

• New Machines and Gadgets •

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⚙️ **CORN POPPER** made of spun aluminum is said to pop corn in about four minutes without the need of shaking or stirring. A measure made of aluminum is included. When not in popcorn use, the popper can substitute as a bun warmer or serving bowl.

Science News Letter, October 26, 1957

⚙️ **ELECTROTHERMAL BURNER** for laboratory use combines the advantages of both gas burners and electrical heaters. The apparatus operates on 110 volt, 50/60 cycle A.C., produces direct radiation, is unaffected by draft, does not smell, and has temperature control. The heating element is replaceable.

Science News Letter, October 26, 1957

⚙️ **NON-SKID RUG COATING** helps prevent rug skidding in the office or home. A liquid rubber, the anti-skidding compound also stops fraying and can be used for repair work without sewing. The moth and fire resistant coating can be applied by brush or spray and dries to form a rubbery film.

Science News Letter, October 26, 1957

⚙️ **CARRYING CASE** made of a cast vinyl film can be used to transport a blanket on picnics, boats or to football games. It can also be used to protect charts, papers and maps. The transparent, plastic case, shown



in the photograph, resists moisture penetration and can be wiped clean of oils, grease and dirt.

Science News Letter, October 26, 1957

⚙️ **VACUUM WASHER** described as a help in washing stockings, lingerie, and baby clothes in a bowl, tub or sink, is hand-operated. Based on a wooden handle, the device works like a plunger. The downward stroke forces air, steam and water

through the clothes, and also creates a vacuum. Lifting the steel plunger sets up a pulling force that is said to clean.

Science News Letter, October 26, 1957

⚙️ **BARREL RACK** permits the handling and stacking of both loaded or empty barrels and drums with standard fork lift trucks. The racks are made of heavy gage channel steel. One unit will support 7,500 pounds in 18 gage drums and 14,000 pounds in 16 gage drums. The enameled racks are shipped knocked down.

Science News Letter, October 26, 1957

⚙️ **MECHANICAL PITCHING MACHINE** provides junior with a remote control batting practice device. The batter controls his own ball receiving, either outdoors or indoors. The machine is 11¼ inches tall and 9½ inches long and has a 15-foot long tube with bulb control. Three unbreakable balls are provided.

Science News Letter, October 26, 1957

⚙️ **BASE DESIGN** for a small world globe permits the sphere to be turned completely around if desired. Housed in a fork mounting, the 12-inch world globe turns in a meridian and the meridian itself moves freely forward or back. The unbreakable metal base, fork and meridian are gold finished.

Science News Letter, October 26, 1957



Nature Ramblings



By HORACE LOFTIN

➤ "LET US begin alphabetically with the adder!"

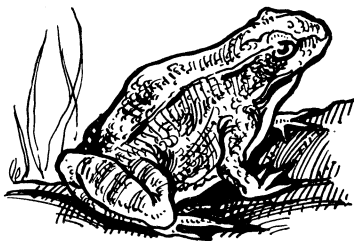
This was the optimistic beginning of one of the first natural history books in the English language, written in 1567 by John Malpet.

Poor John Malpet was a long way from completing his natural history when he died, for it is conservatively estimated that there are some 600,000 species of living animals known to science, not to mention fossil animals.

The animal kingdom is divided into two great groups, those without backbones and those with this marvelous structure of cartilage or bone. The animals without backbones, including the insects, mollusks, worms, sponges and other "lowly" creatures far outnumber the vertebrates in species. There are only about 55,000 known species of the backboneed animals.

Sharing the benefits of a backbone with man are the cyclostomes (lampreys), sharks

Animals With Backbones



and true fishes, the amphibians (frogs and salamanders), reptiles, birds, and other mammals. On the borderline are three groups of animals that share characteristics of both the backboneed and backbone-less creatures.

Members of one of these groups, the hemichordates, are quite like complicated worms, and for many years they were thought to be true worms. However, it has been discovered that these creatures possess the rudiments of a backbone in their heads.

A representative of another group is the familiar sea squirt, or tunicate, that spends an idle life attached to pilings and boat bottoms. While this animal hardly appears a member of the vertebrate clan, it is known that the young or larval form leads an active, free-swimming life, during which time there is a rudimentary backbone in the tail.

The third and perhaps most interesting of these "pre-vertebrates" is the amphioxus, an animal that combines the look of a fish and a worm.

This sea-living creature has a rudimentary backbone that extends the length of its body, as well as several other typical vertebrate characteristics. An obvious missing feature, however, is a cranium; for unlike all true vertebrates, the amphioxus is without a skull.

The amphioxus seems to be the nearest thing to a respectable-looking missing link between backboneed and backbone-less animals.

Science News Letter, October 26, 1957