

• 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 1133. To receive this Gadget Bulletin without special request each week, remit \$1.50 for one year's subscription.

• **VERNIER MAGNIFIER**, with permanent magnets, is held securely on any iron-containing metal. Its transparent butyrate plastic housing helps give sharp focus to scale lines and figures on vernier calipers or metal rules, and increases ease and accuracy of readings. The plastic's strength and resilience protect the lens from damage.

• Science News Letter, 81:142 March 3, 1962

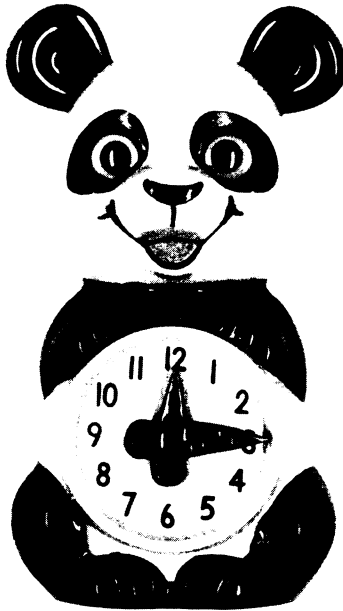
• **COMPACT WATER PURIFIER** for small boats with water-cooled auxiliary engines transforms salt water or water of lakes and rivers into pure, soft water at an average rate of 8 to 10 gallons an hour. Using only the engine jacket water as a heat source, the rust- and mold-resistant converter operates at no cost to the boat owner.

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• **POTTING AND EMBEDDING COMPOUND** of clear silicone protects electronic components and other delicate assemblies. As a pourable liquid in uncured form, it cures in two hours at 65 degrees centigrade. Embedded components can be readily identified and cut out, repaired and replaced without any evidence of repair.

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• **PANDA BEAR CLOCK**, shown in the photograph, is a cheerful addition to children's rooms with its rolling eyes and wagging tail. The plastic clock case (11 x 5



inches in size), luminous eyes, hands and tail are all resistant to breakage. A self-starting synchronous motor activates the eyes and tail of the black and white bear when the clock is plugged in.

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• **RADIANT CEILING PANEL** for kitchens, game rooms or above large glass panels

can be surface- or recess-mounted on any ceiling. The 13/16-inch thick electric heating panel has a steel facing and is insulated. It measures 2 by 5 feet and operates on 700 watts, 240 volts.

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• **CUP TYPE HYGROMETER** for determining relative humidity of grainy or powdered materials, such as tobacco, flour and chemicals, consists of a cup-like aluminum container, in which the sample is placed, and a hygrometer cover. Moisture percentage is found from the relative humidity reading and a table of equilibriums included with the instrument.

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• **ENGINE HOUR METER** makes a precise record of engine operating time in hours and tenths of an hour for proper engine maintenance. Hermetically sealed against moisture and salt air, it can be used on inboard boats with 6- and 12-volt systems.

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• **POCKET RADIO TRANSMITTER**, requiring no license to operate, has adjustable tuning and transmits on regular radio band to home, car or portable radios. The transistor transmitter is the size of a cigarette package and can be used as a walkie-talkie, a wireless intercom, electronic nurse or baby sitter, for dramatic practice or novelty effects.

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Nature Ramblings



► **THE CARDINAL** (*Richmondia cardinalis*) was once a favorite cage bird in many southern states. Today the free-flying vivid red bird with its erectile crest is protected by Federal law.

The cheerful, clear whistle of this bright bird has given a tone of aristocratic elegance to many movies based on novels and manuscripts about the South.

The cardinal, which measures about eight and a half inches in overall length, is found throughout southern states and north to the Hudson Valley, Michigan, Wisconsin, Iowa and southeastern South Dakota. In the Coastal Plain of Maryland and the District of Columbia the cardinal is one of the primary species of the oak-pine forest complex.

Although the cardinal is a bird of the undeveloped areas, it is also found in the suburbs and even in cities if the habitat is right.

The bird will patronize your feeding station, and if there is a dense shrubby planting nearby, so much the better. Such a planting affords the kind of protection the

Cardinal



cardinal needs to escape prowling cats or such airborne predators as hawks. But it requires open water for the liquid in its diet.

Nearly 75% of the food eaten by the cardinal consists of vegetable matter. All kinds of seeds, including those of the sunflower, are relished, as well as an endless list of berries. The balance of the diet is made up of various harmful insects such as codling moths, potato beetles and boll weevils.

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Do You Know

A new computer designed to handle automatically for the first time all the paper work in a military payroll is under test by the U. S. Navy.

Rhodium alloyed with platinum is used for high duty spark plug electrodes and electric resistors.

About 90% of the growth of the head in humans is completed by the end of three years and nine months, while at the same time less than half of the growth of the face has been completed.

More than five million motor vehicles have been produced in 1961, including 4,190,825 passenger cars and 904,695 commercial vehicles.

Charcoal burned by prehistoric man in Arizona's Ventana Cave has been dated at 11,300 years of age by the radiocarbon method.

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