

# • New Ideas and Gadgets •

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⚙️ **AUTOMATIC FOGHORN TIMER** when attached to a foghorn enables fog-bound marine craft to issue intermittent warning signals that conform to the U.S. Coast Guard specifications. The preset precise time intervals avoid the danger of confusion from irregularly timed intervals. Mounted on the boat's instrument panel, the timer works on 6, 12 or 32 volt systems.

• Science News Letter, 81:176 March 17, 1962

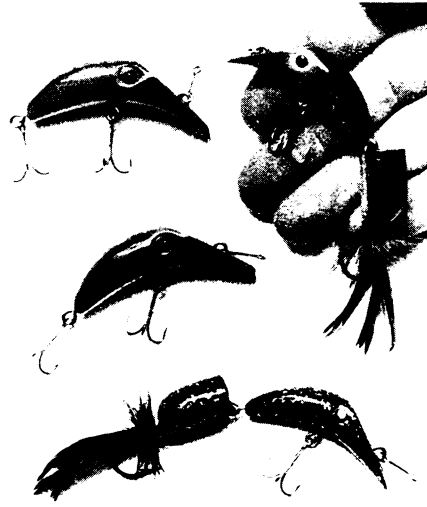
⚙️ **TELEPHONE DISINFECTANT** for office and home use helps reduce spread of colds. Sprayed directly onto the mouthpiece from a four-ounce plastic, refillable squeeze-type dispenser, it dries quickly and has a pleasant pine fragrance. It is also available in gallon quantities.

• Science News Letter, 81:176 March 17, 1962

⚙️ **CAR BACK REST** that is adjustable, up, down or sideways, to any spot of the rider's back that needs relief helps prevent driving fatigue, backache and shoulder strain. Made of vinyl leather in white or tan over soft polyether foam, it straps on any car front seat.

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⚙️ **HAND-PAINTED FISH LURES**, shown in the photograph, are one-and two-piece plastic lures made in a wide variety of colors and patterns and especially designed for spinning, flyrod, casting or trolling. The swivel-jointed, two-piece lure makes a come-



and-get-it popping noise when used on the surface, while underwater its action deters it from trapping weeds.

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⚙️ **PORTABLE BURGLAR ALARM** is entirely self-contained and furnishes its own power with a 4½-volt battery. It can be placed behind a door, in a drawer or car trunk where the slightest bump will cause it to buzz loudly. Several doors and win-

dows may operate on one alarm by connecting them together with a thread.

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⚙️ **PIPE FLOW SLIDE RULE** is a 5½-inch circular direct-reading slide rule for calculating the loss in pressure of liquids or gases flowing through pipes. One side is used to solve the Fanning Equation for pressure loss and the other side gives the losses caused by 22 different valves, fittings and other restrictions.

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⚙️ **CONCRETE SCREWS** to fasten wood or sheet metal to concrete surfaces are made of hard high-alloy square wire and can be driven into the solid concrete with an ordinary hammer. The screws require no lead-hole drilling and turn as they penetrate, with only a ¼-inch penetration necessary for holding power. Screws are made in six lengths.

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⚙️ **PRE-THREADED ASSEMBLY FITTINGS** of plastic make it possible for do-it-yourself home-owners to install flexible-pipe sprinkler systems. Secured with only hand tightening, the need for cementing, clamps, or wrenches is eliminated. Resistant to corrosion and temperature extremes, the fittings are leakproof and capable of withstanding 160-pound pressures.

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## 🌿 Nature Ramblings

➤ THE MEEK VINEGARON, or giant whip scorpion, is the cause of many tall tales by residents of the old Southwest. Completely harmless, this cousin to the venomous scorpion spends its days in tree crevices or under rocks and stumps.

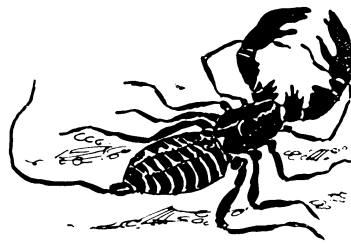
Although feared by many tenderfeet and even some local people, the only defense *Mastigoproctus giganteus* has is an odor similar to vinegar which it produces to smart the eyes of its predator.

These strange creatures are found only in the southern and southwestern parts of our country. They can easily be distinguished from true scorpions by their long pedipalps (the first pair of legs) and whip-like tail.

The whip scorpion has no tail sting and no poison glands. It could only cause slight mechanical injury with its clumsy pedipalps. But this ugly creature grows to a length of three inches and is thus the subject of the tales of old-timers.

Other members of the whip scorpion family are tailless, such as the *Tarantula marginemaculata*. These are also recognizable by their long, whip-like front ap-

### Whip Scorpion



pendages. Their first legs have many segments and are quite flexible.

These animals also live in dark, sheltered places, and occur in great numbers in caves. They are able to run with great speed when disturbed.

All whip scorpions crawl the earth in search of dead or wounded insects. They rarely kill for food but occasionally attack "game" in the form of harmful insects.

Although these creatures are disliked by many, they are friends, not foes, of man.

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## Do You Know?

Nonmetallic crystals are used as infrared detectors in guiding missiles.

Under certain conditions silicon can replace carbon in simple molecules.

Lack of adequate protein in the child's diet results in failure of growth, muscular wasting and edema of varying degrees.

Young adults, the group in whom polio is most likely to cause crippling or death, remained inadequately protected in 1961.

Laboratory mice exposed to gravities from three to seven times that on the earth's surface supported more weight due to the greater gravity but shrank in size.

A tabulation of the relative intensities of 39,000 spectral lines providing intensity values on a uniform energy scale for 70 chemical elements has recently been completed.

The incidence of infectious hepatitis reached an all-time high in 1961.

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