

• New Machines and Gadgets •

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GOLF DISTANCE FINDER is a simple plastic card. A golfer can hold the card at arm's length, look through a transparent section toward the flagpole on the next green, and, using a scale on the card, figure the distance to the pole by its apparent height. The scale also indicates the proper club to use.

Science News Letter, June 11, 1960

OVER-FLOOR WIRING SYSTEM makes electric outlets possible in the middle of a room without dangling extension cords. In the system, the cords are slipped through a hard rubber duct available in various lengths. Taped to the floor, the ducts make only a slight hump with no sharp corners to trip over.

Science News Letter, June 11, 1960

DIVIDED BUCKET holds soapy water in one section, rinse water in the other. Each side holds seven quarts. The bright red plastic bucket has a steel and plastic handle.

Science News Letter, June 11, 1960

ADJUSTABLE RAKE, shown in the photograph, features 16 spring steel tines that may be adjusted for length and stiffness. To move tines, which curl inward at the ends, a wing nut is loosened, the rake head moved up or down and the nut



tightened. The rake's handle is 48 inches long and made of wood.

Science News Letter, June 11, 1960

"INVISIBLE RAY" CANNON shoots out an air blast to knock down toy soldiers as far as ten feet away. Made of plastic, the toy cannon has an adjustable sight. Six litho-

graphed soldiers are included for target practice.

Science News Letter, June 11, 1960

AUTO FOUNTAIN, attached to a vacuum bottle (not included), will furnish ice water or hot coffee at the touch of a finger. Installed in the car with drill, pliers, screw driver and wrench, the unit operates on vacuum from the motor. When a button is pushed, a drink pours into cup held in rack below the fountain's faucet.

Science News Letter, June 11, 1960

FELT WALL COVERING, available in a range of colors, insulates and absorbs sound. The material, designed with a vapor barrier backing, is practical and easy to install. Made of wool, the decorative coverings are treated to make them mothproof, soil resistant and flame resistant.

Science News Letter, June 11, 1960

PUSH-BUTTON PHONE AID automatically dials numbers. Up to 850 names and telephone numbers may be listed on its directory tape. To telephone, user turns dial to party's name, lifts telephone for dial tone and then presses a button on the unit and the number is dialed. Connected to the telephone, the unit will dial both local and direct-dial long-distance calls.

Science News Letter, June 11, 1960



Nature Ramblings



By HORACE LOFTIN

THIS IS A GREEN WORLD, made that way by the countless green plants which cover our countryside in a living mantle. Trees, shrubs, garden and wild flowers, grasses and marsh plants are familiar to anyone who has ever lifted his eyes from the concrete highways. Yet these familiar plants make up only a portion of the green vegetation that surrounds us.

The obvious plants of our modern world are the seed producers, including the conifers (pines, cedars, and the like) and the great assortment of true flowering plants. Most of our trees, garden plants, vegetables and grasses belong to this latter group. But hidden at the base of trees, in shady knolls, in a marshy bog or elsewhere are a host of plants which do not produce seeds. These include the algae, the fungi, mosses and liverworts (see illustration), horsetails, club mosses, ferns and even other lesser plants.

The fungi need not concern us here, since they are devoid of chlorophyll which furnishes the greenness of our green world. But

Hidden Green World



all the others furnish their small or large bit in adding to this color. As a matter of fact, if you consider the tremendous role played by the algae in the sea, it may be fair to say that there is as much or more algae in the world as all other plants put together! On land, however, the seed plants surely play the dominant part today.

It was not always so, however! In terms of geological history, the seed plants are relative newcomers. The first conifers appeared some 225,000,000 years ago, while the true flowering plants developed only

about 150,000,000 years ago. Before this time, the green world belonged to the non-seed plants.

The first plant life probably arose in a watery environment at the dawn of the history of the earth. The first true land plants known from fossils were some 350,000,000 years in the dim past—such things as the club mosses and horsetails. Remains of true mosses and liverworts have been uncovered only in rather recent rocks, making them appear to be even younger than seed plants. But it is probable that their delicate bodies, lacking wood and other hard parts, were not readily fossilized in older rocks. Thus, they are probably among the most ancient plants in spite of their absence in the fossil record.

The great forests of the Coal Age, about 250,000,000 years ago, were predominantly of huge tree-sized ferns, club mosses and horsetails. As these prehistoric, primitive trees died and accumulated over millions of years, their remains were converted into great coal deposits.

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