· New Machines and Gadgets '

For sources of more information on new things described, send a self-addressed stamped envelope to SCIENCE NEWS LETTER, 1719 N St., N.W., Washington 6, D. C., and ask for Gadget Bulletin 981. To receive this Gadget Bulletin without special request each week, remit \$1.50 for one year's subscription.

AlNT ROLLER KIT permits using one roller for all types of paint and all surfaces. The roller has a cover of resilient plastic foam 7" wide and 1¼" in diameter that is easily cleaned. Cover refills are so inexpensive they may be thrown away after one using.

Science News Letter, April 4, 1959

PROJECTION LAMP for slide and movie projectors has a reflector sealed right in the bulb, behind the tungsten filament. The reflector gives the bulb 20% more screen brightness than ordinary lamps. It also reflects heat away from the rear of the bulb wall, resulting in cooler lamp operation and increased filament efficiency.

Science News Letter, April 4, 1959

AUTOMATIC SHIP'S BELL, enabling land-locked sailors, hobbyists and boating fans to enjoy vicarious seafaring, is electrically controlled and never needs winding or setting. The correct number of bells is chimed every half hour. There is a volume control, and an on-off switch to silence the strike if desired.

Science News Letter, April 4, 1959

CATALYTIC BURNER for use outdoors is a combination stove, vertical broiler and radiant heater. Fueled by a small dis-



posable propane gas cylinder, the portable burner, shown in the photograph, provides a cooking effect comparable to that attained with charcoal or with resistant-wire type electric broilers. It is about the size of a large lunch pail and weighs nine pounds with fuel.

Science News Letter, April 4, 1959

BRICK HAMMER of steel has a plastic plug at the end of the handle butt for tapping bricks. The triple-alloy steel handle is

heat-treated and chrome-plated, and is permanently locked in the head. A rubberlike plastic grip is contoured and perforated for easy handling and absorbs shock.

Science News Letter, April 4, 1959

MERCURY-THALLIUM THERMOM-ETERS for use in low temperatures give reproducible readings under all climatic conditions. They come in ranges of minus 57 to plus 100 degrees centigrade and in lengths of 9 to 18¾ inches.

Science News Letter, April 4, 1959

PAPER CAMPING EQUIPMENT includes sleeping bags and tents of cellulose fibers reinforced with threads of nylon. The paper material is waterproof, lightweight and fire-retardant, and can be sewed, stretched, tied and folded. This low-cost equipment can be thrown away at the end of the season.

Science News Letter, April 4, 1959

HOME AIR PURIFIER uses adsorptive charcoal to remove dust, pollen, smog, odors and other impurities and irritants from the air. The charcoal filter has many microscopic chambers that trap particles when air passes through. Using less electricity than a 17-watt bulb, the unit filters 110 cubic feet of air per minute.

Science News Letter, April 4, 1959



Nature Ramblings



By HORACE LOFTIN

EXCEPTING the evergreens, which can dare the icy blasts, the majority of our woodland trees have stood naked against the winter sky for the last several months. But now a warm glow of bright green is lighting up the forests as the winter buds break their dormancy to send forth the first tender leaves.

Along with, or even before, the emergence of the spring foliage, many of the trees come forth in blossoms.

These tree flowers may be as bright and showy as those of the dogwood or the redbud, with their color shining through the spring woods. Most of the tree flowers, however, are tiny and seldom seen by the casual observer. Even if these structures are noted, their identity as flowers may not be realized at first.

These smaller flowers of trees generally depend upon the wind for distribution of the pollen. So much pollen may be produced

The Forest's Hidden Flowers



and spread by the March winds that the forest floor is covered in a golden coat.

forest floor is covered in a golden coat.

With wind pollination, the large petals, bright colors and other adaptations of "typical" flowers for attracting insects become unnecessary. As a matter of fact, these insect attracting parts might even interfere with the spread of pollen by the wind. Thus, it is not surprising to find the small size and lack of common flower parts in these tiny tree blossoms.

Taking a long look backward into the early history of the flowering plants, it has been shown that the typical large, bright blossoms of insect-pollinated plants probably evolved from the simpler wind-pollinated structures.

The best way to take a good look at these tree flowers is with a hand lens. A simple reading glass will do. This close look will reveal the presence, absence or modification of typical floral parts. It will also disclose hidden beauty, for many of these wee blossoms are as striking in their own right as are the flowers of your garden.

Among the things you may discover in your "closer look" is that the different species of trees exhibit sexual differences. You may find that one species has all male flowers on one tree and female on another. Other species may bear separate male and female flowers on the same tree, while others have both sexes in the same blossom.

Science News Letter, April 4, 1959