

ened on the under side with pieces of old net, called "rubbing pieces," to protect it from chafing when a large quantity of fish has been collected within, and the strain on that part of the net is consequently increased.

A trawl is generally fitted with two pockets, one on each side. These are made by lacing together the upper and under parts, beginning at the outer edge, and gradually working towards the middle and small end of the net. The mouth of the pockets, that is, where the lacing stops, therefore faces any fish that may have passed between them into the cod, and escape being impossible at the cod-end, many of the fish swim in a sort of backwater into the pockets until they are stopped at the narrow closed extremities.

The meshes in a large trawl, such as has been described, are of four sizes, and range from four inches square near the mouth to an inch and a quarter square in the cod.

Two stout ropes of about 15 fathoms each are fastened, one to the front of each of the trawl-heads, the other ends uniting to form a bridle, to which is shackled a warp 150 fathoms long; by this warp the trawl is towed, the quantity of rope paid out depending on the depth of water, the state of the weather, and other conditions. Trawling is, as a rule, always carried on in the direction of the tide, sometimes across it, but never against the stream, as under such circumstances the trawl could not be kept on the ground. The trawl is generally kept down for one tide, and its rate of progress is usually only from half a mile to two miles an hour faster than that of the stream, depending on the kind of fish sought after; the object being to keep the trawl steadily working on the ground, on which most of the fish caught by the trawl are habitually found, and this object could not be attained if the vessel were going fast through the water.

The action of the trawl will be readily understood.

The net is towed with the mouth and beam in front, the beam being raised about three feet from the ground by the trawl-irons, and, contrary to general belief, never touching the bottom at all unless the trawl capsizes before it arrives there. In such a case the mouth of the net closes, and the irregular jerking of the warp warns the fishermen that the net must be hauled up and "shot" a second time before any fish can be taken. If, however, the trawl sinks in a proper position, (and this depends in a great measure on the way in which the vessel is managed, as soon as the trawl is overboard,) that is, with the beam uppermost, the ground-rope then comes into play and sweeps evenly over the bottom, disturbing any fish there may be within reach; and as the rope extends forwards on each side of them, and the back of the net prevents escape upwards, the fish, lying, according to their habit, head to stream, dart forward into the bag of the net, and in many cases ultimately find their way into the pockets, from which they are shaken out with the rest of the fish when the trawl is hauled on board and the end of the net opened.

The trawl can only be used with advantage on smooth ground; a sandy bottom is preferred, not only from that being the usual resort of soles and other valuable kinds of ground-fish, but from the less danger there is on such a surface of tearing the net to pieces. Mention has already been made of the use of old rope for the ground-rope; such a material is employed to prevent the loss of the trawl in case of any unforeseen obstruction, such as patches of rock or heavy stones, which are sometimes found on large tracts of sand. In such a case the ground-rope gives away, and the worst that can