

• New Machines and Gadgets •

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⚙️ **FOOTWEAR SCRAPER** designed in the form of a dachshund is made to be placed in the front of a building entrance. Visitors can scrape their shoes or boots off on the dog's metal back. The shoe scraper is mounted on iron legs and is available in brown or black.

Science News Letter, January 12, 1957

⚙️ **ALUMINUM TRUCK** weighing 14 tons expands to more than five times its on-the-road dimensions at the touch of a button. Looking like any other semitrailer, in five minutes the inside area is transformed from 150 square feet to 780 square feet. It is designed for new housing possibilities for industry, shows and the armed forces.

Science News Letter, January 12, 1957

⚙️ **SPONGE RUBBER UNDERLAY** makes small rugs stay put. Made with a strong fabric insert permanently bonded between layers of resilient foam rubber, the underlay prevents rugs from sliding out from under. Soft green in color and suede-like in feel, the rugs will not stain floors.

Science News Letter, January 12, 1957

⚙️ **POCKET FLASHLIGHT**, shown in the photograph, can be held in a pistol-like grip. The flashlight, in a styrene plastic case, weighs less than one and one-quarter ounces when loaded. About three-quarters



of an inch thick and less than three inches long, the pocket light stays on without continuous pressure on the switch. It is available in three colors.

Science News Letter, January 12, 1957

⚙️ **GRAPH MARKER** and maker is an adhesive tape made in various widths, colors and designs. The self-adhesive acetate fiber

tape can be placed on paper and peeled off when the graph or chart is outdated. Tape widths range from 1/32 of an inch to one inch.

Science News Letter, January 12, 1957

⚙️ **CONTACT CEMENT** that is both fire and explosion-proof can be used in the bonding of plastic, leather, linoleum, synthetic rubber and thin gauge metal to plywood and pressed wood. The cement can be applied vertically or horizontally with either a brush or metal spreader.

Science News Letter, January 12, 1957

⚙️ **ELECTRICAL TAPES** withstand temperature extremes from minus 110 degrees to more than 550 degrees Fahrenheit. They are made from a tightly woven high-tensile glass cloth with a silicone adhesive mass. The pressure-sensitive tapes for use in aircraft applications come in three types and seal, hold and insulate without weakening.

Science News Letter, January 12, 1957

⚙️ **RADIATION BADGE** to be worn as a safeguard by industrial and research employees exposed to nuclear radiation has a new one-piece, two-emulsion film. It replaces the two separate films of different sensitivity. Clip badges can be worn on the clothes or attached to the walls.

Science News Letter, January 12, 1957



Nature Ramblings



By HORACE LOFTIN

➤ WINTER in the Arctic wastes is a time of perpetual ice and snow, hardly fit for small birds to thrive in, you might suppose.

Yet there are birds that live and breed in the Far North and stay there successfully through all the terrible winter. Such birds are the ptarmigans, members of the grouse family.

When a fierce snowstorm hurls its way over the barren ground, the ptarmigan simply flies down into a bank of snow and sleeps there till the storm is over. To rest during the day, it scratches a burrow into the snow-covered ground, where it evades the Arctic winds. Evidently, snow is more friend than enemy to this feathered creature.

And so it has been called the "snow bird."

There is still another very good reason why the ptarmigans deserve this title. During the winter months, these birds take on

Birds of the Snow



a plumage as white as the snow itself. Only the tip of the tail bears a black band. Their legs and feet likewise are covered with white—and warm—feathers. This white coat serves as an effective camouflage in their Arctic winter home.

In summer, the white coat is exchanged for one of rich brown, the feathers barred and streaked and with white wings. During the "in-between" seasons, spring and fall,

when patches of snow are on the ground, the bird is a mottled brown and white, again an excellent camouflage.

There are two species of ptarmigans in Arctic North America: the willow ptarmigan, *Lagopus lagopus*, and the rock ptarmigan, *L. rupestris*.

They are both similar in appearance, although the rock ptarmigan is somewhat smaller than the willow ptarmigan. Also, the rock ptarmigan has a black bar from his bill through the eye, absent in his cousin.

The two differ in their choice of habitats. The willow ptarmigan is fond of the willow forests and sheltered valleys during winter, coming to the slopes and tundras to feed and breed in summer. The rock ptarmigan lives throughout the year in the open barren grounds or in the mountains at or near the limit of trees.

Science News Letter, January 12, 1957