. Above the shelf, the brackets serve as bookends as well as a support for a shelf, while below the shelf they serve as a decorative shelf support. The brackets, available in black or brass lacquer finish, come in three sizes and can be used with standard lumber widths.

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• Doctors Are Reading •

Knife Wounds Healed

➤ **HEART WOUNDS** caused by knives, ice picks and even bullets can sometimes be repaired by surgeons who are familiar with operations for congenital defects.

The penetrating instruments cause a diversion of blood through different channels of the heart, a procedure called an "intracardial shunt." Such a shunt, whether in a baby's heart or in the heart of a penitentiary rioter, will either cause death or will respond to surgery.

In this era of cardiac catheterization and open-heart surgery, dramatic examples of heart repair have been reported.

Two cases were reported in the *New England Journal of Medicine*, 272:240, 1965, by a team of doctors at the Medical College of South Carolina, Charleston, along with a brief outline of 12 previously reported cases.

The recovery and return to heavy labor of a 39-year-old prison inmate who was stabbed in the chest during a riot is described, along with the case of a 42-year-old laborer who lived following near-death from a bullet wound in the chest.

The prisoner had to have two operations, more than a year apart. After emergency chest surgery and repair of a wound inflicted on the right ventricle by an instrument resembling an ice pick, the man had a persistent heart murmur with shortness of breath on exertion.

At the Medical College Hospital the following year, catheterization showed left-to-right shunts both in the right atrium and in

the outflow tract of the right ventricle. An operation made possible by heart-lung bypass corrected the defects, after which the patient gradually improved. He still has moderate heart enlargement and a residual murmur, but is able to work.

The other patient improved greatly after operation and catheterization of the right side of his heart with no evidence of a residual shunt.

Drs. Charles P. Summerall III, William H. Lee Jr. and John A. Boone reported the case.

Smallpox Vaccination Risk

Unless there is an immediate threat of smallpox, some persons should not be vaccinated, a leading public health official advises.

Dr. Andre J. Lebrun reported in the *Archives of Environmental Health*, 10:7a, 1965, that routine vaccination in early childhood should not be undertaken if the child has eczema, an inflammatory skin disease.

This is true of adults or older children suffering from eczema, impetigo or other types of skin disease, especially if there are open lesions. Persons whose relatives or close contacts have these skin conditions likewise should not be vaccinated.

Dr. Lebrun also maintains that women in the first three months of pregnancy run the risk of abortion when vaccinated.

Dr. Lebrun, who was formerly chief of public health and director of Institute d'Hygiene, Marcel Wanson, Leopoldville, Belgian Congo, now lives in Signal Mountain, Tenn.

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