

# • New Machines and Gadgets •

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⚙️ **HI-FI POCKET TAPE RECORDER** is completely transistorized and operates on one battery. Weighing only three pounds and coming with a full set of optional accessories, the recorder is specifically intended for radio and television engineers and performers as well as reporters who need a small recorder.

Science News Letter, April 18, 1959

⚙️ **PORTABLE CHARCOAL GRILL** has an 8-by-12-inch cooking area and comes charcoal packed and ready to light. It will hold eight hamburgers or 16 frankfurters. The grill has folding legs and may be used over and over. One firing last two hours.

Science News Letter, April 18, 1959

⚙️ **STATIC INVERTER UNIT** enables vacationers and picnickers to plug portable television sets, bottle warmers, electric blankets or tape recorders into a car's dashboard. The unit uses transistor circuits and magnetic components to convert 6- or 12-volt DC battery current to 115 volt, 60 cycle AC power, furnishing the equivalent of 100 or 200 watts.

Science News Letter, April 18, 1959

⚙️ **SOAP DISH AND BRUSH** of polyethylene, shown in the photograph, is a small ridged soap tray supported on resilient bristles. The tray section also serves as back



and handle for the bristles, making a shampoo brush for scalp massage. Available in different colors, the dish may be used bristle side up so air reaches the soap to dry it quickly.

Science News Letter, April 18, 1959

⚙️ **MOBILE WORK SHOP** of unitized, welded steel has a telescopic work-platform, battery, bench and pipe vises, and a large 16-drawer cabinet. The hand-winch-operated work platform has a raised height of

ten feet and a lowered height of six feet. For maintenance, repair and overhead assembly, the unit transports 2,000 pounds of tools, materials and equipment.

Science News Letter, April 18, 1959

⚙️ **PAINT BRUSH BAG** with zipper flange hermetically stores a wet paint brush so that paint solvents cannot evaporate and make the brush stiff. Available in different sizes, the plastic bag is especially useful to those who paint for only short periods at a time.

Science News Letter, April 18, 1959

⚙️ **WATERLESS HAND CLEANER** containing lanolin comes pressure-packaged for on-the-spot hand cleaning. The push-button aerosol cleaner provides a controlled flow of scented cleaner for removal of grime, grease, tar, paint, ink, adhesives, putty and dirt.

Science News Letter, April 18, 1959

⚙️ **RUBBER PASTE** in squeeze-type applicator can be used in caulking, insulating, waterproofing, etc. It bonds to rubber, metal, wood, glass, plastics, porcelain and fabrics, and dries and sets within a few hours into durable, pliant elastic rubber. It has high tensile strength and good resistance to weather, sunlight, oil, water and chemicals.

Science News Letter, April 18, 1959



## Nature Ramblings



By HORACE LOFTIN

➤ THE NEW-BORN bison swayed uneasily on its feet, innocent of the danger surrounding it.

The big cow bison pawed the ground and glowered at the wolf pack that stood before them. The foremost of the wolves moved in quickly, as if to separate the calf from its mother. But with a deft charge, the bison caught the wolf on the points of its horns, lifted it high and dashed its dying body to the ground. After another attack and another casualty, the wolves left the cow and calf in peace.

Horns as a weapon of defense and offense first appeared among the vertebrate animals with the dinosaurs. A few modern reptiles, such as the horned "toads" of the American Southwest still have horn-like structures. But in general, horns are peculiar to mammals, especially those with hoofs.

A distinctive feature of a true horn is that it is derived from the skin. Thus, the

### What About Horns?



bony antlers of the deer family are technically not horns at all. The hollow horns of bison, antelope, sheep and cattle, on the other hand, are made up of a hard layer of tissue derived from the skin (epidermis), resting on a core of living bone which projects from the skull.

Another typical difference between antlers and horns is that the antlers are usually branched and are shed regularly, to be re-

placed by a complete new set of antlers. True horns are generally unbranched and there is only one set through life.

There are several variants among the "horns" of animals that do not fit the picture of the typical hollow horn.

One of the most striking of these is the adornment of the pronghorn antelope of the western United States. This "pronghorn" has the general structure of the hollow horn, but it is both branched and shed annually. Then there is the giraffe, whose "horns" are structurally like antlers but are never shed.

The rhinoceros ("rhino" means nose, "ceros" means horn) sports still another kind of horny appendage. This terrible weapon is made up entirely of a compact mass of fiber-like material originating from skin tissue. However, unlike the typical hollow horn, it has no bony core. The African rhino has a single horn, while the Indian rhino bears two of them, one behind the other.

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