

• New Machines and Gadgets •

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⚙️ **SAFETY HORN** designed for use during cleaning operations in dangerous areas or with hazardous equipment is portable and non-electric. Persons entering confined or dangerous vapor areas manually set a timing mechanism. In the event of incapacitation there is an automatic gas-charged release for the alarm.

Science News Letter, June 21, 1958

⚙️ **WRAP-AROUND TOWEL** stays put with snap fasteners after the bath or shower. The towel, available in four solid colors, is designed for beach wear too. A series of snap fasteners at regular intervals around the waist allows adjustment for all sizes.

Science News Letter, June 21, 1958

⚙️ **COMBINATION PICNIC PACKAGE** consists of a portable food and beverage cooler plus a robe in its own zippered case. The encased robe snaps on-and-off the ice cooler and can be used as a cushioned seat, pillow or robe. The weight of the combined cooler and case is six pounds.

Science News Letter, June 21, 1958

⚙️ **CASSEROLES** of milk-white glass are held in woven metal serving frames that look like baskets. The casseroles, one of which is shown in the photograph, offer



oven-to-table convenience. They are available in different sizes and the frames in three colors.

Science News Letter, June 21, 1958

⚙️ **NOISE PROTECTOR** is an ear-muff type headgear with comfort added by liquid-filled vinyl plastic cushions. The sound

barriers, which can be worn over glasses or safety spectacles, are shaped, thermo-setting malamine cups. The headgear is available with earphones and attachments for connection to electrical communications systems.

Science News Letter, June 21, 1958

⚙️ **EQUIPMENT AND UTILITY TRAILER** has a capacity of 1,000 pounds. A self-locking winch operates a cable mechanism that lowers the trailer's bed to the ground for easy loading. The elevator-type trailer is designed for station wagons, light trucks and automobiles.

Science News Letter, June 21, 1958

⚙️ **BABY CARRIAGE** can be taken apart or re-assembled in a matter of minutes. Designed for easy storage at home or in the trunk of a car, the carriage is a British development.

Science News Letter, June 21, 1958

⚙️ **PORTABLE RADIO KIT**, featuring five transistors, comes complete with all parts. It is estimated the assembled radio will provide up to 200 hours of playing time from a single, nine-volt battery. Weighing 22 ounces, the radio is 3¾ inches high, 7½ inches wide and 1¾ inches deep.

Science News Letter, June 21, 1958



Nature Ramblings



By HORACE LOFTIN

➤ IMAGINE, if you will, making plans for a tremendous fishing contest. Perhaps all the kids in a scout jamboree are going to try their luck with hook and pole. This would take a lot of worms for bait.

A generous farmer may say you can have all the earthworms you can dig up on an acre of well-drained, fertile soil. With this streak of luck, you organize the scouts and have them systematically turn over every square foot of the soil to a depth of one foot.

Will they come back to camp with hundreds of earthworms? Thousands of earthworms?

If they remove every earthworm in an acre of rich soil, they will have millions of them! And, according to U. S. Department of Agriculture figures, the total weight of all these earthworms in favorable soil would be close to half a ton!

Earthworms are fine for fishing, but they perform a greater service to mankind. The

Farmer's Friend



countless holes they dig through the soil, their transport of earth from one level to another, their "cementing" together of soil particles, all act to produce a well-aerated, well-drained soil for the farmer and forester.

It has been estimated that the earthworms in an acre of good ground can bring to the surface as much as 20 tons of buried soil a year. This means that they play an important role in the vital mixing of organic

material near the surface with underlying soil particles in the maintenance of productive soils.

Good soil "structure," or the clumping of soil particles into minute units, is important to the farmer, since this is vital to good aeration, drainage and root growth. The earthworms actually eat their way through the soil, absorbing food materials from the dirt they take in and passing out the residue in little clumps or "casts." These casts, held together by mucus, act directly in creating good soil structure.

Earthworms live best in properly drained soils containing plenty of organic material, available calcium and low acidity. When these conditions are not met, the numbers of earthworms dwindle.

Thus, the presence of a healthy crop of earthworms tells a farmer two things: that he already has a soil which is in good condition, and that the quality of his soil is being constantly improved by these underground friends.

Science News Letter, June 21, 1958