

# • New Machines and Gadgets •

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**FIRE STARTER** helps start charcoal or wood fires. Squeezed from its tube, a golf-ball-sized lump of the non-explosive red jelly should burn about 10 minutes—long enough to get most fires under way. The chemical jelly is also useful as a safety flare in highway emergencies.

Science News Letter, March 26, 1960

**MAGNETIC STIRRER** mixes six beakers of materials at the same time. Six magnets within the machine turn small magnets placed in the beakers and give identical agitation needed for some laboratory experiments.

Science News Letter, March 26, 1960

**ULTRASONIC CLEANER** uses high frequency sound waves human ears cannot hear to clean small instruments in dental and medical offices, laboratories and jewelry shops. In a dentist's office the unit will clean stubborn amalgam from burrs and drills. A solution is available for use with the transistorized cleaner in "cold" sterilization.

Science News Letter, March 26, 1960

**DRIP-DRY LAUNDRY RACK**, shown in the photograph, is a collapsible convenience for travelers. Expanded, the rack has five



plastic-coated rods and is mounted on the back of a chair or over a towel bar. It folds to 12-x-18-inch size for carrying in a suitcase.

Science News Letter, March 26, 1960

**SEVEN-PITCH PROP** for an outboard motor permits boatmen to dial a range of angles at which the propeller's three blades attack the water. Useful for reduc-

ing trolling speed or for securing top speed from motor, the prop is aluminum.

Science News Letter, March 26, 1960

**POSTAGE METER** in desk-model size seals and stacks letters as well as imprinting postage. The meter prints postage from one-half cent to \$1.09½ in a single stamp on letters or on gummed tape for parcel post packages.

Science News Letter, March 26, 1960

**TAPE RECORDING UNIT** slips over a phonograph turntable to convert an ordinary phonograph into a tape recorder and player. It has an associated, transistorized, battery-powered pre-amplifier, and will record from a radio or microphone and play back through the radio.

Science News Letter, March 26, 1960

**HOSE HIDER** stores up to 150 feet of hose on a large reel in the basement but keeps it available for outdoor watering or indoor fire-fighting. A compartment, which may be locked, must be set into the wall of the house for outdoor access to the hose and faucet. A trap door installed in the floor above the hose reel keeps hose ready for use on fires inside.

Science News Letter, March 26, 1960



## Nature Ramblings



THERE ARE MANY places on the earth where it would be difficult—if not impossible—to say this is land or this is water. These are the tidal marshes where water meets land.

Here mosquitoes and biting flies breed. Any person who ventures into the marsh finds his shoes and clothing covered with a sticky, smelly mud as he pushes his way through tall, tough grasses.

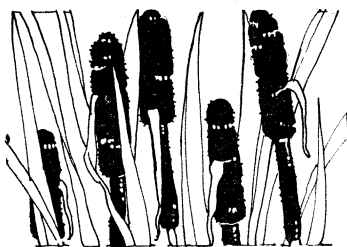
Here, also, you may find tin cans and other rubbish that turns the scene into an eyesore.

Increasingly in recent years the marshes are being turned into "useful" land. With the refuse leveled off and packed down, what was once a natural bit of "in-between" land becomes the site for a factory or a housing development.

You might say that this is good. Our growing population needs more room to live in and for industry to expand. Yet, we may be paying an exorbitant price for this room.

Filling in or polluting marshes starts a cycle of destruction. Hunters and trappers know these regions can provide sport,

### Where Water Meets Land



food or a good financial yield.

Fishermen catch turtles, blue crabs, oysters, white perch and other fishes in the tidal streams that meander through the marshland.

Migrating ducks and other waterfowl use the marshes as resting places, for breeding or as "lunch counters." When the marshes disappear, the biology of the area changes and wildlife disappears.

In an attempt to learn more about the conflict in man's interests in marshes—to use it for factories and homes or for recreation and hunting—a study of one marsh

was made by the University of Delaware.

Now, reported Franklin C. Daiber, it is possible to describe the full circle of relationship in salt marshes. The phosphates and nitrates that come from decomposed material go into new plant tissue. These plants, while alive, provide food or shelter for animals and waterfowl; dead, they are food for crabs, snails, mussels and, indirectly, fishes.

Detritus, fine particles of mostly plant "stuff," is both a link in the cycle and a basic part of the marsh animals' nutrition. Detritus also seems to be related to vitamin B-12.

The amount of this important vitamin, which can be synthesized by certain bacteria, varies directly with the amount of detritus. Possibly, Mr. Daiber suggested, the bacteria are carried "piggy-back" on the detritus particles.

Considering the vitamins in the foods you eat or the pleasures of a "good bag" at the end of a hunting day, the marshland may be more important than 20 new houses.

Science News Letter, March 26, 1960