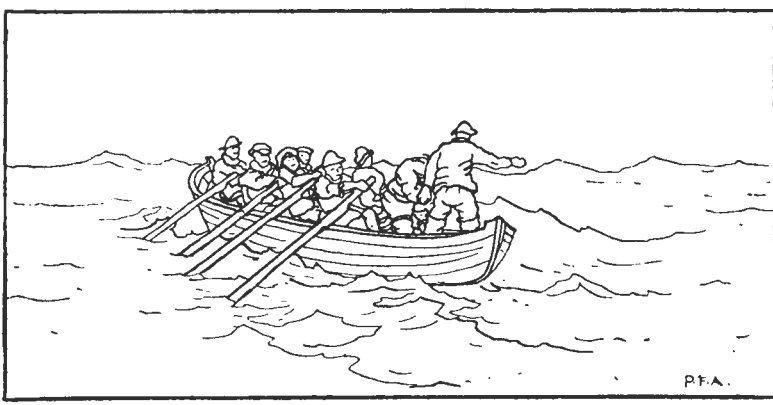
CHAPTER X

Some Other Methods of Fishing

FISHING by means of the seine, sean, or sweep-net is also one of the older methods. There are three classes of seine-nets—'slop,' 'tuck,' and 'foot' nets—but all are constructed on the same principle—*i.e.*, they surround the fish which are to be taken. They consist of a train of netting, varying considerably in size, but always deeper in the middle ('bunt') than at the end ('sleeves' or 'wings'). If they are shot from a boat they are worked in a circle, if from the shore in a semicircle. The back, or upper edge, is kept up by corks or floats, the foot is weighted with leads, so that the net may hang perpendicularly. Pilchards are caught with seine-nets in Cornwall, tow-nets being employed for surrounding a shoal. The large net, or 'sean,' about two hundred fathoms long and ten fathoms at its greatest depth, is made fast to another smaller net, called the 'stop-sean.' The two nets are shot together, two boats starting from the same place on the outside of the shoal. During the pilchard season in Cornwall persons are set to watch on the cliffs to signal to those in the boats the moment they perceive a shoal. These watchers are locally called 'huers,' and are provided with signals of white calico or branches of trees with which they can direct the course of the boats.

Gradually the nets will be drawn round the shoal, the stop-nets being so worked as to overlap each other's

wall of canvas. The place where the two nets join is carefully watched to see that none of the fish escape at this point ; if it is open the fish are beaten back with oars. At last the nets are worked and hauled into shallow water for the convenience of landing the fish. When the tide falls the pilchards are brought ashore, a 'tuck-net' worked inside the seine being used for

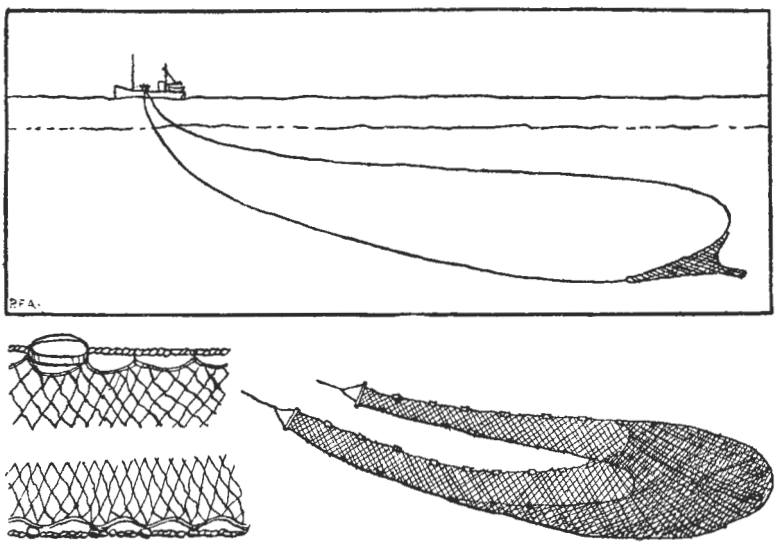


PILCHARD-FISHING

safety, and flattish-bottomed boats bring the catch on to the beach, bucketfuls of pilchards being taken out of the nets and emptied into the boats by means of baskets, large oval baskets known as 'flaskets' being used for this purpose. Ten thousand hogsheads of pilchards have been known to be captured at one time. Pilchards are salted in curing-houses, quantities being piled up in stacks, salt being placed between the rows of fish. The salting process is called 'bulking.' The process takes about four weeks, after which the pilchards are washed and freed from oil and packed into hogsheads for exportation, about 2500 pilchards going to the hogshead.

The method of shooting and hauling a modern Danish

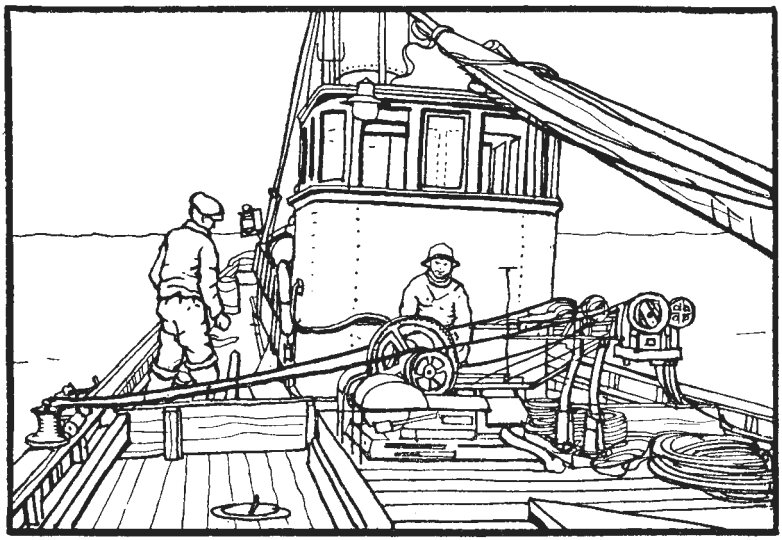
seine-net, used so much in Scandinavian countries and more and more on the coast of the Moray Firth, is as follows. When the vessel has arrived at the fishing-ground an anchor and buoy are heaved overboard, to which is made fast the end of a line. The boat then



A Danish Seine-net

moves round in a triangular course, paying out six ropes of one hundred and twenty fathoms length over a rope-roller fixed to the bulwarks. When directly broadside on against the direction in which the tide is flowing the net is shot. The boat then returns to the buoy, and the net is hauled in by means of a special rope-coiling machine of double pattern fitted with chain-belts and cog-wheel, fixed on to the fore-deck and attached to a steam-winch. The two ropes must be hauled equally so that the bag of the net retains its position all the time at the greatest distance from the boat. The wings of a seine-net are kept apart by

the tide, which has to be carefully watched. The net has to be hauled in gently, careful hold being kept on the ropes and a watch for any obstructions. The whole business of shooting and hauling a Danish seine-net does not take much longer than an hour, and it is



DANISH SEINE-NET FISHING
Rope-rollers, Winch, Rope-coiling Machine, and Warp in Position

repeated again and again throughout the day. Each large boat carries two haddock or plaice nets. They consist of wings, shoulders, and bag, and are made of the best quality cotton twines, the meshes varying from $4\frac{1}{2}$ to 3 inches at the cod-end, with selvedging of stronger twine at the top and bottom. The whole net is mounted on a $1\frac{1}{2}$-inch tarred hemp rope about 78 yards long, with flat corks on top and leads on the foot. The haddock nets are very similar in make, but their circumference is only fifty-six yards.

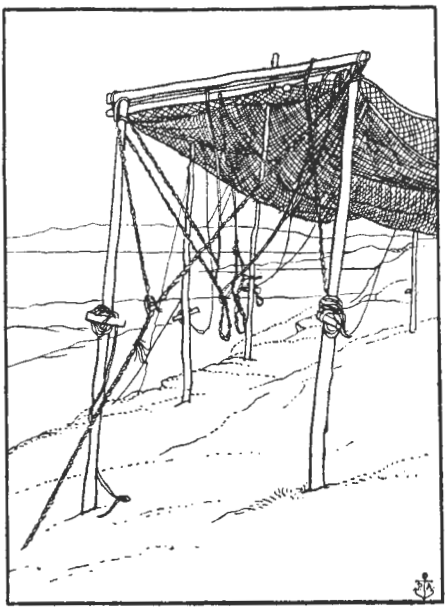
'Ground' or 'foot' nets are worked from the shore, being put on a boat which is rowed out, making a sweep

according to the length of the sean employed ; the net is thrown overboard from the stern as the boat moves along. One end of the rope is left on the shore, and the other is brought back and landed by the boat. The fishermen then form themselves into two groups, each taking hold of one of the two ropes and gradually hauling the net in to the shore until the two ends meet, with the fish surrounded. The net is then drawn on to the beach and the fish taken out. You can still see this type of net in use on Chesil Beach, Dorsetshire, and at a few other places. It is also used for catching salmon on the Scottish lochs. Bag-nets are used for catching sprats on the Thames, Solent, and in the Wash. They consist of a conical-shaped bag, about sixty yards long, made up of four portions or lengths which can be reduced or lengthened according to the quantity of fish expected to be caught. The mouth or entrance is fastened above and below to two strong pieces of wood called ' balks,' the lower heavier than the upper. The mouth of the net is nearly rectangular, about thirty feet deep on either side. The net is moored by an elaborate system of bridles, and shot after the vessel has taken up its position at the beginning of the tide. Nothing more has to be done, except that watch must be kept until the tide turns, when the net is hauled in and the fish measured into the hold.

A trim-net is much the same as a stow-net, except that it is much smaller and the mouth is triangular instead of rectangular. It is used for taking whitebait and eels, and is only thirty feet long.

Trammels or stake-nets, used among other purposes for taking salmon, are fastened on to stakes on the shorelike walls.

The shrimp net, or 'shank,' is practically a beam trawl, but with a second beam below instead of a ground-rope, exercising a sort of ploughing action on the bottom. The lower beam is a stout piece of oak, some nine feet long, flat above and below, its underside sometimes shod with iron. A stout stick, about 1½ feet long, is fixed upright in a chock on the centre of the beam, and supports a pole six feet long parallel to the lower part of the frame. The net, which measures about twelve feet in length, and which tapers rapidly to the cod-end, is fastened to these two beams. The mesh of the shrimp net is very small, ranging from half an inch at the mouth to a quarter of an inch at the cod-end.



SALMON NETS

Shrimp nets are worked with the tide, as in an ordinary beam-trawler. One man and a boy are enough to manage the full number of nets. From two to four are the usual number, and they are kept down from a quarter of an hour to an hour, according to the sort of ground they have been working over.

Those of my readers who live near London have doubtless seen the shrimp boats at the mouth of the Thames. They are known as 'bawleys,' and no prettier

little fishing-vessels are to be found anywhere round the British Isles, "pleasant-mannered, amenable little craft," as Lieut.-Commander H. Warington Smyth calls them.[1]

But if you would know of the ways of bawleys and their crews, and would like to learn in detail how shrimps are caught for the London market, then, if you have not done so already, read *Gotty and the Guv'nor*, by A. E. Copping, far and away the best book about a class of fishermen which is gradually disappearing, although there are still quite a number of bawleys left at Gravesend and Leigh-on-Sea.

AN OLD-TYPE GRAVESEND SHRIMPER

Chapter eight of this delightful story gives a vivid and amusing account of the whole process of shrimping from the moment when the amateur owner of the bawley *Betty* sets out from his house at Westcliff soon after 1 A.M. in order to meet his skipper, 'Gotty,' and the mate at the jetty at Leigh.

I have not the space in which to relate what happened until they at last got away an hour later, when, finally, the narrator, having just fallen asleep, is suddenly awakened by "the thunder of boot leather accompanying the operation of throwing overboard the buoy. . . ."

> I heard the splash which betokened that one of my shipmates had thrown the buoy overboard—the conspicuous piece of tarred buoyancy which, floating to leeward, afforded an alternative means of recovering the gear, should the tow-

[1] *Mast and Sail in Europe and Asia*, p. 180.

rope snap. . . . Now they were at grips with the trawl—an ancient, strenuous struggle ; the meshed monster refusing to budge ; two muscular men sternly set on conquering its obstinacy. I knew the process.

Over go great armfuls of net, masses at either end of the width being simultaneously bundled across the bulwarks, and at last, when the huge bag of perforations is loosening itself as a tapering tunnel in the water, the fishermen enter upon the crowning toil of thrusting overboard the mouth of the monster, held open by rigid jaws of iron, a long beam serving for the upper lip—the monster which, that mankind may enjoy a nutritious diet, moves slowly along the sandy bottom of the sea, swallowing little fishes in its ruthless maw.

Next follows an amusing description of breakfast on board the shrimper while she is fishing in the early hours of dawn, and at last comes the moment to haul in the shrimp net, a less exhausting labour than shooting it, because of the assistance given by the capstan, turned by the mate with an iron handle. The beam having been got on board, the net itself is dragged over the bulwarks and the bulging extremity dumped on the deck. The skipper untied the end, and " a twitching mass of wrigglesome green-grey life " slides out.

We were out, as I knew, after the agile shrimp. But our success had manifestly lain rather in the direction of small crabs. . . . They crawled in variety, of several colours, some with the long legs of a spider, and each apparently concerned to show off his parts in pedestrianism. They were walking with heedless rapidity over infant soles, full-grown whitebait, little gasping cod, and other small fishes of which the names were unknown to me. Also in our gleanings from below there was a half transparent shrimpy element which lost definiteness in a seaweed tangle.

Two pairs of expert hands immediately engaged in the business of removing the undesirables, and a lively cascade

of crabs and small fish, mingling with tatters of marine vegetation, played over the bulwarks. Thus we were soon left with a reduced heap, into the texture of which quivering legs and whiskers largely entered.

Some of these were reddish in colour, the others of a translucent grey. The skipper explained that the grey ones were known as 'Dutch shrimps,' and these are more in favour on account of their size, but the "little pink 'uns" are the sweetest and more appreciated by connoisseurs of shrimps.

Then, with concentrated thought, he put the shrimps through a further process, aiming at their better appearance. Transferring half of the total to a circular sieve, he held it at arm's length above the deck, what time the mate, drawing water in a bucket from over the side, gave them a succession of sluicings. As each torrent descended Gotty vigorously shook the sieve, so that sand and other foreign bodies might the more surely be removed.

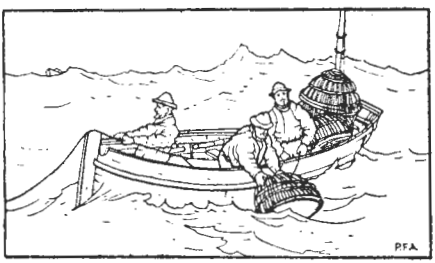
It was a small avalanche of clean and dapper crustaceans that he finally poured into a larger sieve by his side, where they were presently joined by their brethren, also spotless from shakings in a shower bath.

Meanwhile the mate of the bawley had been getting ready a fire, upon which he placed a large copper half filled with water and salt. The shrimps were thrown into the copper, and when boiled they were ready to be packed in baskets and sent to London as soon as the boat returned to port.

Such, in brief, is the manner in which shrimps are caught in the mouth of the river Thames by the fishermen of Gravesend and Leigh-on-Sea.

METHODS OF CATCHING SHELLFISH. Another and very ancient method of fishing still employed is the use of traps, the most familiar of which is the lobster-pot.

Lobster-pots vary in shape according to the locality, those used on the east coast of England and Scotland being rather like large rat-traps, with openings at each end. They are made of netting attached to a circular wooden frame, baited with any sort of fish offal, and dropped into the sea, a heavy weight being attached to keep them on the bottom. They may be distributed anywhere within a depth of from twelve to twenty fathoms, preferably over a rocky bottom full of holes and crevices. Their position is marked by a cork buoy, in some places by a little black flag on a pole.



LOBSTER-FISHING

On the south and the west coasts of England the lobster-pots are wicker baskets, shaped like a safety ink-pot, with one hole on top. On the west coast of Scotland, also on the north coast of England, baskets are used, but they are long-shaped, with the openings at the ends. In my drawing, made at Audierne, you will notice some French lobster-pots, which are much larger than the British ones, and made like round, upright baskets. Lobsters can be kept alive for a long time if the pots are left in the water; it is essential that they should be kept fresh. Crabs and prawns are also caught in pots.

Various types of boats are used in lobster-fishing, mostly small open boats, but in these days larger boats fitted with motors are being employed more and more.

Cockles are taken with a hook, rake, or hoe, as they are found half an inch below the surface of the ground, embedded in the sand. They are sifted out, washed

and boiled in salt water, and packed in bags for the market.

Mussels, which grow attached to rocks or timbers, are taken either by hand or by toothed rakes fastened to long handles, which require considerable dexterity in their use. Cockles are generally cooked before being eaten, whereas mussels are usually preferred raw.

Oysters have been used as food by mankind from time immemorial, as can be proved from the heaps of shells found in the kitchen middens left us by the men of the Stone Age. After the conquest of Britain by the Romans oysters were sent to Italy from England, and became more popular than the local varieties. Curiously enough, oysters seem to have gone out of fashion in the Middle Ages; later on they became as much in demand as they are to-day. Oysters are gathered to-day in the same places around the coast of England as they were in the time of the Romans—the Thames Estuary, Devon, and Cornwall, also on the east coast of Scotland. France has the famous oyster-beds at Cancale, near Saint-Malo, and there are many large oyster-beds on the Atlantic coast of America, to mention but a few.

The Whitstable oyster-beds in Kent now belong to a company, the successors of the former Company of Free Fishers and Dredgers of Whitstable, and only the oysters taken in their beds are entitled to the description of "Royal Whitstable Natives." In the olden days membership of this company was jealously guarded, and there was no means of entry except by birth, and none but a 'free dredgeman' of the town could hold shares in it.

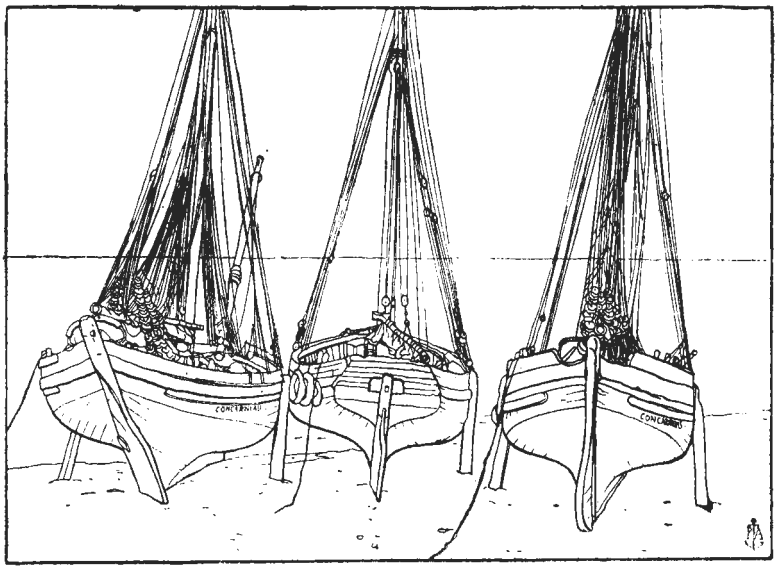
Here is a brief description of the method of working an oyster-bed. The company buy young oysters, called

'brood,' or 'spat,' and lay them down on their beds to grow. North European oysters act alternately as male and female—that is, they not only produce eggs, but, a fortnight after they have been shed, fertilize them. American and Portuguese oysters, however, are definitely male and female, the eggs being laid by the female and fertilized in the sea by the male. The eggs remain attached for a few days to the parent oyster, and a fortnight or so later they grow thin shells and drop off. As the shells get heavier they sink to the bottom, and if they fall on hard ground all is well, for they have something to which they can attach themselves, otherwise they will perish. A European oyster takes three years to mature, and has not reached its prime until the age of five to seven. They may live for about ten years. On oyster-beds movable tiles or frames are placed for the 'spat,' or young oysters, to fall on, from where they are afterward removed to any locality that may be desired. In France earthenware tiles are used for this purpose. At Whitstable cutter-rigged boats, forty or fifty feet long, the newer vessels being fitted with motors, are used for dredging the oyster-beds.

The beds lie at a depth of from one to six fathoms. For dredging oysters a small triangular-shaped net, on an iron frame two feet broad by a foot and a half long, with an iron handle attached to its upper end, is used. Each boat carries a crew of three or four men, and each man has three dredges to look after. When they have been taken the oysters are sorted out into network baskets and left in tanks at a depth of eight to ten feet. Three days a week dredging for the London market is carried on at Whitstable ; on the other three days the oysters are transferred from one part of the

bed to another, dead ones are cleared away, mussels removed, and so on. Oyster-beds require the greatest possible care, and attention and dredging have to be continuous, otherwise the oysters will be contaminated.

FISHING FOR SARDINE AND TUNNY. Millions of people all over the world eat sardines every day. From

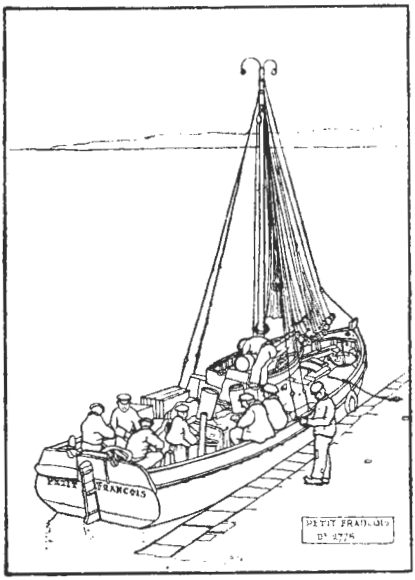


SARDINE BOATS AT CONCARNEAU

the point of view of commerce there is no more 'international' fish. A tin of sardines is the stand-by of every housewife in an emergency. Few people who eat sardines have any idea of how they are caught or prepared for table, still less that the sardine itself is really no more than a species of herring, a young form of the common pilchard, caught so much off the coast of Cornwall.

Sardines, like herring, are found in shoals. The common idea is that they swim northward across

the Bay of Biscay during the summer, but modern authorities are inclined to disagree with this popular explanation of their presence in such vast numbers off the coast of Finistère in summer.



BRETON SARDINE BOAT AT DOUARNENEZ

The sardine is the prey of numerous enemies; gulls and larger fish attack it without mercy, particularly the belugas, a species of porpoise, also tunny-fish. The methods employed by the Breton fisherman in the capture of sardines have changed very little during the past hundred years or more, for there is no more conservative seaman in the world than the Breton. It is hard to induce him to change his boats or his gear. What was good enough for his grandfather is still good enough for him.

From the point of view of colour, a Breton sardine port is one of the most picturesque sights to be seen on any coast. Concarneau, Douarnenez, Guilvinec, Quiberon, La Turballe—those who have visited any of them will recall the forest of masts draped with the fine gossamer-like blue nets hung up to dry and blowing about in the wind.

And what gorgeous colours the fishermen themselves wear! Not the sober dark-blue or dark-brown cloth and blue jerseys of the English or Scottish drifter-

man or trawler-hand, but a pageant of every shade of red, from a deep purple crimson to vivid orange and pale rose-pink—as the result of continual washing and patching and mending. In some ports the men wear bright blue jumpers and trousers, also much patched and mended. Can it be wondered at that the fishing-ports of Brittany are the Mecca of artists in search of colour effects? No matter where you go on the south coast of Brittany you are sure to run up against artists. At Concarneau and Douarnenez on a sunny August morning it is almost impossible for a latecomer to find a corner for his easel down on the harbour-front, so closely packed are the artists, amateur and professional, good, bad, and indifferent, old and young, male and female.

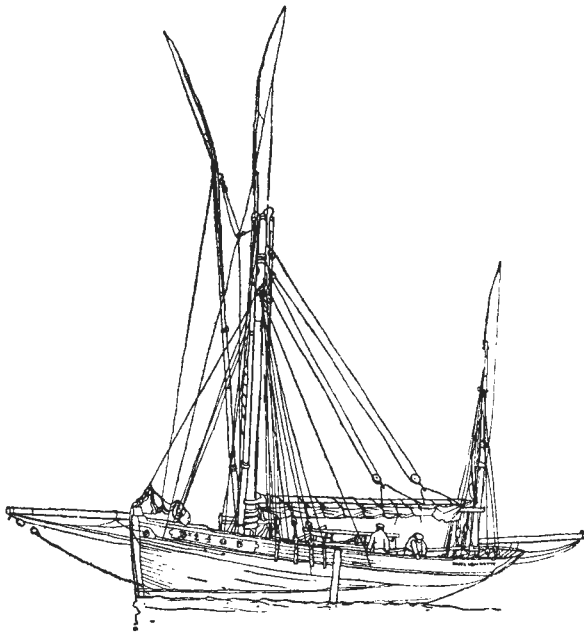
The sardine boats put out to sea in the early morning, as soon as it is light. They do not go farther than a few miles as a rule, for the fish are found close inshore. The nets hang vertically in the water like a herring drift-net. In the smaller boats the nets are always shot from the boat itself, but in the larger modern motor-craft, called pinnaces, the nets are shot from a *canot*, or dinghy.

To attract the sardine cod's roe, or, more often, an artificial bait manufactured from nuts, is thrown overboard. This also serves the purpose of keeping off the larger fish which are on the look-out for sardines, as it forms a sort of white milk in the water, so that the sardines are invisible to their enemies.

The boats return to port in the afternoon. The sardines are then taken ashore in baskets and removed to the curing-yards, where they undergo a process of drying, either in the sun or in ovens. They are afterward soaked in hot oil before being packed in the

familiar hermetically sealed tins. This work is all done by women and girls, like the herring-curing in Scotland.

The life of a sardine fisherman is a hard one. The boats are small and lack any sort of convenience or comfort. Only the larger ones have cabins. In the



A Breton Tunny Boat

majority of the vessels the crew are exposed to the wind, rain, and heavy seas the whole time. When it is fine enough a small stove is used to cook the fish soup which is the ordinary meal of the Breton fisherman. (You will notice it in my drawing on page 270.) But more often than not the men have to satisfy their appetite with dry bread. No matter how much rum, brandy, or wine the fisherman may consume on shore —and the average consumption of alcohol at Concarneau is said to be about ten quarts annually per

fisherman—his normal drink at sea is water. Sardines are caught in large quantities also off the coasts of Spain and Portugal.

Next to the sardine fishery the most important fishing on the south coast of Brittany is the tunny, a fish differing from the tunny caught in the Mediterranean. The chief centres of the tunny-fishing are Concarneau, Douarnenez, Etel, Quiberon, and Belle Île. But the Île de Groix fishermen were the pioneers in this industry. The tunny are caught at a considerable distance from the coast, the boats often going as far as 60 to 150 miles out. There is no more voracious fish than the tunny. It swims on the surface of the water, and this habit has resulted in the method of capture employed. The fishing lasts from July to October.

BRETON TUNNY FISHERMEN

In my drawing on page 272 is shown a typical tunny boat, with its long antennæ-like booms, called *tangons*, which, when fishing, are hung out over the side of the vessel at an angle of about forty-five degrees. On each of these long arms are attached six lines with a brass hook at the end. Attached to the hook is a bunch of straw, made from maize, which skims over the surface of the water, thus attracting the fish. As soon as they are caught they are hauled on board. They are not easy to handle, owing to their long, sharp fins and tremendous strength. They fight furiously, and have to be killed by spearing their heads. When dead they are cleaned and dried, and then hung on a sort of wooden frame under a canvas awning amidships. The

tunny boats generally remain at sea about fourteen days. The fish are prepared for commercial use in much the same way as sardines.

The tunny fishermen live much more comfortably than those on sardine boats. They breakfast on coffee and bread and butter, have a substantial midday dinner of fish soup, served up with potatoes and other vegetables, and washed down with red wine, their supper consisting of either grilled tunny or the same fish cooked as a *ragoût*, with a brew of strong tea to finish up with.

The tunny boats are large smacks of 50 to 90 tons, not unlike a Brixham trawler in general appearance, magnificent sea-boats, capable of standing any weather. With their wonderful variety of colours, blue, red, green, white, pink, primrose-yellow, and orange being used both for sails and hulls, they look like a lot of tropical birds or butterflies when moored together in the harbour.

No more hard-working or finer types could be found than the Breton sardine and tunny fishermen. They seem capable of standing almost any exposure to weather, and are born seamen in every sense of the word.

But the limits imposed on me by my generous and long-suffering publishers have already been exceeded, otherwise much more could be written concerning fishermen and fishing ways. There are many countries about whose sea-fisheries I have said practically nothing, and they are some of the most important. Perhaps one day another volume may be devoted to this subject, in which I will give them the notice they deserve.

Fisherfolk all the world over are worthy of our infinite respect and admiration. For, as Sir Walter Scott so truthfully expressed it, "It's no fish ye're buying. It's men's lives."

EP Publishing Ltd