

• New Machines and Gadgets •

For addresses where you can get more information on the new things described here, send a three-cent stamp to SCIENCE NEWS LETTER, 1719 N ST., Washington 6, D. C., and ask for Gadget Bulletin 662. To receive this Gadget Bulletin without special request each week, remit \$1.50 for one year's subscription.

⚙️ **GREEN FLANNEL** cloth with adhesive backing covered with gauze can be trimmed to fit the bases of lamps, bookends and what-nots that might scratch fine furniture. The flannel's adhesive is stripped of its protective gauze and is pressed onto the bottom of the article being covered.

Science News Letter, February 21, 1953

⚙️ **PROJECTION LAMP** for eight or 16 mm. home movie machines has a smaller, more compact filament and is said to throw up to 20% more light on the screen than any other lamp of equal wattage. The lamp uses a "floating bridge" device to minimize filament distortion as it heats and cools when turned on and off, keeping the projected picture bright.

Science News Letter, February 21, 1953

⚙️ **GLUE FOR** polyethylene plastic squeeze-bottles permits the housewife to attach ordinary paper labels to the containers. Until now, most existing adhesives have not been satisfactory. Because it is inexpensive to use, the new glue also should be a boon to manufacturers who now must silk-screen or stencil labels on the bottles.

Science News Letter, February 21, 1953

⚙️ **FOOTVALVE FOR** water pumps, shown in the photograph, is made of a rugged rustproof butyrate plastic so that it will work for months underwater without



corroding or leaking. The valve screws to the end of a pipe extending into the reservoir. Its plastic construction makes it impervious to most oils and greases.

Science News Letter, February 21, 1953

⚙️ **PICNIC TABLE** folds like a suitcase and has trunk-type latches and a carrying handle. The metal table's steel legs and four canvas-covered camp stools can be stored inside the unit along with food,

utensils or sporting gear. When folded, the table fits easily into an automobile luggage compartment.

Science News Letter, February 21, 1953

⚙️ **INSULATING INNERSOLE** of foam rubber is lined on the foot side with 100% virgin wool. Especially designed for sportsmen, surveyors and others who must work outdoors in cold weather, the innersole comes only in one large size, but can be trimmed to fit any size shoe or boot.

Science News Letter, February 21, 1953

⚙️ **ALGAE KILLER** for fish ponds, swimming pools and water systems also controls scum and slime. The chemical is applied in small traces to the water being treated and has a "continuing residual action" that controls algae "for long periods" even though no more is added, the manufacturer states.

Science News Letter, February 21, 1953

⚙️ **DASHBOARD LIGHT** flashes a warning when motorists drive uneconomically or when the engine dies. Easily attached to the intake manifold of the car, a sensitive vacuum switch flashes the red light when gasoline is wasted by over-acceleration of the car. The signal is clearly visible through the corner of the eye and has an intensity adjustment for day or night driving.

Science News Letter, February 21, 1953

• Nature Ramblings •

► WINTER IS commonly thought of as a time of death for the lesser winged and creeping creatures—insects, spiders, centipedes and the like.

We are used to the migration of birds and the hibernation of mammals; but insects we think of as either perishing with the first stiff frost or spinning themselves into sheltering cocoons and sleeping it out.

We are of course well used to seeing surviving flies and mosquitoes flitting about in our houses, and occasional spiders and centipedes furtively on the crawl at odd times during the winter. However, we are prone to take credit to ourselves for involuntarily providing shelter for these undesired guests. Outside, assuredly, insects cannot live through the season's severity!

It comes as a surprise to many of us, therefore, to see occasionally, during a winter thaw, and more frequently as late winter merges into early spring, a considerable population of adult insects creeping or flitting about in the short release that

Insects in Winter



the midday hours give them from the stiff thrall of winter normally imposes.

Almost everyone gets to see winter-wandering ladybird beetles and those odd-shaped but attractively-colored insects, the box-elder bugs. Unobservant indeed must be the person who fails to notice woolly-bear caterpillars hastening, humpity-hump, across sidewalks and patches of bare earth.

Rarer is the treat afforded by the mourning-cloak butterfly, and you have to walk

the winter woods for a chance to see it. There are other butterflies that over-winter in the adult state, but they are smaller and less conspicuously colored than the mourning-cloak, and hence less likely to be noticed. Even the mourning-cloak is not apt to catch your eye unless it is in flight or preparing to take off. Then the light-bordered dark upper surfaces of its wings are visible. When it is resting, whether in active state or chilled into immobility as it clings to a tree, these are folded up together and only the camouflaging, bark-colored undersides are presented.

Some insects that are usually thought of as hibernators do not actually become dormant or even stiffened into inactivity with cold. They have sufficient shelter to permit at least limited wakeful activity. Bees, for example, remain active within their hives or hollow trees, clinging together in masses to conserve the heat their bodies generate out of their stores of food.

Science News Letter, February 21, 1953