## · New Machines and Gadgets '

For sources of more information on new things described, send a self-addressed stamped envelope to SCIENCE NEWS LETTER, 1719 N St., N.W., Washington 6, D. C., and ask for Gadget Bulletin 993. To receive this Gadget Bulletin without special request each week, remit \$1.50 for one year's subscription.

DECORATIVE PLASTIC PANELS reinforced with glass fiber may be used for luminous ceilings, room dividers and cabinet doors. The translucent material is available in 30-inch-wide flat panels in standard 50-foot rolls and can be cut, nailed or drilled.

Science News Letter, June 27, 1959

HOME PLUMBING KIT has 101 plumbing parts and an eight-page illustrated instruction book that should allow the homeowner to make his own minor plumbing repairs. The kit includes articles ranging from a plunger to a bottle of porcelain glaze to a bathtub stopper.

Science News Letter, June 27, 1959

TRICYCLE SEAT of polyethylene resists the wearing action of exposure to sunlight, rain and rough handling. The plastic is crimped tightly into the metal frame's sides. Air space between the plastic and the metal insulates the rider against the shock of riding over bumps.

Science News Letter, June 27, 1959

PLANT SPRAYER, shown in the photograph, for fighting insects and disease on garden plants and shrubs is made of lightweight, durable plastic. It is used with a light pumping action similar to that of a



trombone sprayer and is filled through a wide opening at the top. The sprayer releases a fine spray that gives wide coverage. Science News Letter, June 27, 1959

ELECTRICAL INSULATING TAPE with vinyl base protects against four causes of insulation failure: moisture, surface contamination, corona and excessive heat. It

may also be used for safety purposes on tool handles and sharp edges, and to strengthen hockey sticks or repair baseball

Science News Letter, June 27, 1959

CELESTIAL GLOBE, 14 inches in diameter, consists of a colored terrestrial or earth globe within a transparent celestial globe. It offers an easily used and understood model of the universe, providing aid in visualizing and identifying the stars and constellations and their relationships to each other, and to the earth.

Science News Letter, June 27, 1959

ELECTRIC CIGARETTE LIGHTER requires no fuel, flint, wicks or batteries. Equipped with a six-foot cord, it furnishes a light by plugging it into a wall outlet and pushing a button. The lighter may be placed near a phone, desk or easy chair for handy access.

Science News Letter, June 27, 1959

SLING LAUNCHER TOY consists of a stick with a strong rubber band and a feather-shaped projectile that can be shot 300 feet into the air. The projectile glides and spins on its way back to the ground much like a leaf or tree seed would.

Science News Letter, June 27, 1959



## Nature Ramblings



## By HORACE LOFTIN

STEALTH or camouflage is quite often enough to protect small animals from predators in jungles, woodland or a grassy plain. But on the open desert where spaces are wide and cover almost absent, the premium is on speed and elusiveness.

Showing a parallel evolution to meet similar conditions in different parts of the world, the jerboa of the Old World and our own native kangaroo rat both have attained oversized hind limbs. Like diminutive kangaroos, these tiny rodents can spring surprising distances at a good rate of speed. But perhaps as important, their springs and jumps when being pursued are highly erratic, serving to confuse thoroughly the carnivore which chases them.

Another important adaptation of these rodents, shared by many other tiny dwellers of the desert, is the ability to do with little or no water at all. Water for their body processes is obtained, in large part,

## Living in the Desert



by a chemical break-down of the foods they eat, releasing enough of the lifegiving liquid for their needs.

Desert mammals may also supplement their water supply by eating moisture-laden plants, such as the prickly pear cactus. But in addition to getting water, these animals must conserve water. Toward this end, there is little wastage of water in their excretions, and they tend to live through the hot daylight hours in cool burrows or

crevices, which reduces their body loss of water due to perspiration.

Even in captivity where they are given an abundance of water, many of the desert mammals refuse to touch it, relying on their food for liquids.

But in the desert, even water-bearing plant life may be hard to come by during the driest months. Thus the little desert rodents must "make hay after the rain falls," collecting and storing the seeds from the desert blossoms as quickly as possible before they are blown away by the winds. For this job, many are equipped with cheek pouches which they stuff full of seeds and other foods to carry back to their burrows.

A final solution to the problem of maintaining life through the desert summer is that of "summer hibernation" or estivation. Many of the small mammals thus pass the hottest and driest months of the year in a deep sleep from which they do not awaken till the climate becomes more tolerable.

Science News Letter, June 27, 1959