

# • New Machines and Gadgets •

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⚙️ **EMERGENCY FLASHLIGHT** has a red signal wand extending out over the lens. The red hood itself is said to be visible for half a mile and does not obstruct the flashlight's white beam. The wand is available in three- or five-inch lengths.

Science News Letter, July 26, 1958

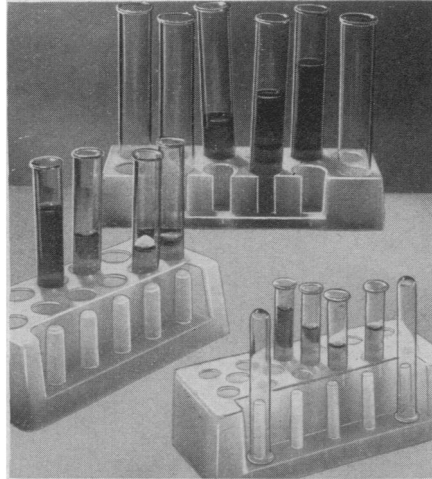
⚙️ **PORTABLE ELECTRIC JIGSAW** can cut through two-inch wood and one-eighth-inch steel. Weighing four pounds, the jigsaw has a cast-in blower vent to aid cutting accuracy. It also has a tilting base and angle index for cutting angles to 45 degrees on either side of the line of cut.

Science News Letter, July 26, 1958

⚙️ **STOVE GUARD** is designed to reduce the danger of burns and scalds while cooking. This British invention consists of two plates designed to be attached to the sides of a stove and project a little above the cooking surface. Each plate has six slide sockets to contain the handles of pots and pans.

Science News Letter, July 26, 1958

⚙️ **TEST TUBE HOLDERS** made of plastic are designed in different sizes to accommodate tubes ranging from semi-micro to very large. The largest rack can also hold



centrifuge tubes, dropping bottles, and vials. The polyethylene racks, shown in the photograph, are described as being almost unbreakable and easily cleaned by washing.

Science News Letter, July 26, 1958

⚙️ **DOWN SPOUT ATTACHMENT** takes rain water away from the house foundation. It is 48 inches long and seven inches wide

and is in the form of a coiled, flat garden hose. The down spout extension can be attached to round or rectangular spouts.

Science News Letter, July 26, 1958

⚙️ **ZIPPERED SLEEVING** permits accessibility for repair of electrical wiring. The plastic sleeve is extruded from vinyl resins and the zipper is heat sealed to the sheeting. It is easily opened and folded back to expose wires for marking, splicing or soldering.

Science News Letter, July 26, 1958

⚙️ **PLASTIC SYPHON** has a built-in self-starter. The syphon consists of a semi-rigid "U" tube that has an open end and a flexible "squeeze" bulb attached to the other end. The bulb has a stopcock outlet. The syphon is available in two sizes.

Science News Letter, July 26, 1958

⚙️ **MAGAZINE-LOADED AIR TACKER** is described as forming and driving staples with machine-gun speed. The stapler has a plastic throw-away magazine. All that is necessary is to insert the magazine, loaded with pre-cut staple-forming wires, and fire away. The machine throws out 5,000 staples without reloading.

Science News Letter, July 26, 1958



## Nature Ramblings



By BENITA TALL

➤ NOW THAT midsummer is here, each week end thousands of Americans are getting together with family and friends and going off for a picnic.

No matter where they go, to the woods or out in the backyard, the picnickers are usually joined by some six-legged picnickers.

Ants have been described as "social" insects. The thousands of Americans who spread their food out on picnic tables or on cloths on the ground can only agree. Unfortunately, the ants seem to want to socialize with humans who may wonder if the ant has any other source of food.

Scientists are also interested in the ants' food habits. How these insects find their food, their methods of feeding the young, special kinds of food, variations in feeding,

### Food for Ants



all are factors in the development of this social insect.

One group of ants particularly interests scientists because of its anti-social habit of cannibalism!

The Australian bulldog and "jumper" ants of the genus *Myrmecia* are believed to be the most primitive, in form or morphology, among the ants. While the more highly social species of ants feed one another and the young or larvae by regurgitating liquid

food from their crops, the primitive *Myrmecia* eat other insects, their own ant eggs, and sometimes one another.

Studies of colonies of *Myrmecia* show that the workers and queens have a highly adaptive form of egg-laying. Eggs are offered to larvae of all sizes, even when they are at the stage where they eat insects. Adults, including the queen, also eat the eggs. Some of the ants have even been observed to beg or steal an egg from a hungry larva. A worker ant may even induce another worker to lay an egg for him.

Workers have been seen assisting larvae by turning the egg, held in the mandibles, so that the young could more easily get at the contents.

For primitive insects, the *Myrmecia* manage to eat well.

Science News Letter, July 26, 1958