

• New Machines and Gadgets •

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⚙️ **STACKING PADS** of white felt are used to separate fine household dishware and prevent chipping, scratching and rattling. The pads are in three sizes (4½, 5½, and 7½ inches in diameter) for saucers, salad plates and dinner plates.

Science News Letter, November 15, 1958

⚙️ **CLASSROOM TV RECEIVER** can be used in either closed-circuit systems or for viewing over-the-air broadcasts from educational and commercial stations. When used in closed-circuit systems, the screen has a 500-line picture for detailed reproduction of microscope slides and such. A simple switch changes the set to commercial broadcast reception.

Science News Letter, November 15, 1958

⚙️ **MASSAGE CHAIR** for executives has a built-in rotary motor which imparts a cycloid or "Swedish" massage type of motion to the occupant. Molded foam cushions in the back, arms and seat transmit the action of the motor. Under the seat is a hidden five-speed control.

Science News Letter, November 15, 1958

⚙️ **FROZEN FOOD KNIFE HANDLE** has a recess in the top and a curve on the



underside for a firm grip. The plastic off-set handle, shown in the photograph, makes it possible to cut frozen packages without having to rock the knife. Ordinary cleaning agents will not affect the plastic.

Science News Letter, November 15, 1958

⚙️ **TUFTED AIR MATTRESS** for camping is inflated to a height of five inches. Inflated, it is 25 by 72 inches and weighs 52 ounces. The sides have tubes of I-beam construction and the middle portion is

tufted. The material is a two-ply clothlike plastic.

Science News Letter, November 15, 1958

⚙️ **ULTRACENTRIFUGE AUXILIARY EQUIPMENT** consists of a radiation shield and heating element mounted in the rotor chamber; heat-reflecting baffles; a power supply, and a rotor temperature indicating and control unit. This equipment allows the ultracentrifuge to operate between 120 degrees Centigrade and 0 degrees Centigrade.

Science News Letter, November 15, 1958

⚙️ **SAFETY LIGHT** has no filaments and is practically glare-free. It will burn day and night for a full year for less than a penny. The "bulb" is an electroluminescent cell, which consists of a phosphor coating on a glass panel that is treated to conduct electricity. The lamp has a rated life of 10,000 hours and runs on 1/200 of a watt.

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⚙️ **WORK TABLE** has a hard maple top, formed steel pedestal legs and a reinforced shelf for storage or foot rest. The top is 1½ inches thick, 30 inches wide and 60 inches long. The shelf is 20 by 51 inches.

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Nature Ramblings



By BENITA TALL

► SOMETIMES when you are walking through a clearing in a woodland or through a meadow, you may come across a strange marking on the grass: a fairy ring.

A perfectly round ring of dry yellow grass encloses an area of bright green, lush-looking grass. The ring may even be bare of any vegetation at all.

Folk tales have an explanation for the ring. It is a kind of fairy "brand." Wherever fairies dance no grass can ever grow, but the grass inside the ring of dancing fairies grows better and greener because of the fairies' nearness.

This is one explanation, certainly. There is another, however, and the key to this explanation is toadstools.

The toadstools that are seen are actually only the fruiting bodies, parts of the plant formed for the production and liberation of spores, the toadstool's "seeds." The rest of the plant, what would correspond to its

Fairy Ring



stem, leaves and roots in other plants, is below ground. Threadlike hyphae make up this vegetative part of the toadstool. When there are many hyphae in a mass, they are called a mycelium.

For many species of toadstools, these mycelia are perennial, remaining in the soil and producing "fruit" year after year. The mycelium expands radially. As it grows, it obtains food through the action of enzymes on organic material in the soil. Ammonium

salts formed by this action of the mycelium stimulate the growth of grass and other plants. This is the reason for there being an area of especially healthy looking plants.

Eventually, however, the mycelium fills the spaces between soil particles, water cannot be absorbed and there is a drought above ground. And a bare ring surrounds the fertile area.

Fairy dance or fungus growth: these are two theories for the fairy ring. Make your own choice.

Many persons make a common-sense distinction between toadstools and mushrooms and call all poisonous growths toadstools and all edible ones mushrooms. Plant experts agree, however, that this is not a very scientific way to name plants. One suggested way to solve the toadstool-mushroom controversy is to keep the name mushroom for the genus *Psalliota* which provides our cultivated mushrooms. All others, poisonous and edible, would be toadstools.

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