New Ideas 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 1112. To receive this Gadget Bulletin without special request each week, remit \$1.50 for one year's subscription.

the FOOD SURVIVAL KIT sustains one person for 14 days in an emergency situation. The 24-pound kit contains a basic multi-purpose food, 14 pints of water with vitamin C supplement and necessary utensils. With a shelf life of three to five years, it is also useful as an emergency kit for boat or airplane owners.

Science News Letter, 80:248 October 7, 1961

TINY KEY LIGHT eliminates fumbling for the lock in the dark. Mounted in a key and giving a bright, short-range beam, the lamp is powered by a tiny silver oxide battery. A recessed button switch prevents accidental lighting in pocket or purse. Key is available in silver or gold-plated finish.

• Science News Letter, 80:248 October 7, 1961

ONE-HAND TAPE APPLICATOR for applying 1/2-inch and 1-inch wide pressure sensitive tapes without wrinkling, curling or waste is useful for home or office. Its single-handed action permits the tape to be rolled out and cut as needed merely by tilting and twisting. The applicator can be used over and over again.

• Science News Letter, 80:248 October 7, 1961

PEG RAIL AND HANGERS unit of aluminum for kitchen or workshop consists of a four-foot-long extruded track 11/2 inches wide with 8 movable pegs 3 inches



long. The pegs slide along the horizontal track for adjustment to any position. The set, shown in the photograph, comes ready to install.

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SUPER CAR VISOR of black simulated leather contains holder for cigarettes, coin purse, glasses case, zippered map compartment, a ball point pen and an umbrella of quick-drying acetate. To install it is slipped over the visor of any car or truck.

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DISPOSABLE MEDICAL SYRINGE has a barrel made of inert polypropylene and can be used with all types of presentday medications. The plunger of the 21/2 cc syringe is of inert rubber. Sterilized and sealed at the factory, the syringe features newly designed finger tabs, color coding for needle size, and an inside stop to prevent accidental withdrawal of plunger from the barrel.

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POCKET SIZE "WALKIE-TALKIE" RADIO that weighs only 18 ounces and uses eight batteries with a life of about 70 hours has a range of one mile. Featuring a push-to-talk operation, it has a 46-inch telescoping antenna that will transceive up to seven miles. The radio has no Federal Communications . Commission . license . or minimum age requirements.

• Science News Letter, 80:248 October 7, 1961

& AIRLESS SPRAY PAINT SYSTEM makes it possible to apply paint with pinpoint accuracy with virtually no fog or overspray. The portable system, completely sealed against dust, is equipped with a powerful 3-inch air motor. It is attached to any 5-gallon container by a swivel clamping technique. Accessories are available.

• Science News Letter, 80:248 October 7, 1961



➤ IN RESPONSE to shorter days and cooler nights, the plant world is turning on its autumnal display of color.

The reds and yellows actually have been there all summer long, merely hiding beneath the green of the leaves. But now the physiological mechanisms that held the more brilliant colors in check are relaxing their grip.

In the summer months, the green leaves manufacture their own type of sugars during the daylight hours. At night, most of the food is moved out of the leaves and stored elsewhere within the plant.

When the nights become cooler, however, the nighttime transfer slows down and the sugars are trapped in the leaves. This, plus the fact that green chloroplast production falls off sharply during the shorter days, produces the reds and yellows of the leaves.

Whether the color comes out red or yellow or some shade in between depends upon the genetic make-up of the tree or plant, the light intensity during the autumnal day and

Autumn Leaves



the type of sugar trapped within the leaves. The sugar type may vary so that a particular tree may tend to have yellowish leaves, but some years they will be more reddish. Leaves also turn redder when the days are very bright.

Contrary to widely circulated myth, frost does not enhance autumnal leaf color. It kills the leaf tissue, and the leaf itself turns a dead brown and falls from the tre.

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There are about 450 species of fishes around the Hawaiian Islands living in depths to 100 feet.

Ancient people ascribed powers of divine healing to color and red was thought to be the most efficacious.

Under the U.S. Atoms-for-Peace Program, eleven countries have received reactor grants from the United States.

More than one-third of the deaths in the U. S. are among people under age 65.

In a dairy experiment, cows fed four times a day produced 14% more milk than those fed twice a day.

Only one-third of the United States urban population receives community protection against dental caries through fluoridation of public water supplies.

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