

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

⚙️ **CLEANSING COMPOUND** removes rust and scale from steel. Acidic in nature, the compound is available in powder form in 100- and 400-pound quantities, and mixes with hot water into controlled acid concentrations that also attack oil films. The cleanser is said to be easier and safer to handle than strong acids.

Science News Letter, January 17, 1953

⚙️ **BALL VALVE** for tank-type toilets can be installed in three minutes and assures positive closing of the discharge valve after flushing, eliminating jiggling the controls, the manufacturer states. It has a special self-centering guide that helps the ball to seat properly over the discharge pipe.

Science News Letter, January 17, 1953

⚙️ **PLASTIC CEMENTS**, formerly available in bulk, now can be obtained by the homeowner in small quantities. The cements actually form a series, each cement working best on certain specific types of plastics. One cement will join plastics to glass, wood and metal without heat, pressure or special surface preparations.

Science News Letter, January 17, 1953

⚙️ **HAND-HELD TRANSMITTER**, as shown in the photograph, is designed to operate in the 152-174 megacycle frequency



band and is powered by self-contained dry batteries. Weighing only one pound, 13 ounces, the unit is effective over a five-mile range and is useful to firemen, policemen, news reporters and watchmen.

Science News Letter, January 17, 1953

⚙️ **NEW WALL PRIMER** dries in 45 minutes to two hours and seals porous surfaces, including patch-up spots and hairline

cracks in plaster. Especially suited for top-coating with popular flat wall-finishes, the primer has a polyvinyl acetate base that produces no solvent odor.

Science News Letter, January 17, 1953

⚙️ **DIESEL FUEL improver** blends in tiny amounts with ordinary diesel fuel at refineries or at storage terminals to make the fuel ignite more quickly. The improver recently underwent successful year-long Navy tests and now is available commercially.

Science News Letter, January 17, 1953

⚙️ **TOY AUTOMOBILE** operates by remote control from a hand-held battery case having two push-buttons that direct the car to speed ahead, or to turn left or right. Made of a cellulose acetate plastic, the small car safely withstands the bumps and collisions of playtime traffic.

Science News Letter, January 17, 1953

⚙️ **"ICE-CUBELET" MACHINE** turns out 20,000 cubelets a day for hospitals, restaurants and soda fountains. The small "cubes," said to cool faster and last longer than crushed, chipped or flaked ice, are five-eighths of an inch on a side. Thickness can be adjusted as required.

Science News Letter, January 17, 1953

• Nature Ramblings •

➤ **USED AS** we are to thinking of swans as the pampered darlings of English country estates, sailing their dignified ways over mirror-like little lakes, we may be a little astonished to learn that America has wild swans. Like their more plebeian relatives the geese, they nest in Canada for choice, but appear on broad waters in the wilder parts of the United States quite frequently.

Our swans are not precisely the same as the European "mute" swans, but they look very much like them; certainly as dignified and graceful. The commonest American swan is the so-called whistler, or whistling swan. It gets its name presumably from the "who-who-who" call of the flock leader, sounded like a note on one of the lower wood-wind instruments as the migrating birds go over in the night. Besides this call, the whistling swan has a considerable variety of other notes.

The other American swan species, the trumpeter swan, is now a great rarity, and few of us indeed ever get to see it. It is a huge bird, white, tinged with rusty color

Aquatic Aristocrats



on its head, reaching an over-all length of five feet. Because of its great beauty and size it was hunted remorselessly during the days of the reckless exploitation of our wild life, so that it was thought for a while to be extinct, like the passenger pigeon.

Now, however, at the Red Rock Lakes Migratory Waterfowl Refuge in southwestern Montana, one can see some evidence that the graceful birds have been saved.

The flock of 76 found in the valley of Red Rock Lakes nearly half a century ago has increased to 535.

The birds make this area their year-round habitat, for the secluded valley has natural food, warm springs providing open pot holes for winter occupancy, and protected nesting areas.

On small islets, they pile a mound of bull-rushes or organic debris until it is about eight feet across, with one-third projecting above the water. In the down-lined depression on top, they lay seven or eight eggs. Despite extreme care, however, many of the young die. The total population is, nevertheless, happily increasing.

Supplementing the trumpeters found in the United States, there are about 900 in the coastal areas of British Columbia, where the Canadian Wild Life Service carries on a program similar to that at Red Rock Lakes. Another estimated 200 have been noted in the Ketchikan area in southeastern Alaska.

Science News Letter, January 17, 1953