

• New Machines and Gadgets •

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⚙️ **LEAK PLUGGER** is both a wet surface roof coating and roof cement. It is described as permitting repair of ordinary asphalt roof coatings. Application in freezing weather, morning dew, or rain can be made with a brush or spray.

Science News Letter, September 28, 1957

⚙️ **ELECTRICAL ATTACHMENT** protects home appliances, power tools and other devices from overloading and defects. A built-in circuit breaker in the plug-in-protector is designed to fit on the end of an extension cord. Connected to the appliance, it provides individual overload protection.

Science News Letter, September 28, 1957

⚙️ **OVERHEATING GUARD** for the busy housewife is a heat alarm that fits into a pan with liquid foods. After being set to one of its ten heat settings, the alarm will sound off to remind the housewife that the food is ready. Based on a chrome-plated, stainless steel base, the alarm is said to be ideal for baby formulas, chocolate, soups, vegetables and water.

Science News Letter, September 28, 1957

⚙️ **MIXING BOWLS**, shown in the photograph, have been provided with a removable suction cup designed to hold them firmly to a table or a counter. Made in a set of three graduated sizes, the bowls are formed



from a non-porous lightweight plastic. They will not absorb grease or oil and can be safely washed in an automatic dishwasher. The suction cup clings to the bottom of the bowl and the top of a table.

Science News Letter, September 28, 1957

⚙️ **ROLLING RECORD CADDY** holds up to 250 long-playing record albums. Made of heavy-duty black wrought iron, the caddy measures 37 inches high, 15 inches wide and

22 inches deep. It is mounted on two-inch casters and provides a full-front view of every album cover.

Science News Letter, September 28, 1957

⚙️ **SHOTGUN CLEANER** and oiler consists of a polished wooden handle and wooden rod 34 inches long, completely covered with a pile of acrylic fiber. The fiber-covered rod will fit either 12, 16 or 20 gauge guns in all standard barrel lengths. An oiled "bob" of the fiber is made to be hooked to the end of the rod.

Science News Letter, September 28, 1957

⚙️ **PAINT EDGING TOOL** is said to produce sharp, clean edges around ceilings, windows, doors and baseboards. Made of plastic and colored red, the tool has two plastic wheels with serrated edges for guiding it. A white mohair pad had been attached to the aluminum frame and can take paint, varnish or enamel.

Science News Letter, September 28, 1957

⚙️ **GOLF BALL WASHER** is a helical agitator molded of a butyrate plastic. The ball is placed in the hole of the agitator and as the golfer moves the unit up and down the ball is rotated against a brush in a washing chamber. The washer is both rust and corrosion proof.

Science News Letter, September 28, 1957



Nature Ramblings



By HORACE LOFTIN

➤ **OLD TOM** made a prodigious leap from a nearby limb and landed on the platform holding the birdhouse. He peered through the opening at the helpless, naked young birds in the nest. If cats could smile, that is what Tom would be doing.

You know what happened. Tom ate well that morning. It seems to be a changeless law of nature that cats and birds are enemies, the hunter and the hunted. And it seems cats and rats, dogs and cats, lions and lambs all behave in this same way.

Changeless law? No, not really.

Probably all of us know of cases in which the family cat knows better than to attack the family canary, or the armistice between dog and cat under the strict surveillance of their master. But these are cases of enforced peace, so to speak. Now a Tulane University psychologist has found that "blood enemies" can be trained to live in harmony when they need each other for mutual aid.

Animals and the Golden Rule



For the experiment, the scientist used an alley cat with a "long and glorious record of rat-killing." The rat was laboratory-bred, young and tender. These two enemies were placed in a cage, but were separated by a glass, and later a wire, partition. A door connected their separate compartments with a common cage, and in this cage were two buttons which controlled electrically another door which led to a cage with food. To open this door, the cat had to press one button and the rat the other.

According to the scientist, about 700 trials

lasting nearly four months were necessary before the cat finally cooperated with the rat without any act of aggression. Once they had worked together to open the door to food, they ate amicably out of the same dish.

The experiment was then made more complicated, when an electric button controlling the rat's door was placed in the cat's cage. The only way the rat would be available to help the cat reach food now was for the cat to press the button, releasing his old enemy. He learned to do this in a hurry.

Thus, through conditioning, the rat-killing cat has been taught to cooperate with his traditional "enemy" toward a common goal.

This work seems to contradict the ancient idea that in animal nature there is an indestructible instinct of pugnacity which makes fighting or wars inevitable, the psychologist points out. Thus, the "golden rule" works, when used, to the benefit of both. The lion may lie down with the lamb.

Science News Letter, September 28, 1957