
Fishery Leaflet 291

Washington 25, D. C.

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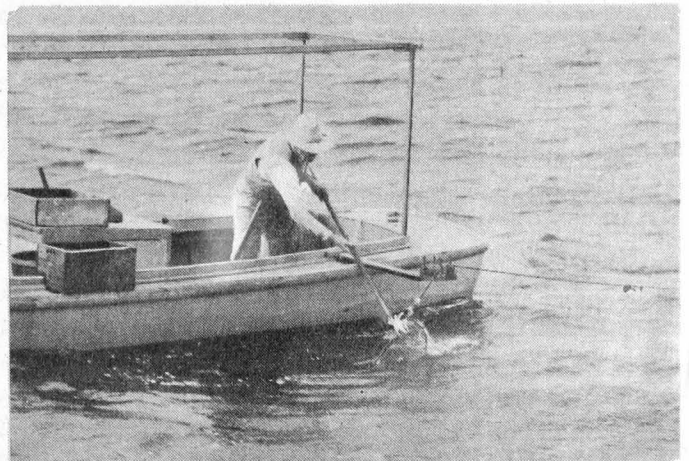
July 1948

TROTLINE CONSTRUCTION, OPERATION, AND MAINTENANCE
(Chesapeake Bay Type)

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Illustrations by Gustaf Sundstrom

BRANCH OF COMMERCIAL FISHERIES

Trotlines, as used in the Chesapeake Bay area, are usually made of $3/8$ -inch diameter cotton rope and vary from one-quarter of a mile to one mile in length. At each end of the line an anchor is placed in the form of an iron chain weighing about ten pounds and a colored buoy for identification and location of the set. Chain is used instead of a grapnel because it will allow for slight adjustments in "running out" the line and because it can be stored in or near the line barrel without entangling the line.



The buoys are usually made of five gallon cans. Given two coats of paint they should last one season. They are readily available, inexpensive, have sufficient buoyancy, and can be seen from a considerable distance. The buoys are connected to the anchor with an 18-thread fiber rope about 60 feet in length. The trotline is connected also to the same side of the buoy. A six foot length of $3/8$ -inch iron chain is inserted 60 feet down the line. This serves to keep the line in place on the bottom and gives warning that the end of the line is near when rolling over the reel.

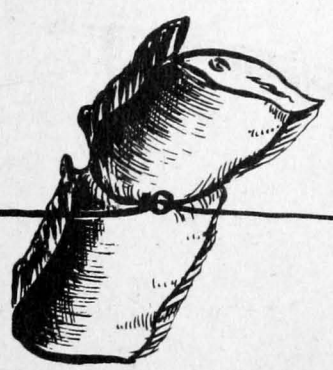
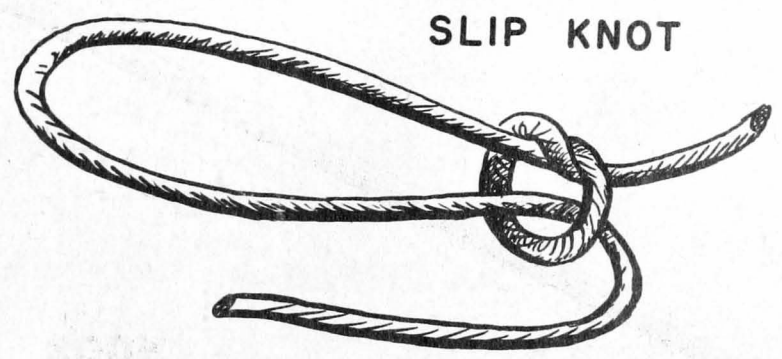
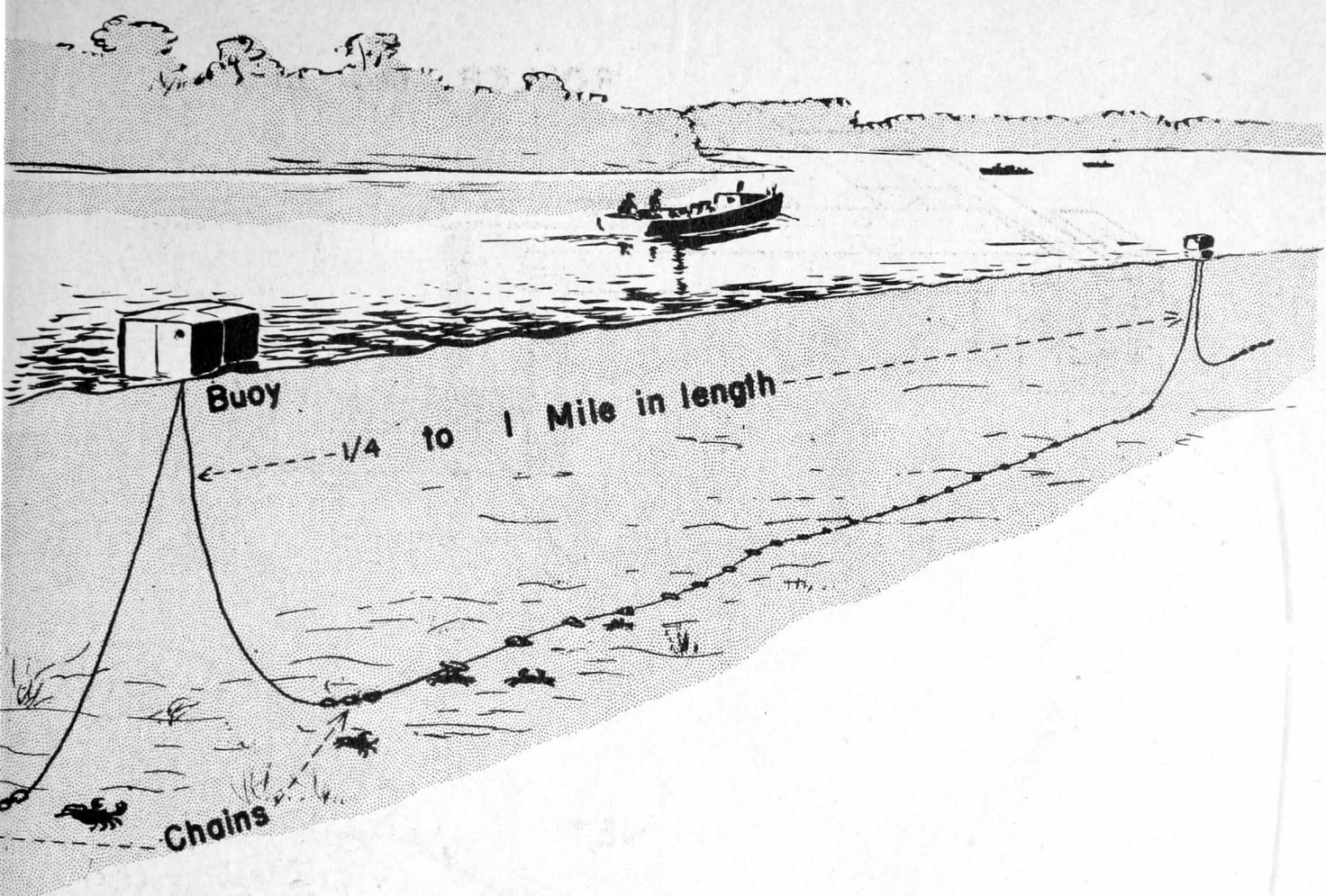
Most generally, loops for holding the bait are made up by slip knots in the main line at intervals of about 18" and no gangings are used. This type of knot is used because it holds the bait firmly and is easy to tie and untie. Bait, consists of salted eel, small flat fish called "hogchoker", or beef tripe. Most fish are not tough enough for bait and are easily cut off unless placed in a snood.

In making the set, the boat is directed in line with some fixed object on the horizon, the trotline anchor is thrown overboard and the rope allowed to slip through the hands so as to keep it taut. The buoy is then cast overboard and the trotline payed out from the line barrel until the end is reached, when the second buoy and anchor are thrown overboard.

Two types of set are commonly used, depending largely upon the dimensions of the fishing area, the location of the channels, and the number of fishermen working the area. In one of these types, two lines are set parallel to each other about two hundred yards apart; in the other the two lines are extended in the same general direction. In either type one line can be attracting crabs while the other is being fished.

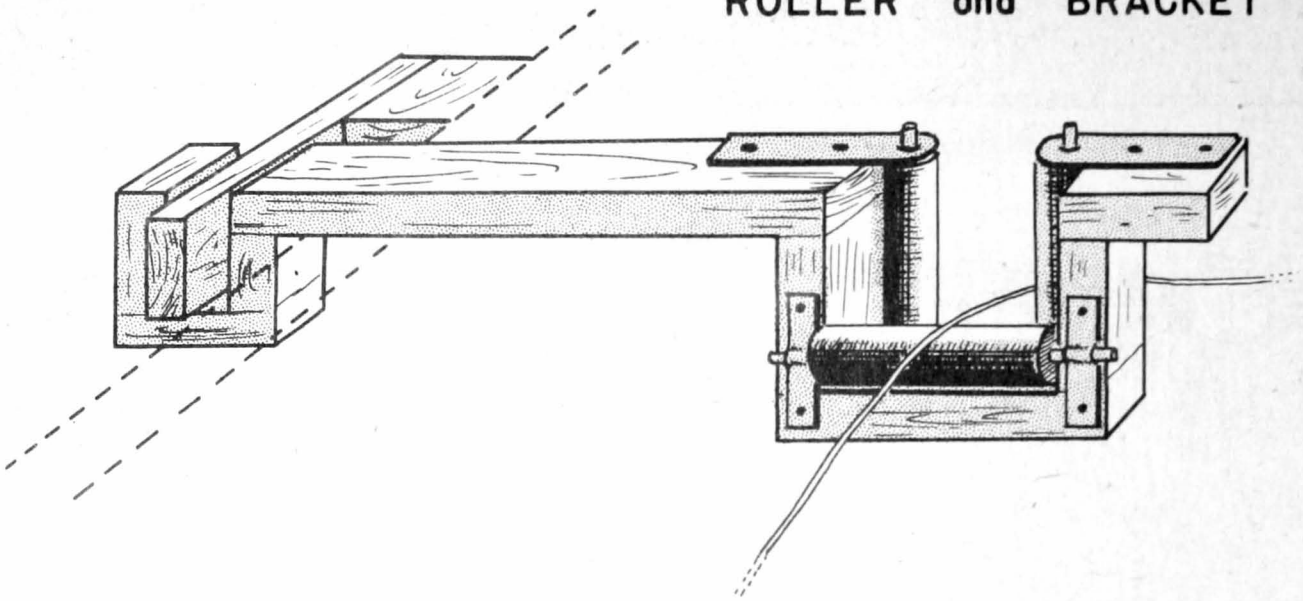
In hauling back the line the motorboat is brought up to the buoy, and the line is grasped with a small hand hook and placed in the groove of a detachable roller which is projected about twelve inches outboard from the side of the boat. This rig acts as a guide for the line, keeping it straight and making it easier to handle. As the boat runs down the line, the baits are brought to the surface, and the crabs are scooped up by a hand net as they approach the reel. In the lower sections of the Bay many fishermen use an automatic dip net which tends to lighten the work of the crabber. This rig, which is attached to the boom of the motorboat and swung over the trotline, scoops off the crabs as they approach the reel. When filled with crabs, or when the end of the line is reached, it is swung back over the crab barrel and emptied by slipping the knot at the bottom of the net. It has the disadvantage of catching whatever crabs are on the line, regardless of size and stage of shedding, and heaping them where separation is more difficult.

It is usually better to set the lines in the early morning or late afternoon. Crabs will not follow the baits to the surface as well under the direct rays of the sun. The effect of the stages of the tides is generally negligible. The baits are checked daily and renewed as necessary. At the end of a days fishing, the baited line is coiled carefully, well sprinkled with salt and stored in a barrel. When breaking in a new line it is baited and soaked overnight in brine. Otherwise, difficulty is encountered in getting it to sink to the bottom. Strength of the brine should be sufficient to float a potato or about 50 pounds of salt to the barrel.

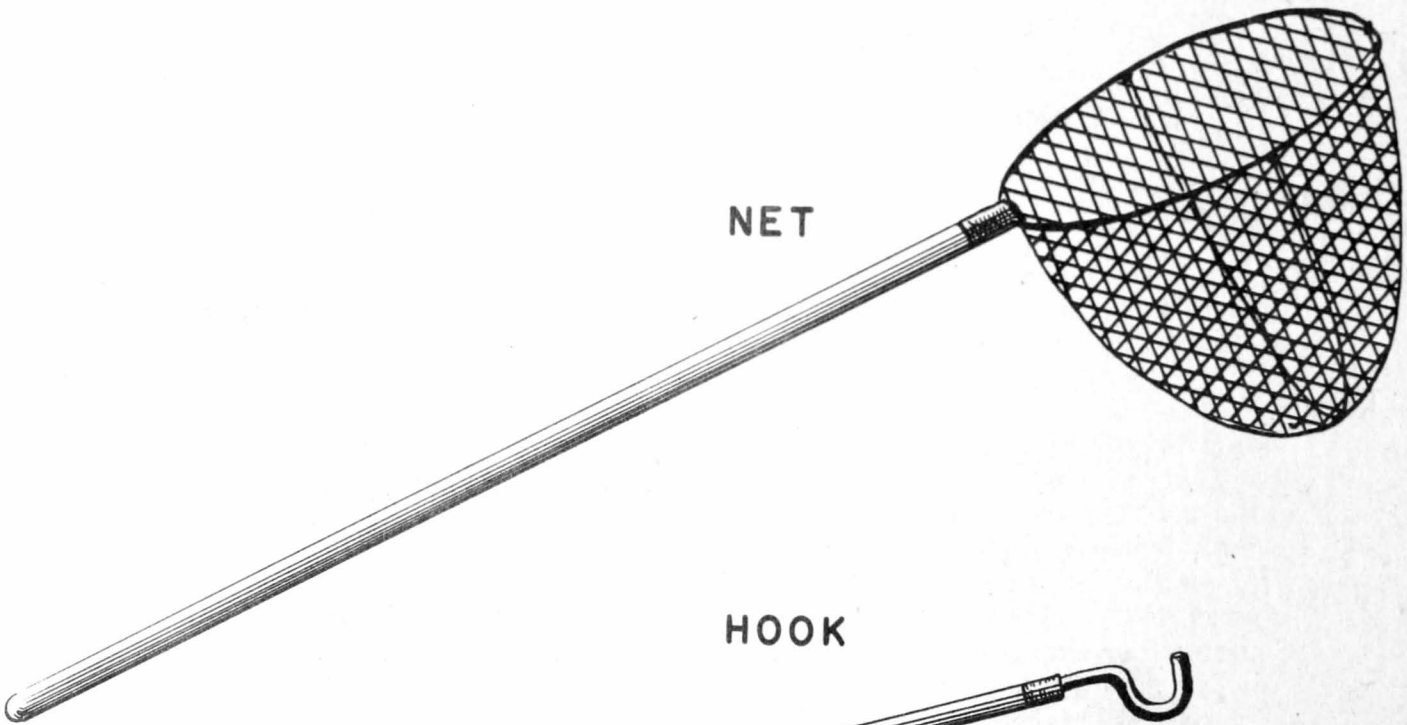


BAITS

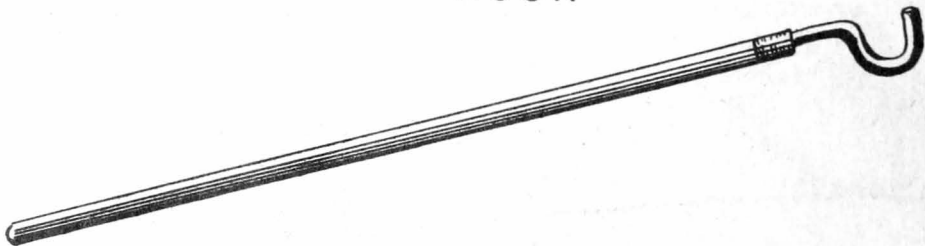
ROLLER and BRACKET

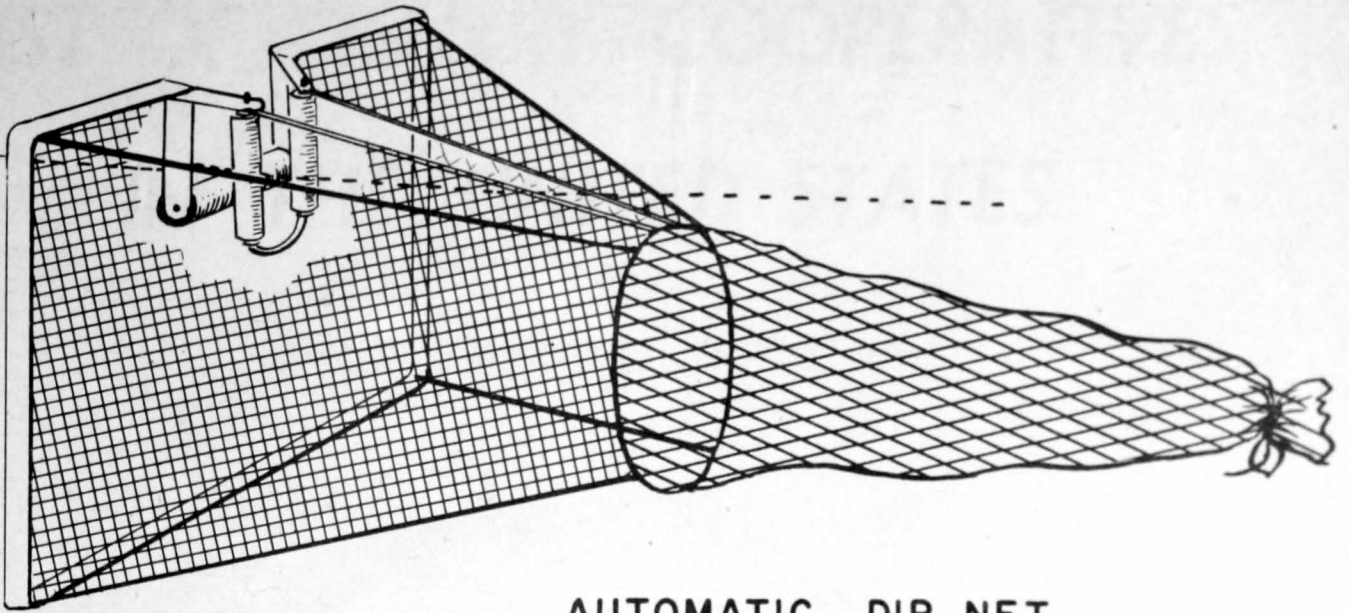


NET

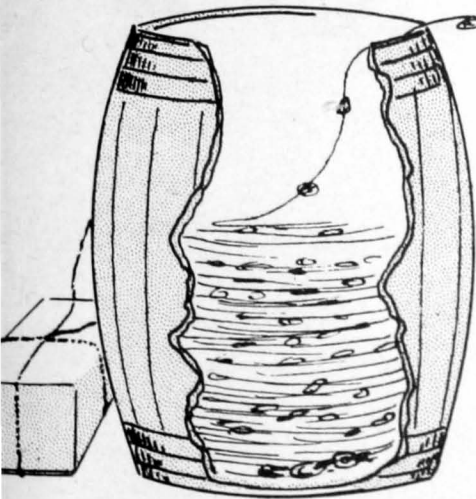


HOOK

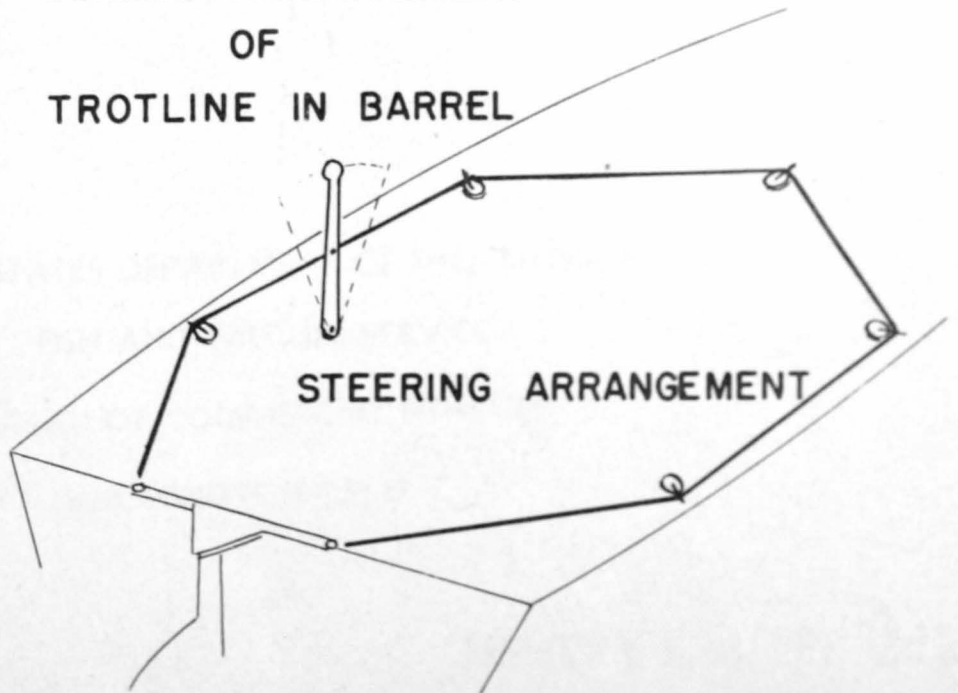




AUTOMATIC DIP NET



COILING ARRANGEMENT
OF
TROTLINE IN BARREL



STEERING ARRANGEMENT