

• 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 666. To receive this Gadget Bulletin without special request each week, remit \$1.50 for one year's subscription.

⚙️ **HEMISPHERES MADE** of a clear plastic are placed over outdoor seedlings and protect young plants from light frost, heavy rains, hail and small animals. The protective hoods permit sunlight to stream through and do not screen out ultraviolet rays needed by the plants. The hemispheres are easily washed and can be reused.

Science News Letter, March 21, 1953

⚙️ **ALUMINUM SIDING**, adaptable to either modern or traditional house architecture, is easy to install so that its deep shadow lines run either horizontally or vertically. Resisting dents and unsightly waves and ripples, the clapboard siding is pre-painted with a sprayed, baked finish that withstands the weather well.

Science News Letter, March 21, 1953

⚙️ **NEW PLANT food**, sprayed on the leaves of plants or added to the soil, supplies a "balanced diet of nitrogen, phosphorus, potassium and essential trace elements" to growing things, the manufacturer says. Soluble in water, the plant food makes an odorless spray that also can be used indoors on potted plants.

Science News Letter, March 21, 1953

⚙️ **SAFETY BELT** for automobiles, trucks and buses, as shown in the illustration, accommodates two persons at once and can



be fastened in about five seconds. Attached to the car chassis, the belt's webbing comes in various colors to blend with the car's color scheme.

Science News Letter, March 21, 1953

⚙️ **LIQUID LEAK detector** works in basketballs as well as in huge pressure tanks

of complex machinery. A fluorinated hydrocarbon, the liquid under pressure is colorless, virtually non-toxic and odorless. It changes to a gas after escaping through tiny leaks. An electronic device or gas-burning torch whose flame changes color when in contact with the gas reveals the location of the leak.

Science News Letter, March 21, 1953

⚙️ **CORNER BRACE** for window screens slips into a slot that is easily sawed into the corner of the wooden screen frame and "locks" the frame together. The corner clamp is held in position by eight tiny nails.

Science News Letter, March 21, 1953

⚙️ **STORAGE CONTAINER** holds three gallons of anti-freeze and should solve the problems of filling station attendants who are called upon by their customers to drain and store anti-freeze solutions. The plastic-lined, light-tight unit also can be used on picnics as an ice-cube carrier.

Science News Letter, March 21, 1953

⚙️ **SHUTOFF VALVE** for garden hoses permits water to run full-force yet shuts it off completely at the twist of the valve key. The brass valve is leakproof, the manufacturer states, and can be screwed into the hose line between couplings.

Science News Letter, March 21, 1953

• Nature Ramblings •

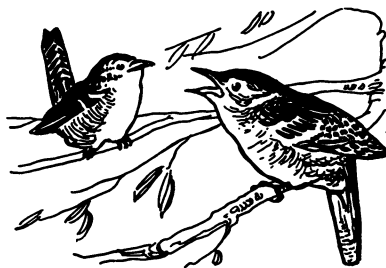
➤ **SPRING BIRD** songs have already filled the air where winter has retreated, and will soon be heard to the northern boundary and up the highest mountains.

There have been robins and red-winged blackbirds; presently there will be wrens and bluebirds, thrushes and orioles. The full choir will be the delight of children and poets, the distraction of lazy folk who like to sleep late.

Romanticists of all schools have for centuries rhapsodized over the sweet songs of birds, hailing them as "nature's troubadours" and all that sort of thing. Since many bird songs do sound very sweet to human ears, it is only natural for us to suppose that birds sing for the same reasons that we do: that they are feeling happy, or want to attract favorable attention to themselves, or are trying to please their friends or offspring. Such "anthropopsyching" is a mental groove very easy to slip into.

However, more objective observations made by cooler-brained field scientists seem to indicate that birds do not necessarily

Utilitarian Song



sing through sheer exuberance of feeling or from love of mate or family. Certainly the first song-outpourings we hear in spring cannot come from such causes, for neither families nor nests exist as yet, and even the prospective mates have not yet put in their appearance. First spring bird songs are sung only by males—and heard only by males.

The reason is highly utilitarian. Practically all song birds migrate in waves, with

the males traveling in advance of the females. Upon arriving at an area that promises to supply good hunting for the prospective nestlings, each male bird picks out a tract that will supply his family's needs.

Then he proceeds to stake claim to it by perching in some prominent place and singing as loudly as he can. However pleasant his song may sound to human ears, it is probably disagreeable to a later-coming male, for it warns him, in effect: "This territory is mine; move on or prepare to exchange buffets!"

Bird song as an expression of bird pugnaciousness reaches an easily observed climax when a cat gets near a wren-house. Between furious lunges at Tabby's bewildered head, the wren will perch on a twig and sing as if to burst his throat. And when the furred ogre has slunk away he will sing again, for as much as a half-hour.

Just like that larger and equally assertive though less tuneful male—the common rooster.

Science News Letter, March 21, 1953