New Machines and Gadgets

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INDOOR INCINERATOR can dehydrate and burn one and one-half bushels of rubbish, garbage and other household combustibles in one to four hours. Designed specifically for use in areas where air pollution is a problem, it is gas-fired, smokeless and odorless.

Science News Letter, November 21, 1959

HOME WORKSHOP KIT contains 35 pieces with a 2.5-amp, one-quarter inch drill as the basic tool. This drill can penetrate one-half inch into hardwood and one-quarter inch into steel. It is especially adapted to driving accessories for sawing, jig sawing, sanding, grinding, polishing, buffing, and stirring paint.

Science News Letter, November 21, 1959

AUTOMATIC POTATO PEELER for homemakers removes only the thinnest layer of skin. Potatoes are placed inside the unit, which is connected to the water faucet by a flexible tube. When the water is turned on, the potatoes are peeled and washed. Peels are finely ground to run freely down the drain.

Science News Letter, November 21, 1959

TRANSPARENT ROWBOAT of tough, lightweight plastic carries up to 600 pounds and may be powered by oars or a three-



horsepower motor. It is eight feet long and weighs less than 50 pounds. Hull transparency, illustrated in the photograph, permits easy study of marine life or quick selection of sites for fishing and skin-diving.

Science News Letter, November 21, 1959

CAR-BATTERY CLOSURE, molded as a string of six caps for 12-volt batteries, eliminates the need to unscrew six separate caps to check the electrolyte level. By pulling one end of the closure, the plastic caps "zip" off all six battery openings and checking is done in a much shorter time.

Science News Letter, November 21, 1959

FISH-LINE HOLDER may be attached to any part of a boat quickly and easily by thumb screw locks. An anchor rope or fish stringer may be tied to it, and a minnow pail or tackle box hung from it. It will also hold a fishing pole or magnetic flashlight.

Science News Letter, November 21, 1959

MOLDABLE METAL in paste form is an aluminum-based compound that hardens without heat or pressure and can be filed, drilled or sanded. It may be used to fill holes and cracks in plaster, wood, tile and concrete and also forms a permanent bond to metal, glass or plastic.

Science News Letter, November 21, 1959

BEVERAGE HOLDERS of anodized aluminum and stainless spring steel hold glasses, pop bottles and paper cups in level position. One type has a clip for attaching to tubular items such as chairs, while another comes with a bracket into which the holder can be inserted. Size may be adjusted by bending the steel straps to fit the glass or bottle.

Science News Letter, November 21, 1959



Nature Ramblings



By HORACE LOFTIN

MAN HAS observed the natural world with everything from telescopes to electron microscopes and sometimes it seems that there could be nothing under the sun that has escaped his curious eye. But every biologist knows that every day he studies nature at close hand, new surprises await him. Surprised was hardly the word for a group of Florida State University scientists who opened one old package from the musty shelves of the Smithsonian Institution. Here is the almost unbelievable story of their discovery:

It began in the 1860's, when a trip to Florida was something of an adventure. One traveler during this period, an amateur botanist, stopped in various places in the semi-tropical wilderness to collect exotic plants. Among his finds were several kinds of blue-green algae, the primitive one-celled plants that form thick mats on the edge of cypress-hidden pools.

Later this plant explorer deposited his collections with the Smithsonian Institution.

Blue-Green Sleeping Beauty



The blue-green algae were identified, dried out and stored away on museum shelves where they gathered dust for almost a century.

The scene now jumps to the early 1950's, when the Florida State University scientists were studying the blue-green algae of the state. To be complete, they wanted to examine the collections of that early botanist. They asked the Smithsonian to send the old packages of algae, which was done. Then in the Tallahassee laboratory, a piece of one of these 90-year-old blue-greens was

placed in water so that its structure could be more clearly seen.

Within a few hours, this piece of old, dried pond scum had turned green and was beginning to reproduce and grow!

Thus after nearly a century of lying away as a "dead" museum specimen, this bit of primitive alga demonstrated its tenacity for life. Who can say how many more years or even decades this bit of alga might have retained its power of life?

The blue-green algae are near the base of the figurative tree of life, the branches of which represent the different evolving groups of plants and animals.

They and allied kinds of algae are close kin to the fungi (see illustration). The fungi (molds, bacteria, "toadstools" and the like) are similar to the algae, but lack the power to manufacture their own food by photosynthesis as can the algae. Reminiscent of the long-lived blue-greens, many of the fungi produce resistant spores which can withstand freezing, drying and other adverse conditions for long periods of time.

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