

• New Machines and Gadgets •

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⚙️ **LABORATORY APPARATUS** combines a 700-watt heater and a magnetic stirrer. Designed to cut time in routine stirring, mixing and dissolving operations, the apparatus is made so the hot plate and stirrer can operate independently or simultaneously.

Science News Letter, January 19, 1957

⚙️ **NON-SKID PAPER** is a form of heavy duty cross-creped material made from kraft paper. The paper stretches and can be lengthened 60% of its base length and 45% of its base width at the same time. The material can be printed, die-cut, slit or sewn.

Science News Letter, January 19, 1957

⚙️ **"DRY BOX"** gloves for workers in atomic energy plants and nuclear research laboratories are made of neoprene. The gloves have curved fingers. Made with extra long sleeves, the gloves are available in a 27-inch length with a five-inch inside diameter opening, and in 30-, 32- and 36-inch lengths with an eight-inch opening.

Science News Letter, January 19, 1957

⚙️ **FISHERMAN'S SHOT DISPENSER** permits anglers to apply shot to their lines in less than a minute. The device, which is shown in the photograph, holds a supply



of 3/0 split-shot. A single shot is dialed into position in a feeder slot, the line is inserted in the slot, a plunger pressed, and the job is done. The automatic dispenser is molded of a butyrate plastic.

Science News Letter, January 19, 1957

⚙️ **HEATED STEERING WHEEL** for cold weather driving of either automobiles

or tractors is a British invention. The heating element can be made to be attached to the wheel rim and will keep a driver's hands warm in below-freezing temperatures.

Science News Letter, January 19, 1957

⚙️ **GYM BAR** for the home can be attached to a doorframe without screws, nails, suction cups or tools. Made of 18 gauge stainless steel tubing, the gym bar weighs less than three pounds. It will fit any doorway from 25 to 38 inches wide.

Science News Letter, January 19, 1957

⚙️ **GLASS SLICER** is a cutting tool that consists of a spring base with a slotted guide board. When the cutter is run down the slot, the glass slices or separates at a slight bend of the base. The board guides the cutter along a straight line while the base holds the glass at the needed pressure points.

Science News Letter, January 19, 1957

⚙️ **PORTABLE CARRIER** to hold luggage, groceries and/or sport equipment is designed to fit on any conventional rear trunk lid of an automobile. Made of steel with a chrome finish, the adjustable carrier measures 36 by 38 by 7½ inches and holds up to 250 pounds of distributed weight.

Science News Letter, January 19, 1957



Nature Ramblings



By HORACE LOFTIN

"THE MELANCHOLY DAYS are come, the saddest of the year, Of wailing winds, and naked woods, and meadows brown and sere."

Thus William Cullen Bryant described the bleakness of northern winter as it affects the majority of plant and animal life. But this melancholy time is not a time of death: it is a time of sleep and rest for nature buried under winter's snow.

Look at the "naked woods." Each twig contains a winter bud, dormant but ready to burst into green life with the first warm days of spring. The brown, sere meadows, too, are full of sleeping seeds which will sprout to cover the meadows in green once more when winter is gone.

Buried in the ground, under leaves and in decaying limbs are countless numbers of lesser life: worms, insects, snails. These will emerge from winter sleep soon. Those

The Winter Sleep



species that perished with the onset of winter surely left their autumn eggs warm and safe, to carry on the cycle of life another year.

Some of the mammals, such as the deer, must struggle against cold and lack of food till spring returns. But many mammals are wrapped in a profound sleep, hidden in a warm burrow or cave. The ground squirrels, woodchucks, and jumping mice are especially deep hibernators

where winter is most severe. Skunks, raccoons, badgers and opossums sleep for several weeks at the time, although they may rouse and forage for food when mild weather sets in.

Bears are deep sleepers in winter, but their sleep cannot be called true hibernation. Throughout the winter, their body temperatures remain close to normal. Among true hibernators, body temperature falls to a very low level, barely enough to maintain life.

Other body changes occur in those mammals which are true hibernators. In the ground squirrel, for example, the heart may beat some 100-200 times per minute after the animal awakes from hibernation. But in his winter sleep, the tiny mammal's heart beats only five times a minute. Likewise, the normal ground squirrel breathes about 187 times a minute. In hibernation, this may fall to only four a minute!

Science News Letter, January 19, 1957