• New Machines and Gadgets •

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⚙ *BAGGING MACHINE loads almost any size or shape of package at speeds far in excess of hand-loading. It can open and load all types of bags including lip, gusseted, paper and plastic. The machine, available in several models, has special use for bags affected by static electricity or tackiness.*

Science News Letter, December 29, 1956

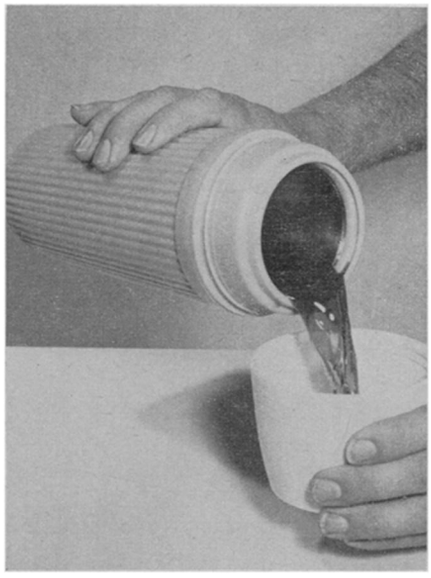
⚙ *WASHABLE PAINT covers an unpainted area with one coat. Based on a plastic vinyl acetate resin latex, the interior paints may be compounded at a pigment volume greater than that for latex paints. The paint provides one-coat hiding with no sacrifice in washability and freeze-thaw stability.*

Science News Letter, December 29, 1956

⚙ *HELMET HATS for young sports enthusiasts of the grade school set are formed from light, tough sheeting of a butyrate plastic. Protectors for skating, scootering and bicycling, one helmet has a foam headband and cushion and adjustable chin strap. Others have an elastic headband.*

Science News Letter, December 29, 1956

⚙ *VACUUM BOTTLE with an unbreakable liner, shown in the photograph, keeps liquids or solid foods hot for five hours or cold for six hours. The plastic liner is sealed inside an unbreakable polyethylene plastic case and cushioned by millions of*



tiny insulating cells made of urethane foam. A small hole does not destroy the insulation's effectiveness. The bottle is available in half-pint and pint sizes.

Science News Letter, December 29, 1956

⚙ *WEATHER SEAL for service entrance mast installations on roofs makes caulking unnecessary. The plastic neoprene unit seals out moisture and absorbs vibration. The unit contains a seamless base of aluminum, copper, lead or zinc-plated steel. The neoprene seal fits the base snugly.*

Science News Letter, December 29, 1956

⚙ *HUMIDITY DETECTOR determines moisture conditions in sealed packages without breaking the seals or packages. The electrical humidity detecting system can be used for military and industrial packs where contents must be protected from corrosion. No special training is necessary to use the device.*

Science News Letter, December 29, 1956

⚙ *SIGNAL AUTO LIGHT for highway safety when motorists are forced to stop provides a blinking red and yellow flash. The cord is plugged into the cigarette lighter socket and the light automatically flashes on and off. It can be put on any part of the stopped car by means of a rubber suction cup.*

Science News Letter, December 29, 1956

⚙ *TRANSISTORIZED PA SYSTEM is built into an attache case. Weighing 18 pounds, the portable public address system can be carried like luggage and is powered by two flashlight batteries. It consists of a Hi-Fi transistor amplifier, a heavy-duty eight-inch speaker, a microphone and controls.*

Science News Letter, December 29, 1956

Nature Ramblings

By HORACE LOFTIN

➤ COLD WINTER has robbed the crown of the king of our temperate forests, the white oak, *Quercus alba.* Only snow covers the stark branches of the sleeping monarch.

Winter nakedness, however, helps to reveal the regal bearing of the white oak. See—as you could not in summer—how the great branches emerge almost at right angles from the sturdy trunk. See the magnitude of the branches.

These branches give the white oak the greatest spread of any trees of our woods.

If you could look underground at the root system of the white oak, you would see a taproot that almost rivals the trunk in size and lateral roots to match the branches in length and complexity.

White oaks become gigantic in size and hoary with age. There is, for instance, an ancient oak at Fairlee, Md., that measures 24½ feet around its trunk, is 118 feet tall and has a spread of 127 feet.

Forest Monarch

Testifying to great age is another great white oak standing in the Friends cemetery at Salem, N. J., under whose shade the Quakers and Indians signed a peace treaty in 1675.

The first leaves of spring to emerge from the awakening monarch's winter buds are vivid red, bringing brightness to the forest. This red then turns to pink and finally to the typical silvery white crown of the white oak. These deeply lobed leaves are five to nine inches long and two to four inches wide. Their upper surface is shining and hairless, while the lower surface has a whitish bloom.

About the time of the unfolding of the leaves, male flowers on drooping tassels add a share of color. The female flowers are quite inconspicuous.

Acorns begin to develop in early spring, at first with three seeds in each. Later, two of these disappear by being absorbed, so that each ripe acorn represents a single seed.

Acorns of the white oak mature in a single season. Acorns of the red oaks take two years for maturation, being only minute "baby acorns" during their first season.

White oak acorns are from ¾ to 1⅛ inches long and are shiny brown. They can be told from red oak acorns by examining the inner surface of the acorn shell. In the white oaks, this surface is smooth; in the red oaks, it is lined with wooly hairs.

Science News Letter, December 29, 1956