

• New Machines and Gadgets •

For sources of more information on new things described, send a self-addressed stamped envelope to SCIENCE SERVICE, 1719 N St., N.W., Washington 6, D. C., and ask for Gadget Bulletin 886. To receive this Gadget Bulletin without special request each week, remit \$1.50 for one year's subscription.

⚙️ **MAGNETIC TOOL** picks up small hard-to-get-at parts. The tool consists of an alnico magnet at the end of a flexible shaft that can be shaped into any angle or curve. The shaft does not spring back into shape until retrieved with clinging parts.

Science News Letter, June 8, 1957

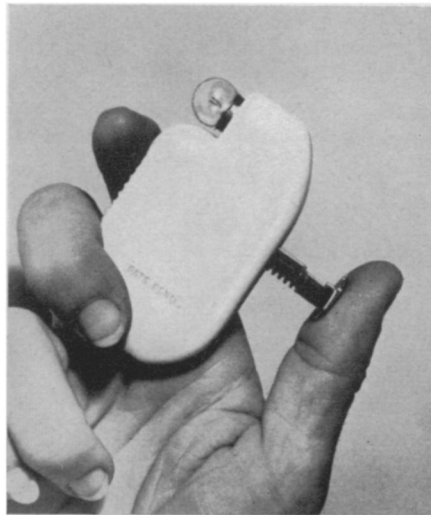
⚙️ **LIQUID PUMP** dispenses chemicals into small containers without spilling or splashing. A carboy is elevated and liquid flow started by the air pump, forming a natural siphon. The overflow tube is 56 inches long and available in polyethylene, lead, hard rubber or aluminum.

Science News Letter, June 8, 1957

⚙️ **FLOODLIGHTING UNITS** consisting of weatherproof wiring troughs and splice boxes are designed for use outdoors. Made of aluminum alloys, the troughs and boxes are UL-approved. The troughs come in sizes from nine to 22 inches in length and hold up to 12 lampholders each. The boxes are available in round, square or hexagon shapes.

Science News Letter, June 8, 1957

⚙️ **SELF-GENERATING FLASHLIGHT** is smaller than a package of cigarettes. Batteryless, a push of the button starts up



the generator. Contained in a white plastic case, the flashlight, shown in the photograph, measures two and one-half by one and one-half by one-half inches.

Science News Letter, June 8, 1957

⚙️ **FOOD KEEPER** for the busy housewife is a multi-purpose aid. Molded of polyethylene plastic, the container converts from a

mixing bowl to a cake holder, refrigerator container or pail-like carrier. It has a snug-fitting top and snap-in-place handle.

Science News Letter, June 8, 1957

⚙️ **CONTROL INSTRUMENT** measures as little as one ten-thousandth of an inch of paint film, electroplating or metal overlay. The device is portable, can be plugged into any 110-volt outlet and needs no special training for operating it.

Science News Letter, June 8, 1957

⚙️ **ELECTRONIC SURVEYING INSTRUMENT** has a working range of from 500 feet to 35 miles. It operates by measuring the travel time of radio waves over the distance to be measured. Accuracy is said to be within a fraction of a millimicrosecond and measurements can be made day or night.

Science News Letter, June 8, 1957

⚙️ **SILICONE COATINGS** have good electrical characteristics and are resistant to reversion. The 100% silicone solids compound can be used to encapsulate electrical components. The 35% solids coating solution in toluene can be used for solution coating and dipping.

Science News Letter, June 8, 1957



Nature Ramblings



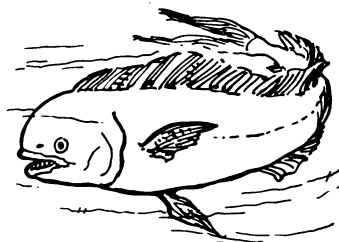
By HORACE LOFTIN

➤ THERE IS REASON for genuine concern that the earth's human population may outrun the food supply at some seemingly inevitable future date—unless something is done to change the picture.

One possible solution lies in the more effective use of the foods already being produced by the world's green plants—the ultimate source of all food. It has been estimated that some 500 billion tons of solid plant matter are made each year by green plants through photosynthesis. Man uses only a minute fraction of this amount. Only one-tenth of this photosynthesized food is produced by land plants. Ninety percent of the world's food is made by marine and fresh-water algae, mostly marine!

If we are alarmed that the productivity of the land will not keep pace with the demands of our growing population, perhaps we should look to the resources of the sea

Mariculture



for more of our food—that almost untouched 90% of the earth's photosynthesized material.

Many marine scientists are taking this look.

They see that on land nearly all food production is based on agriculture, in which the materials furnished by nature are controlled, improved and cultivated by scientific methods. On the other hand, they see that the meager amount of food we take from the

sea today is hunted from the wilderness of the oceans. As one scientist said, compared with agriculture, our marine fisheries "are still in the stone age."

So a new concept has recently appeared, "mariculture," the utilization of the food resources of the sea using the techniques worked out and employed so successfully in modern scientific agriculture.

Some marine laboratories are beginning to take on the look of young agricultural experiment stations now. Animal breeders, accustomed to working with cattle and poultry, are investigating the chances of creating better strains of fish, shellfish and shrimp. The Rockefeller Foundation is sponsoring such a preliminary study on marine animal breeding. Biochemists are starting work on nutritional requirements of marine animals for possible use in cultivation.

The field is a pioneer one. Keep your eyes on mariculture.

Science News Letter, June 8, 1957