

# New Machines and Gadgets

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**NYLON TYPEWRITER RIBBONS** give sharper impressions, are stronger and last longer than conventional ribbons. Their high strength permits a thinner ribbon, so nearly three times as much ribbon may be coiled on a standard spool. The lint-free fabric helps keep the type face from clogging.

Science News Letter, May 30, 1959

**HOLE-CUTTING TOOL** for attachment to acetylene cutting torches permits cutting of precision holes in thick metal plates. Circular holes one-half inch to 12 inches in diameter may be cut by turning a crank. Odd shapes of many sizes may also be formed.

Science News Letter, May 30, 1959

**PICTURE-FRAME SAVINGS BANK** is a combination plastic frame, 5½ by 6½ inches, and 1¼-inch-deep steel bank, attached vertically to the back of the frame by a piano hinge. The top of the bank has a coin slot and the back has a steel door and key. The frame may be hung on a wall or placed on a table top by means of an easel.

Science News Letter, May 30, 1959

**BABY TUB** OF polyethylene plastic, shown in the photograph, is designed to fit many standard bathinette frames. It can be



used in the frame for bathing baby, or used on any flat surface in kitchen or bath. When baby outgrows the tub, it may be used as laundry basket or wash basin.

Science News Letter, May 30, 1959

**PLASTIC MEASURING DEVICE** combines all measuring gauges into one, eliminating separate kitchen measuring spoons and cups. The device is a rectangular scoop with a channel handle which is fitted with

a movable measuring stick. The stick has various markings for required amounts of liquids or solids.

Science News Letter, May 30, 1959

**PHOTOELECTRIC GLOSSMETER** measures gloss of papers, paints, plastics, waxes, floor coverings, and textile yarns, fibers and fabrics. Optical and electrical units are in separate housings connected by a cable, enabling the meter to be used in various ways and positions.

Science News Letter, May 30, 1959

**GUN STORAGE KIT** consists of a transparent polyethylene bag and two rust inhibitor discs. The discs are tied to trigger guard and the center of the barrel after the gun has been cleaned and oiled. They release chemical vapors that inhibit rust. The bag seals the gun in moisture-free air.

Science News Letter, May 30, 1959

**ASTRONOMICAL COMPASS** for hobbyists, students and star gazers can be rotated through 60-degree angles along its calibrated degree scale. It may be used to solve simple surveying problems, teach celestial coordinates, foster understanding of star positions, and determine approximate position on earth or the true heading of airplanes.

Science News Letter, May 30, 1959



## Nature Ramblings



By HORACE LOFTIN

FROM THE TINY MOLE that plows a hill across a well-kept lawn to the hefty aardvark of Africa, an impressive number of mammals have become adapted to digging for a living.

The aardvark, or earth pig, can tear into the hardpacked earth with his oversized front claws faster than a crew of shovelers can uncover him. Prairie dogs use an elaborate system of tunnels and chambers which they dig out as a secure home, from which they forage for food. Ground squirrels, woodchucks and kangaroo rats likewise are accomplished diggers; but these, too, spend a considerable amount of time above ground.

In the United States, only two groups of mammals, the moles and the pocket gophers, spend the great majority of their lives under the ground. These animals find their food, mate, rear young and pass practically all of their life in their subterranean

Life Down Under



homes and may never see the light of day.

It is not surprising, then, that moles and pocket gophers show marked structural changes which aid in their life of perpetual digging. Of what use is an eye to a mole? Little or none. The eyes are reduced in size (protecting them from the dirt) or even sealed over in one mole. Pocket gophers have small, weak eyes, and copiously flowing tear glands to keep them cleansed. External ears, too, are more of a hindrance

than a help. These have all but disappeared.

Since their principal occupation is digging, the front limbs of both animals are short, stout and very strong, armed with efficient claws. Their main musculature is concentrated forward in their body to furnish the strength needed for digging, and the bones of the shoulder and arms are well developed.

On the other hand, the hind limbs are reduced in size, the "hip" being quite small to allow freedom of movement in the tunnels. The tails of these animals are usually very sensitive. The reason becomes clear when you consider that the pocket gopher can travel about as fast backward through his tunnel as forward!

The hair of the mole lacks a "grain." That is, it lies forward as easily as backward, so that it does not present an obstacle in moving in either direction in a narrow tunnel—and it keeps the dirt out. It is this velvety quality that makes mole-skin so valuable in the fur trade.

Science News Letter, May 30, 1959