## · New Machines and Gadgets '

For sources of more information on new things described, send a self-addressed stamped envelope to SCIENCE NEWS LETTER, 1719 N St., N.W., Washington 6, D. C., and ask for Gadget Bulletin 986. To receive this Gadget Bulletin without special request each week, remit \$1.50 for one year's subscription.

All PAINT BRUSH has nylon filaments, each of which tapers gradually in thickness from the ferrule to a fine flexible point at the flag end. Tapered filaments are claimed to afford greater control and paint flow. The fine chisel tip produces a flawless painted surface.

Science News Letter, May 9, 1959

DRAFTING MACHINE of aluminum combines a T-square, rulers, protractor and triangles while covering 400 square inches of drawing surface. Weighing only three and a half pounds, with its drawing board, it folds like a jackknife to fit into a briefcase.

Science News Letter, May 9, 1959

SFISH HOOK GUARDS of plastic come in three sizes and may be used to carry treble and double hooks safely. They are triangular in shape, with one side open, and are easily snapped on or off the hooks. The guards keep hooks from tangling in a tackle box and make it possible to carry baits in a pocket.

Science News Letter, May 9, 1959

to INFLATABLE LAMPS, shown in the photograph, for decorating patios, pools and playrooms are made of colorful plastic. They come complete with light plugs and six-



foot extension cords. When inflated, they form globes about 15 inches in diameter. When deflated, the lamps weigh one pound and are easily shipped and stored.

Science News Letter, May 9, 1959

BRASS DARTS have revolving plastic fins that are also replaceable. For the beginner or the skilled player, they are available in light. medium or heavy weight.

The darts come in sets of three and are guaranteed for one year.

Science News Letter, May 9, 1959

ORBITAL SANDING MACHINE for the home craftsman is made of die-cast aluminum for compactness and light weight. It has a polished finish and a slide snap on the top of a curved handle. Equipped with three sheets of abrasive paper, it has a direct drive induction motor coupled with an enclosed counterweight for vibration-free sanding.

Science News Letter, May 9, 1959

CHEMICAL CALCULATOR is a flat circular table eight inches in diameter with complete instructions on the reverse side. It offers students and technicians a fast, accurate way to determine whether a specific reaction will occur and, if so, the chemical compounds involved in the reaction.

Science News Letter, May 9, 1959

AESOSOL INSECTICIDE in a twoounce container is small enough to carry in pocket or purse. It is said to be harmless to humans and animals and to protect against flies, mosquitoes, ants, gnats and other insects. A metered valve controls the amount of spray.

Science News Letter, May 9, 1959



## Nature Ramblings

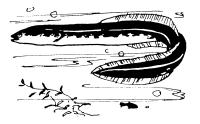


## By HORACE LOFTIN

SOME STATES have their fish conservation agencies nicely split by law into two distinct bodies: one organization dealing with fresh water fishes, the other with salt water species. This probably works fine for purposes of administration and legal codes. But it leads to perplexity in the eyes of the biologists and fishery management scientists who have to decide when a fish is a "salt water" or "fresh water" species. The fish will sometimes not cooperate.

The American eel is an example. This well-known denizen of mill ponds and creeks throughout the eastern half of the country spends its adult life in fresh water. But then, an urge to migrate carries it from the creeks into the rivers and thence to the coast. Once in the ocean, it makes a mighty trip to an area somewhere in the mid-Atlantic near Bermuda, where it mates, spawns and dies. The larval young then

## Lawbreakers With Fins



make the trip to the coast and up the rivers, where they spend their adulthood. In contrast, there are species like the

salmons which pass their adult lives in the ocean, then return to their natal stream far upriver to lay their eggs.

In between these two extremes are a whole host of fish that just cannot seem to "make up their minds" as to whether they like fresh or salt water best.

The very common pinfish, a notorious

bait thief on the Atlantic and Gulf coasts, can be taken from the very head of a fresh water spring down to many fathoms in the ocean depths. Although they are apparently born in the sea and pass a great deal of their life there, many mullet frequent pure fresh water streams for lengthy periods.

Florida rivers are especially noted for their "mixed-up" fish. In many spots upriver, a fisherman never knows whether his next catch will be a bluegill or largemouth bass, or a "salt water" sheepshead or stingray! Many sharks, rays and sawfish are partial to fresh water.

Such fish as listed above are not commonly thought of as estuarine species—those that pass their lives near the meeting place of fresh and salt water. They survive in extremes of freshness and saltiness. They apparently have not read the laws that men have made about them!

Science News Letter, May 9, 1959