

# • 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 927. To receive this Gadget Bulletin without special request each week, remit \$1.50 for one year's subscription.

⚙️ **SHINGLE GAUGE** for both the amateur and professional roofer or carpenter spaces the rows accurately. The steel roofing help is designed to be taped onto any hammer and does not get in the way of nail pounding.

Science News Letter, March 22, 1958

⚙️ **PICTURE HANGER** is said to eliminate tilting, slipping and tipping. Made of aluminum, the hanger is almost two inches wide by one inch at its highest point. Near the top there are nail openings with a center slot arrangement.

Science News Letter, March 22, 1958

⚙️ **SPRINKLING CAN** made of polyethylene plastic has a non-leak, snap-on head for use as a garden sprinkler. When the head is removed, the plastic can fills car radiators, or potted plant holders. It has an eight-quart capacity.

Science News Letter, March 22, 1958

⚙️ **AIR MATTRESS** that can be made into a chaise lounge is made of heavy gauge plastic. The mattress, shown in the photograph, which comes complete with a small repair kit, adjusts to several positions. Lightweight for easy carrying to the beach or on a pic-



nic, the mattress measures 72 inches long and 30 inches wide.

Science News Letter, March 22, 1958

⚙️ **AUTOMATIC WRENCH** requires no other adjustment than turning the knurl which, when turned, holds the jaw openings fast so they cannot change position. Made of alloy steel, the wrench is available

in five sizes: four, six, eight, 10 and 12 inches.

Science News Letter, March 22, 1958

⚙️ **PICNIC TABLE AND BENCHES** for small fry are made from California redwood. Metal parts are rust and stain resistant. The set can be assembled by Dad without special tools. The table measures 14½ inches wide by 30 inches long and 15½ inches high.

Science News Letter, March 22, 1958

⚙️ **TRAVEL IRON** is for use anywhere in the world on AC current. The five-inch long, one and one-half pound traveling companion can be connected to 110 volt or 220 volt outlet. It has a dial-knob adjustment for different fabrics and a flashing red light to show when the proper temperature is reached.

Science News Letter, March 22, 1958

⚙️ **POWER MEGAPHONE** that has an effective range up to three-quarters of a mile is fully transistorized and battery-operated. Six ordinary flashlight cells drive the six transistor amplifier to provide 15 watts amplification. The unit weighs less than eight pounds.

Science News Letter, March 22, 1958



## Nature Ramblings



By BENITA TALL

► A FISH SCALE and a cross section cut from a tree trunk are certainly very different. Yet, they have one characteristic in common.

Just as the rings on the cross section cut indicate the tree's age and growth patterns, the scales of a fish can be "read" to give much the same kind of information.

For scientists and conservationists this characteristic is very helpful, particularly for studying the sockeye salmon. Fish, unlike land animals, cannot be observed continuously throughout their lives and indirect means have to be used to study their life histories.

Except for the record provided by examining the fish's scales, it would be difficult, if not impossible, to tell under what environmental conditions the fish lives and reproduces.

Fish are not born with scales. Scales first

### Telltale Scales



form on sockeye when they are about one and one-half inches long and the scales continue to grow with the fish. The salmon's one or two years of fresh water life is marked by a characteristic growth pattern which is followed by a period of slowed growth before the salmon's seaward migration.

Identifying fish through scale studies has a number of practical applications.

The catch of a particular "race" from a commercial hatchery can be identified. Also, the relationship between fresh water growth and salt water survival can be determined and hatchery workers can calculate the total production of one spawning through age analysis of salmon.

This kind of information is necessary for carrying out a successful program of fisheries management. Keeping a fish population up to normal, providing adequate protection during spawning runs, and maintaining a constant fishing intensity all are helped by greater knowledge of a fish's life history.

Sportsmen are benefited by better fishing, conservationists learn more about maintaining a "balance of nature" when stocking lakes and streams. Biologists gain information on the life cycle of a living creature.

The tiny fish scale has proved to be an extremely useful object.

Science News Letter, March 22, 1958