

• New Machines and Gadgets •

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⚙️ **HAND OILER** in the shape of a fountain pen, equipped with a pocket clip, operates by touching tip end to the spot to be oiled. A drop of oil is released on contact from an inner plastic tube. Oiler may be used for most household oiling chores.

Science News Letter, February 21, 1959

⚙️ **BOAT BOW LIGHT** is die-cast with a corrosion-resistant triple chrome plate. Its corners and edges are rounded off to avoid line fouling and personal injury. The light's base dimensions are 6¼ by 3½ inches. Its overall height is 2⅞ inches.

Science News Letter, February 21, 1959

⚙️ **LOW-POWER MICROSCOPE** made from war surplus optical components is designed for hobbyists, students and science fans. It is six inches long and weighs about four pounds. Basic magnification is 5X, but accessory objectives yield 10X, 15X, 20X, 30X and 40X magnifications.

Science News Letter, February 21, 1959

⚙️ **SKIN DIVING SUIT** of closed-cell vinyl sponge, shown in the photograph, is available in various colors to be more visible underwater. It comes in a kit containing the material, patterns, glue, color touch-up and instructions to make the hood, jacket, pants and socks. The suit



is said to be warmer and more buoyant than conventional suits.

Science News Letter, February 21, 1959

⚙️ **NON-TANGLING APPLIANCE CORD** with jacketing of flexible neoprene is designed to reduce the tangle of extension lines around electrical outlets. Made

for heating appliances, such as toasters and hand irons, the cord retracts to an 18-inch length. Its actual length is six feet. The neoprene makes the cord heat-resistant and waterproof.

Science News Letter, February 21, 1959

⚙️ **BOTTLE CARRIER** for safe handling of chemicals in glass containers is made of thick-walled polyethylene. A heavy wire handle is secured to integrally molded-on ears. Bottles are held firmly in place by a snap cover.

Science News Letter, February 21, 1959

⚙️ **SQUEEGEE ATTACHMENT** for lightweight industrial vacuum cleaners is an all-aluminum die casting with an overall width of 15½ inches. Its rubber blades are designed to make them conform to irregular floor surfaces, assuring even drying.

Science News Letter, February 21, 1959

⚙️ **MINNOW BUCKET** has built-in, pressure aerator tank shaped like a flattened globe and located at the bottom of the bucket. The tank may be filled at a gas station air hose or hand pump to 140 pounds of pressure. The air supply lasts 24 hours. The noiseless, automatic, and buoyant bucket has a lid with many 3/16-inch perforations.

Science News Letter, February 21, 1959



Nature Ramblings



By BENITA TALL

➤ IF YOUNG George Washington had not been quite so honest, instead of admitting that he had cut down the cherry tree, he might have said he was practicing some tree-breeding techniques.

His father might not have believed him, but George would not have been too far from the truth.

Cutting and grafting techniques have become an important part of tree cultivation, particularly for fruit trees. There are several reasons for this, most of them stemming from the nature of the tree and its slow growth.

Usually when a tree is planted from seed, the owner can never be sure of exactly what kind of tree he will have. Its producing ability, disease resistance, ability to withstand temperature extremes and drought, and the quality of its fruit are among the important unknowns.

Part of the problem is due to the plant scientist's lack of information on tree physi-

Fruit Trees



ology and genetics. A tree is too big for the usual laboratory and relatively little is known about what makes it "tick."

There are also big gaps in the ancestry of a tree. Although the family history and thus genetic make-up of a mouse, or even a man, may be known for many generations, scientists rarely know a tree's family history.

Another problem with seeds is that of knowing whether or not they will germinate.

Seeds of some trees and shrubs germinate quite promptly. Those of many, however, often fail to sprout even when they are exposed to suitable temperature, moisture, oxygen and light.

Such seeds are labeled as dormant. Only after special treatment will they germinate.

Grafting, for example, avoids the pitfalls of these unknowns.

By this technique it is possible to "have your cake and eat it too," to grow a tree that you know will produce certain fruit and be strong. Established rootstocks, resistant to diseases attacking roots, provide the base on which is grafted a branch bearing the desired fruit.

Another advantage to using tree grafts is that several different varieties or even kinds of fruit can be grown on one tree.

It is not too great a stretch of the imagination to see in your mind's eye an orchard in one or two trees: peaches, plums, pears, cherries and apples borne on branches of one stout tree!

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