

# • New Machines and Gadgets •

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⚙️ **DISPLAY CASE**, made of aluminum and plastic, can be used in museums, schools and stores. Deep molded plastic windows can be paired to permit object viewing from all sides. Dividers of any type can be used in the case. The single units measure three by four feet, double units, four by six feet. Both may be joined.

Science News Letter, May 24, 1958

⚙️ **QUICK ENTRY MASK** is said to give complete respiratory protection in any toxic or oxygen-deficient atmosphere for 10 to 15 minutes. The full face mask unit weighs 15 pounds. The rescue device can be put into operation in seconds.

Science News Letter, May 24, 1958

⚙️ **CHEMISTRY SLIDE RULE** contains special scales for solving temperature, pressure and solution concentration problems. On the reverse side of the slide rule are 11 standard scales. Six of the scales on the laminated bamboo rule are color coded in red.

Science News Letter, May 24, 1958

⚙️ **CANVAS CARRYALL** is both water and mildew resistant. It can be used to tote books, athletic equipment, laundry, sundry items, beachwear or overnight



clothes. The canvas bag, shown in the photograph, measures 16 inches high and 10 inches in diameter. Available in a wide range of colors, it comes with one four-inch felt letter.

Science News Letter, May 24, 1958

⚙️ **FIRE HOSE REEL** from England automatically turns on the water supply as it

is unwound. The reel can be housed flush with a wall face and can swing through 180 degrees. Rewinding the hose shuts the water off.

Science News Letter, May 24, 1958

⚙️ **STRETCHER-LADDER COMBINATION** is a British-devised rescue apparatus. Self-contained aluminum-alloy units can be joined together to form a ladder or used singly as either ladder or stretcher. A carrying sheet, included with each unit, permits transfer of an injured person to an ambulance.

Science News Letter, May 24, 1958

⚙️ **SWIVEL BASE** is a light duty adjustable glide designed for the slanted legs on television, radio, hi-fi, dinette and casual tables. The slide has a locking adjustment that permits furniture to be moved for cleaning without changing the caster's adjustment.

Science News Letter, May 24, 1958

⚙️ **SPACE GRAPH** is said to divide any line into an equal number of parts, odd or even, automatically. The graph can also be used to enlarge or reduce, or to give arcs, polygons, pi, square of a circle and other ratios. It is printed on a 9-by-12-inch sheet of plastic.

Science News Letter, May 24, 1958



## Nature Ramblings



By HORACE LOFTIN

► A SINGLE LOOK is not enough. It takes that second look to spot the fascinating "tricks" that nature sometimes plays on our eyes. For example, would you say that the daisy, shown in the accompanying picture, is a beautiful flower?"

If you did, you would be wrong.

The object illustrated is not a flower, but a cluster of scores of tiny flowers, grouped together to form what looks like a single large flower. The "petals" you see are individual ray flowers, while the center of the cluster is made up of many tiny disk flowers.

Botanists speak of such a flower cluster as a "head."

This head is typical of the large group of flowering plants called the composites, including the daisies, sunflowers, ragweed and hundreds of others. It indicates, along with some other special characteristics, that these

### Flower Clusters



plants are among the highest on the evolutionary scale.

The most primitive flower system, supposedly, is the single flower on one stalk. Clusters of flowers, which arrived later in evolutionary time, generally follow one of two patterns.

In the first case, the oldest flowers appear closest to the base of the stem, with the progressively younger ones nearest the tip. Theoretically, there might be new flowers

formed as long as the tip kept growing. This kind of flower cluster is called "indeterminate" or "indefinite."

In the other general pattern, the first flower to bloom is at the tip, with the younger flowers appearing lower and lower on the plant. Growth of the stalk is limited by the presence of the oldest flower, and the number of flowers possible then is generally limited to the buds already present. For this reason, botanists call this a "determinate" or "definite" cluster.

The daisy represents a highly advanced stage of the indeterminate cluster. The outer flowers are the first to appear, while the very center ones unfold last. Other types of indeterminate flower clusters are found in the hyacinths, willows, carrots and cherries, to name a few.

Determinate flower clusters can be seen on the crab apple, sweet william, nettles and dogwood.

Science News Letter, May 24, 1958