

• New Machines and Gadgets •

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⚙️ **MAGNETIC CHARTS** for plotting the course of hurricanes takes in longitudes 61 to 92 and latitudes 14 to 45. The chart is printed in dark blue on a white background, on metal enamel coated on both sides. It is available in two sizes and comes with 18 magnetic markers.

Science News Letter, June 22, 1957

⚙️ **HEATING PAD** for boaters is made of vinyl plastic. The pad operates on standard 110 volt dockside electrical systems. The pad is available in two models; one provides a temperature of 115 degrees Fahrenheit on both sides, and the other 115 degrees on one side and 105 degrees on the other.

Science News Letter, June 22, 1957

⚙️ **CARTRIDGE HOLDER** keeps ammunition clean and dry. Designed for hunters, match-shooters and hand-loaders, the polyethylene plastic boxes hold shells in individual shock-resistant compartments. The boxes are colored red and can be washed clean.

Science News Letter, June 22, 1957

⚙️ **VENDING MACHINE** is built to resemble a rocket space ship. The seven-foot tall machine shown in the photograph dispenses helium or air-filled balloons. The mechanism is generally operated with a



coin so that balloons can be made available to tots around the clock. The balloons are dispensed complete with string.

Science News Letter, June 22, 1957

⚙️ **THREAD BOX** molded of a clear styrene plastic holds 24 regular-size spools of thread on shelves that tilt forward when the case is opened. A snap lock holds the 4½ by 6 by 2½ inch case firmly shut.

Science News Letter, June 22, 1957

⚙️ **RADIO TRANSCEIVER** for the amateur is a portable five-pound unit. Measuring five by five by seven inches, it is designed to operate on any frequency between 50 and 54 megacycles. It can be worked from 115 volts AC or from a six- or 12-volt battery.

Science News Letter, June 22, 1957

⚙️ **DENTURE CUP** is the product of a practicing dentist. The plastic cup is an opaque container that holds any set of full or partial dentures in a bath. A hinged lid prevents spilling and finger grips guard against dropping when hands are wet.

Science News Letter, June 22, 1957

⚙️ **FLUID DISPENSER** prevents loss or contamination of various liquids. The dispenser can be drop-calibrated for quantitative delivery of milliliter amounts and will deliver one pint or more per minute when fully opened. A safety lock-knob prevents accidental opening.

Science News Letter, June 22, 1957



Nature Ramblings



By HORACE LOFTIN

► THE PREVIOUS week had been one of constant rain, but today the warm sun appeared from behind the clouds. On this signal, countless buds erupted into fragrant flower in the rose garden.

Several hundred yards away at the edge of the woods, a bees' nest lay hidden in a great hollow tree. The wet weather had forced the bees into idleness, and now they had to double their efforts in search of nectar. Too many cells stood empty and the grubs were hungry.

Scouts left the hive early, flying off in all directions. One forager wandered farther than the others and she discovered the rich harvest to be gathered in the rose garden. Soon her honey stomach was filled with nectar and she flew back to the hive. At home, her first act was to feed some of her companions with this nectar. Then she

Bee Language



began a strange, ceremonious dance on the vertical wall of the comb.

First she moved in a short, straight line, then made a tight semi-circle to the right, next back up the imaginary straight line again and finally a semi-circle to the left. She performed this dance over and over again, and several of her companions walked eagerly behind her through all the steps. Bees near her watched attentively and with great excitement. Finally, her admirers took

off on a flight directly toward the rose garden and in a short while were busy collecting nectar from the blossoms.

This is not fantasy. It describes a typical case of how bees can communicate news of a rich find of nectar to their companions.

Unraveling of this "language of the bees" is largely due to the work of a German scientist, Dr. Karl von Frisch, and his colleagues.

By a series of experiments they discovered the direction of the straight line in the bee's dance indicates the direction of the nectar find. Likewise, the slower the dance, the farther away from the hive is the nectar. Finally, the scout who finds the nectar and performs the dance carries the scent of the particular flower. Thus, bees responding to her dance waste no time with flowers bearing another perfume.

This is true language, in the sense that facts are really passed on from bee to bee.

Science News Letter, June 22, 1957