

# • New Machines and Gadgets •

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⚙️ **TRUCK WHEEL CLEATS** are designed to get double-wheeled trucks out of the mire. Fitting all standard dual wheels, the cleats are firmly held in place by a reinforced nylon bag which is slipped between the tires. The bag is inflated through a hose which taps the air supply in one tire, reducing its pressure by only two pounds.

Science News Letter, January 24, 1959

⚙️ **INK SOLVENT** is a powdered soap with cold cream base for use in print shops, offices, manufacturing plants and schools. The soap safely and quickly "cuts" ink from the hands. Cost accountants report wash-up time is sharply reduced.

Science News Letter, January 24, 1959

⚙️ **CITIZENS' RADIO** for two-way voice transmission over a distance of several miles operates on band frequencies set aside by the Federal Communications Commission for personal conversation. Weighing less than 10 pounds, it works on a six-volt or 12-volt battery, or standard 115-volt a.c. power.

Science News Letter, January 24, 1959

⚙️ **HEATED OUTSIDE MIRROR** for trucks, tractor trailers, buses and cars will melt a quarter inch of ice in 10 minutes at 60 below zero. The rear-view mirror, shown



in the photograph, has an electrically conductive coating on its back for heating, and a surface coating on its front for non-glare reflection. A high-low-off dashboard switch controls the heating rate.

Science News Letter, January 24, 1959

⚙️ **FOLDABLE BOAT** is built of marine plywood with leak-proof joints and seams. It folds flat for storage on walls or rafters and can be carried flat on top of any car.

Unloading takes five minutes or less. A metal transom brace is strong enough to lift the entire boat.

Science News Letter, January 24, 1959

⚙️ **LAMP REFLECTOR** has built-in vents to force a moving stream of air through it. This affords cooler operation and longer lamp life while keeping the reflector free of dust and grime. The reflector is made in various shapes of porcelain-bonded steel.

Science News Letter, January 24, 1959

⚙️ **PLASTIC RUBBER ADHESIVE** in dry bar form leaves a thin pressure-sensitive coating that is not sticky to the touch. Paper sticks instantly, yet can be picked up and moved many times. The cement bonds tight at the edges without oozing, and will not stain, wrinkle or shrink the paper. Also, it is odorless, non-inflammable, non-toxic and never spoils.

Science News Letter, January 24, 1959

⚙️ **TOOL HOUSE** of heavy gauge steel is easily and quickly assembled and dismantled. Side and rear panels are horizontally ribbed for added strength. Seven feet wide and seven feet deep, the utility house has a rolling, garage-type overhead door gliding on free-turning rollers.

Science News Letter, January 24, 1959



## Nature Ramblings



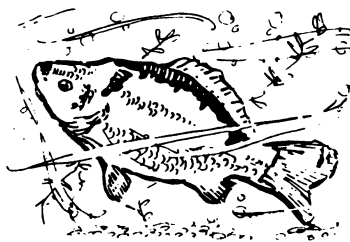
By BENITA TALL

### The Brainy Fishes

► THE EMPTY-HANDED fisherman who returns with long recitals of the "one that got away" is undoubtedly convinced that fishes think.

The trout's trickery in eluding the hook, yet taking the bait and escaping with the prize, is certainly an example of intelligence, says the fisherman. And given the opportunity he will continue with stories about the Old One at Mirror Lake that has been around for years despite all efforts of the best fishermen in the neighborhood.

The fact that many fish in the wild become wary and consistently escape capture seems to be evidence of intelligence. The salmon's ability to make his way upstream to spawn, navigating "steps" and weirs, is regarded by some as an example of learning. Experiments in tanks, artificial ponds and aquariums also indicate fishes have a memory for their home site.



Even altering a fish's home by changing the lighting, plant arrangements or the aquarium bed, did not make one trout change its position.

The ability of the young eel to find its way from the ocean where it was spawned to the river or pond its parents had left is believed to be further evidence of possibly intelligent behavior.

The known and tested ability of some fishes to distinguish among various sounds and shapes certainly indicates keen observation if not intelligence!

Many tropical fish fanciers believe the cichlids, colorful, spiny-finned fishes that carry their eggs in their mouths or pharynx until they hatch, have mental development akin to intelligence. They are emotional and selective. Numerous stories are told of their ability to learn from just one experience.

With all the research and tests attempting to measure animals' or fishes' intelligence, few scientists would attempt the work of some French researchers. They categorized fish on the basis of intelligence. A partial listing goes like this: intelligent, carp; fairly intelligent, chub, roach and trout; not very intelligent, bream; definitely stupid, eel, pike, perch, minnow and catfish.

Science News Letter, January 24, 1959