

• New Machines and Gadgets •

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⚙️ **COLLAPSIBLE** baby carriage has a detachable bassinet, made of resin-bonded light wood fiber, which can be used as a baby basket in the home or in the car. The chassis folds to occupy a minimum of space in storage, and can be converted into a stroller when carriage days are over.

Science News Letter, March 12, 1949

⚙️ **OUTBOARD MOTOR SHIFT**, which operates by varying the pitch of the propeller, can be easily attached to nearly all standard outboard motors and permits either two or three forward speeds, in addition to neutral and reverse. In neutral, the propeller is feathered, which permits warming the motor while standing.

Science News Letter, March 12, 1949

⚙️ **MICROFILM READER**, motor-driven at three speeds and with variable magnification of 24 to 35 diameters, resembles a two-drawer letter file in height and appearance, but the turret top screen revolves through 360 degrees to bring the film into direct view of the user. New optical flats, which hold the film in focus while moving, prevent dust scratches.

Science News Letter, March 12, 1949

⚙️ **CLEAVER** for the kitchen, shown in the picture, may be used not only for chopping meat and vegetables but also to tenderize steak, open bottles, grip one-inch standard metal screw caps, lift tacks and nails, and wedge open stuck refrigerator



trays. It is made of highly tempered carbon steel.

Science News Letter, March 12, 1949

⚙️ **SMALL-SIZE** electric transformer, for insertion in a line to an extension trouble lamp, cuts current voltage from 110 to six volts, providing safety from shock to the light user. The four-pound transformer, which looks like a large black capsule, is in a strong plastic housing to permit dragging around.

Science News Letter, March 12, 1949

⚙️ **PICK-UP STICK**, for a wheel chair patient, or usable as a cane, has a magnet at one end and a detachable hook at the other. The magnet can pick up a needle or thimble from the floor and the special hook can pick up any tool with a proper hole in it, or a handkerchief or a letter.

Science News Letter, March 12, 1949

⚙️ **MIST SPRAYER**, light enough to be used in the ordinary truck, has a vertical range of 65 feet and a horizontal range of over 700 feet. It is designed for use in controlling insects and fungi on shade and orchard trees but can also be used in mosquito and fly elimination programs.

Science News Letter, March 12, 1949

⚙️ **MIDGET FAN**, weighing only three pounds and taking less than 10 inches of space in a travelling bag, is a hot-weather electrical accessory designed to provide comfort for travellers. It is claimed to be as efficient as the non-portable table model fan.

Science News Letter, March 12, 1949

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Do You Know?

On a single acre of good soil, some 1,500 pounds of *sunflower seed* can be grown, from which about 400 pounds of table oil can be extracted.

Three species of coffee are grown commercially but what scientists call *Coffea arabica* accounts for 90% of all coffee consumed.

Quartz, virtually insoluble in water ordinarily, can be made as soluble as common salt by putting crushed quartz with a trace of caustic soda in water and heating to 700 degrees Fahrenheit at 15,000 pounds per square inch pressure.

Both *balloons* and *rockets* are contributing to man's knowledge of conditions in upper spaces many miles above the earth; balloons carry self-recording instruments to nearly 20 miles, while rockets take them into the 70-mile region.

Hybrid trees, from a combination of the eastern and the western white pine, are expected to mature in from 30 to 40 years less time than the parent trees require.

Albino rats, in a laboratory experiment, developed *goiters* when a little photographer's hypo, chemically sodium thiosulfate, was added to their drinking water.

Low-pressure *laminating* is the technique employed in producing strong, curved molded parts with plastic resins and fabric fillers; the mixture, placed in a mold or over a form, is sometimes pressurized by air in a rubber bag.

In the *photoelectric cell*, the so-called electric eye, variations in the light hitting it cause corresponding variations in the electric current flowing through it; in the *photovoltaic cell*, light energy is converted to electric current.

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