

# • New Ideas and Gadgets •

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⚙️ **POWER ZOOM BINOCULARS** for observing sports, hunting, birdwatching and similar activities, is electrically operated and requires no manual magnification adjustments. A push of a button changes the image size and field view. Regardless of magnification, the subject remains in focus throughout the entire zoom range. Weighing only 44 ounces, including batteries, it comes with neck strap and carrying case.

• Science News Letter, 87:239 April 10, 1965

⚙️ **PLASTIC COATED TRAYS** for the laboratory are suitable for handling fragile laboratory glassware, equipment and other items. The trays, made of heavy gauge wire rod thickly coated with plastic, give rust-free protection, can be immersed in hot or cold water and may be used in drying ovens. They fit one into another for convenient storage and are available in several sizes.

• Science News Letter, 87:239 April 10, 1965

⚙️ **PROJECTION SYSTEM** for slides that fits into a brief case is suitable for salesmen, teachers or scientists having an audience of one to six persons. The unit consists of a folding rear projection screen with a built-in hood, and a miniaturized projector that operates on a standard 100-watt lamp but can be adapted for use with a 12-volt automobile battery. Only two feet of desk space is required to set it up.

• Science News Letter, 87:239 April 10, 1965



⚙️ **POWER GRASS SHEARS**, shown in photograph, simplify lawn trimming and run on a 12-volt rechargeable battery carried by a strap from the shoulders. No long-trailing electric cord from a 115-volt house current is necessary, thus eliminating risk of dangerous shock even if the cord from the motor to the battery should be accidentally cut. The shears can be detached for use on close-up hand-trimming chores.

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⚙️ **BUTTON FASTENER** requires no needle or thread to replace a missing button on a garment. A hair-pin-shaped metal device is inserted through the button and through the fabric. The unit is then anchored with the plastic closure included with the package. The button fastener is suitable for either flat or shank buttons.

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⚙️ **LABORATORY POWER SUPPLY** is a low voltage unit designed especially for electrical and electronic experimentation in high school level physics classes. Operating from 117 volts, 50/60 cycle AC, it has both AC and DC output, and is provided with two combination volt-ammeters, an on-off switch and two meter function switches. A 48-page manual of experiments is supplied with each unit.

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⚙️ **WINDSHIELD WASHER** is a manual washer that can be installed in any car or truck. No holes need to be drilled to install the unit, which consists of a flexible plastic bottle and 30-inch tube. When filled with water the bottle is placed under the dashboard or hung on a convenient knob and the tube is passed through the doorway and clipped to the windshield wiper. A gentle squeeze squirts the water onto the windshield.

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# • Doctors Are Reading •

## Blood Irradiated Outside Body

➤ **THE DISEASED BLOOD** of leukemia patients can be circulated through Teflon tubing outside the body, irradiated, and returned minus its leukemic cells.

Wrist tubes are the same as those employed in some artificial kidney treatments, but they have been adapted so this type of radiation is successful for the first time.

So far, five leukemia patients have been treated by Dr. E. Donnell Thomas at the University of Washington School of Medicine, Seattle. At Brookhaven National Laboratory, Upton, New York, Dr. Eugene F. Cronkite, who headed a team studying six patients, said it was too soon to draw conclusions about results.

One advantage of this "extracorporeal irradiation" technique is that it avoids serious problems caused by subjecting the patient's entire body to irradiation. Another is that it may be useful in some cases of leukemia that have become unresponsive to treatment with drugs.

A report on the technique appear in *Medical World News*, 6:27, 1965.

## Showers Release Germs

Unwashed surgeons, nurses and patients spread fewer germs than they do when they are just out of a shower, two studies in a London medical journal, *The Lancet*, 1:478, 1965, revealed.

*New Scientist*, 25:547, 1965, also published in London, commented on the probable reasons for this surprising discovery, saying that "the best guess is that the washing removes the outermost layer of dead cells from the skin and releases many skin-inhabiting bacteria which would otherwise remain trapped below the surface."

One person gave off 49 times as many staphylococci after taking a shower as before.

The studies show that the increased dispersal of bacteria was greatest about 10 minutes after showering, but the effect persisted for up to two hours. Women gave off appreciably fewer germs than men, and more bacteria came from the lower part of the body than the upper part. This disproves the idea that nurses in operating theaters should wear trousers, the researchers said.

## Sucrose Defect Harms Children

Stomach distension, diarrhea and poor gain in weight—all caused by sugar in seven children with a peculiar body condition—were reported in *Nutrition Reviews*, 23:101, 1965.

Recent attention has been drawn to an enzyme defect in the intestines of certain children that results in the body's intolerance to sugar. When they were fed food rich in carbohydrates, the symptoms appeared, but when sucrose was withdrawn, the symptoms subsided.

Doctors studying the cases of these infants and children believe the defect has a genetic origin, inherited from the parents.

• Science News Letter, 87:239 April 10, 1965