• New Ideas and Gadgets •

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⚙ METAL FORMER bends and forms metals up to 16-gauge thickness a full 90 degrees. Useful for making boxes, covers, trays and similar items, the device has one-inch slots in the brake bar allowing flanged edges up to one inch in height. Useful for school, shop or laboratory, the tool is suitable for single jobs as well as production runs.

• *Science News, 89:478 June 11, 1966*

⚙ BUTANE TORCH provides a flame in wind or rain. Slim like a pen, the handy torch is suitable for lighting camping equipment, campfires, gas appliances, butane heaters or lanterns. The torch which lights itself comes in 8-inch and 15-inch lengths. The longer torch burns up to two hours on a single filling, and has an adjustable flame up to five inches long. Butane fuel is available separately.

• *Science News, 89:478 June 11, 1966*

⚙ PLASTIC EGG CARRIER for campers and sportsmen minimizes the risk of breaking fresh eggs. The high-impact case can be carried with safety in rucksack or back pack. Available in half-dozen and one-dozen sizes, the larger model is designed with a carrying handle. The smaller model includes built-in pepper and salt shakers.

• *Science News, 89:478 June 11, 1966*

⚙ FOLDING PROJECTION CABINET, shown in the photograph, collapses into portfolio size and can be carried under the arm. Useful to educators, lecturers or demonstraters, the cabinet, 28 inches high when open, displays the image on a 14 × 14-inch screen directly over the projector. The screen made of daylight blue nonreflecting plastic, can be used to view images in normal room light with slide, filmstrip and most movies projectors.

• *Science News, 89:478 June 11, 1966*

⚙ HOME PROTECTION LIGHT goes on the moment the electricity goes off due to storm, short circuit, or blown fuse, providing a powerful beam of light which will illuminate a room. The standby light is powered by nickel cadmium cells that never require replacement and can be removed from the wall socket for use as a regular flashlight. It is especially useful on stairways and near fuse boxes.

• *Science News, 89:478 June 11, 1966*

⚙ NEW INDICATING CALIPER for shops, laboratories or stock rooms, is designed for making direct readings of outside measurements of objects up to six inches in size. As the long legs of the steel caliper open for measurement, the attached pointer indicates the reading on a curved permanently marked graduated scale.

• *Science News, 89:478 June 11, 1966*

⚙ NEW OPTIC CLOTH comes in a roll eight and one-half inches wide and 300 feet long. Designed for cleaning and polishing coated optics, the cloth is made from high count, combed cotton batiste. Also useful for scratch-free polishing of plastics and bright metals, dusting photographic film and mirrors, the nonabrasive, static-free highly absorbent cloth comes with a convenient dispenser rack.

• *Science News, 89:478 June 11, 1966*

• Doctors Are Reading •

Pacemaker Adjusts Heart Beat

➤ A NEW ELECTRONIC pacemaker shuts itself off whenever the heart is working normally.

Generally good results for 17 patients are detailed in the Journal of the American Medical Association, 196:784, 1966, by investigators at Beth Israel Hospital, Newark, N.J.

Five persons have had standby pacemakers permanently implanted, and three of the devices have been working for up to four months. Only the first patient treated had a "partial failure."

The 12 other patients used external, temporary units for brief periods—one of them for three months. The others used external pacemakers for only a few days while awaiting implantation of other types of permanent units.

The pacemaker overcomes one difficulty of electronic heart stimulators, that is, the "competition" between the heart's regular pulse and the pulse induced by a pacemaker operating at another rate.

The standby pacer keeps a heart beating steadily at approximately 69 beats a minute, then shuts itself off when it senses that the heart is capable of maintaining its own rhythm. It also lets the heart take over when the body needs a faster pulse rate.

A sensing circuit "listens" for the closing of the heart's ventricles. It is this electrical impulse that produces the so-called R-wave, the highest rising wave on an electrocardiogram of a normal heart. As long as the R-wave signals are strong and steady, the pacemaker does nothing. If the beat becomes weak or irregular, the unit takes over.

One condition that is helped by the pacemaker is Adams-Stokes disease, a condition in which the heart's atrial and ventricular chambers beat independently of each other. Symptoms include frequent fainting or dizziness. Victims of certain kinds of heart block also have received standby pacing.

If the pacemaker's reliability is proved in further tests, it could be appropriate for all types of heart patients, the researchers said.

Drs. Victor Parsonnet, I. Richard Zucker, Lawrence Gilbert and George H. Myers reported the findings.

• *Science News, 89:478 June 11, 1966*

Thalidomide Affects Baboons, Humans

➤ THALIDOMIDE, the sedative drug responsible for malformed babies in Germany and other countries where pregnant women used it, behaves the same in baboons, a group of Texas biochemists reported in Nature, 210:958, 1966.

A previous report that thalidomide kills the embryo prior to implantation is not supported in the present research, which shows fetal malformations identical in type to most of those described in the newborn infants of women receiving the drug. Drs. Andrew G. Hendrickx, Leonard R. Axelrod and Larry D. Clayborn of the Southwest Foundation for Research and Education, San Antonio, Texas, reported the study.

• *Science News, 89:478 June 11, 1966*