

# • 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 1101. To receive this Gadget Bulletin without special request each week, remit \$1.50 for one year's subscription.

⚙️ **ELECTRONIC OVEN** for office building or factory uses radar beams to transform pre-cooked, refrigerated dinners into hot meals in just one minute. Meals are on plastic, disposable tray-dishes with color-coded tape. The ovens have automatic timers with color-coded buttons to match the various dinners. The amount of energy used to heat the meal is controlled by the timers.

• Science News Letter, 80:64 July 22, 1961

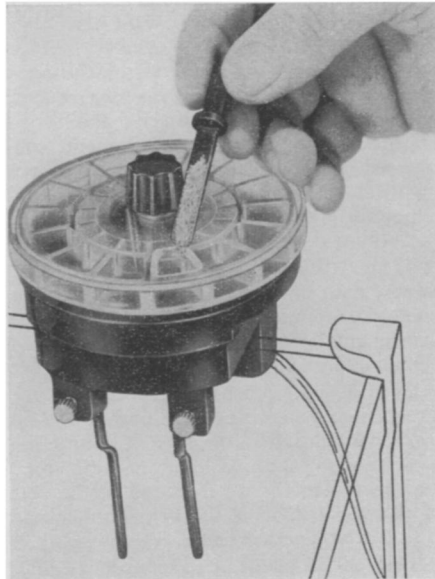
⚙️ **ADJUSTABLE FRUIT TRAY** is an attractive cherrywood centerpiece for dining room or coffee table. The naturally finished 11½-inch-wide tray expands to a 13-inch length or folds to a 9-inch length. It is also recommended for flower arrangements.

• Science News Letter, 80:64 July 22, 1961

⚙️ **VACUUM APPARATUS** for science classes provides a variety of experiments demonstrating the behavior and uses of air. Air is pumped out of a 6½-by-9-inch vacuum jar, resting on a baseplate, by a hand pump.

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⚙️ **ELECTRIC FISH FEEDER**, shown in the photograph, automatically feeds fish one to three times a day even if you are away on vacation. Fish food, stored in tiny com-



partments, lasts up to two weeks. The feeder attaches to nearly all rectangular or round aquariums and is powered by a quiet clock-type motor.

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⚙️ **ANIMAL OXYGEN TENT** converts hospital cages into oxygen tents by attach-

ing a transparent plastic panel to a standard cage door. The box-like panel has a 15-pound capacity ice chamber for cooling the cage and a single regulator controlling the flow of oxygen and degree of cooling. The unit can also use spray medication.

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⚙️ **TINY DENTIST DRILL** revolving 260,000 times a minute is said to reduce drilling time as much as 75%. The air turbine drill, riding on a cushion of air, vibrates little and is very quiet while drilling.

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⚙️ **PLASTIC INCUBATOR** for laboratories, physicians and dentists has lift-off lid revealing an 85-square-inch plastic-covered shelf with a coated wire heating element underneath. The gray, nearly three-pound unit is thermostatically controlled at 98.6 degrees Fahrenheit and uses 30 watts.

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⚙️ **SWIMMING AID** helps keep children afloat. A solid foam plastic simulated water lung, capable of supporting 100 pounds, is worn strapped to the back. A yellow vinyl face mask and junior-size swim fins complete the junior "frogman" outfit.

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## Nature Ramblings



## Do You Know?

► **LIKE A BIG BEE** in feathers, the hummingbird darts about the garden, suspended in mid-air on its invisibly vibrating wings while it probes deep-throated flowers for food.

It is always a mental effort to regard this dynamic molecule of life as a bird, it is so small and flies so much more in the manner of an insect. Other small birds can hover for short moments, but the fluttering of their wings is relatively slow and one can see them as they beat. No other bird has so perfected the art of hovering flight.

In the eastern United States there is only one species of hummingbird, the ruby-throat. This one, however, ranges everywhere east of the Rockies, well up into Canada, where you would hardly expect to find tropical visitors.

For the hummingbirds in general are of the tropics, and ours is a commuter who comes north to rear a family and then returns to a warm climate for the winter. Ruby-throated hummingbirds winter all the way from Florida and Texas south to the Isthmus, and appear sporadically in Cuba; in spite of their diminutive size they are quite evidently efficient travelers.

### Hummingbirds



The hummingbird does not spend all day at that dizzying occupation of flying so fast without moving from the spot. That kind of flying requires the burning up of too much energy to be kept up indefinitely. He does it in short spurts, resting in between on a slender twig or perhaps a trellis wire, preening his feathers.

Nor does the hummingbird feed, insect-wise, on honey, as is often imagined. It likes meat and is willing to take it in little bits—as tiny insects in the bottoms of the flowers. That is really what its long, probing beak is after most of the time.

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One of the most extensive uses of epoxy resin in highway application is as an adhesive for non-skid mineral dressings over slippery pavements and bridge decks.

Statistics show that in baseball there is a direct relationship between vision and playing skills.

Grasshoppers cause extensive damage to trees and shrubs in the Northern Great Plains.

Experimental studies of salamander embryos reveal that behavior patterns develop in correlation with structural development in the nervous system.

There are 160,000 miles of crude oil pipelines servicing 500,000 oil wells in the United States.

General signs of aging as manifested in appearance, skin texture and graying hair are not speeded up because of irradiation, a scientific study of survivors of the Hiroshima atomic bombing indicated.

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