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SERJEANT BAKER.

FISHES I HAVE KNOWN

BY

Arthur H. Beavan

ARTHUR H. BEAVAN

AUTHOR OF "BIRDS I HAVE KNOWN," "ANIMALS I HAVE KNOWN,"
"MARLBOROUGH HOUSE AND ITS OCCUPANTS," ETC.

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PREFACE

THE subject of fish and fishing has always been of such interest, particularly to inhabitants of seagirt lands, that this book (professedly non-technical) recording my experience of the life and habits of fishes, and the various modes of capturing them in Great Britain and elsewhere, does not, I think, require much justification for its existence.

In many countries the harvest of the sea ranks first in importance, while in others it is of hardly less consequence than the annual ingathering of wheat and other cereals.

Let us imagine, if we can, not only our coasts (already yielding fewer fish than formerly), but the Dogger Bank and other productive fishing-grounds in the "near seas," closed to us by the outbreak of a general European war, or deserted

by the finny tribe! The result would be a national disaster.

What would become of our fishermen and their families, and the thousands interested in the fishing industry? Lowestoft, Yarmouth, Grimsby, Hull, Aberdeen, Wick, and all fishing centres would be ruined, and the Metropolis would acutely feel the extinction of Billingsgate market.

Picture the dismantling of countless smacks and trawlers, and the loss of millions sterling represented by the fish annually landed in the United Kingdom!

Then, socially speaking, what would the indigent substitute for the bloaters that give a relish to their dry bread? How could the poorer classes exist without cheap mackerel, hake, conger, and the like, not to mention the savoury fried plaice and skate, and the comforting stewed eels?

In fact, fish, once the luxury of the few, has become a staple article of food, and a necessity to the multitude.

ARTHUR H. BEAVAN.

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CHAPTER I

FISHES OF MY CHILDHOOD

CATCHING my first fish ! A never-to-be-forgotten experience ! I do not refer to my very earliest success—the catching of a bull-head with bent pin and cotton line in a pond at Hampstead, then a sort of watering-place for London children—but to my first achievement as a grown-up child.

The scene was Bexhill (near Hastings), a primitive village with scant access to the adjoining sea-beach, and ignorant of golf-links, big hotels, and other attractions of a twentieth-century pleasure-resort. Its one street was fronted by the gardens pertaining to queer little thatched houses, whose luxuriant sweet-briar hedges made fragrant the air throughout the long summer days, that to childhood's imagination seemed destined to last for ever.

We lodged at a cottage where lived the village

carpenter, in whose yard the sawing of wood was continually going on, and my delight was to sit and watch the man in the pit co-operating with his mate above. I noticed that the latter, though he seemed to do less work, by way of compensation got more sawdust in his eyes.

Delightful also did I find it in the garden, amongst the sweet-williams, hollyhocks, and roses, of which last I was allowed to plant a cutting; and thirty years afterwards, when I re-visited the dear old place, I found the front of the house completely covered with the white blossoms of the *Banksia*—the result, I believe, of my first attempt at practical horticulture.

Having been promised a day's fishing on the first suitable opportunity, the momentous question regarding the choice of rod, tackle, and bait for my purpose kept me awake several nights. The moot point decided, to prolong the pleasure of "getting ready" I purchased each separate item *longo intervallo*, at the one shop where such things could be obtained. These items were very primitive, compatible with my tender years and slenderness of purse. The rod was a two-jointed wooden affair, about six feet long, the line a cotton one, the gutted hooks of the smallest, the plump float a brilliant green; there were split shot and

quill caps in a pill-box, and the winder was a piece of split bamboo.

To fasten the tackle together, to attach the line to the rod by its solitary ring, and to rehearse the dropping of the line into the water (by means of a tiny pool in the back garden) was my cherished occupation the greater part of the day. In the evening I took the entire apparatus to pieces, arranged it in orderly fashion on a table, and gazed upon it reverently, and at bedtime I laid it by my bedside.

At intervals I had discussions with my big brother upon the mysteries of the gentle art of angling—how to plumb the depth of water, how to adjust the float to suit the various kinds of fish, which I fondly hoped would be caught. The weighty subject of how to make the float remain upright was explained to me by my brother, the split shots were adjusted, and the use of the caps pointed out.

Then came the questions: Was the line to be drawn up directly the float began to bob? How long must I wait before striking, and must I strike smartly or slowly? Lastly, what bait must I use?

My brother suggested in turn, paste, gentles, wasps, grubs, lobs, &c., as bait, but seemed

uncertain about which was the best; so we consulted the carpenter, who advised red-worms, and promised to supply us with a lot from his manure heap.

At last the long looked-for day arrived for the fishing excursion. I had gone to bed with an anxious mind, caused by the threatening look of the weather, but as I lay lamenting it, I suddenly remembered that somebody once told me fish bit well before thunder or rain. So I fell asleep in peace.

Morning dawned with a cloudless sky, and found me wide awake and eager for the fray, too eager to remain in bed one unnecessary moment. In all England there could not have been found a happier child than I, as I set off with my brother, after a hurried breakfast, to the scene of action full of glorious expectation, and laden with a large bass basket for the catch!

We soon reached the windmill, behind which was a mill-pond used as water-power when breezes failed. Even after all these years I can picture the place in every detail—the sails slowly moving round, the great arms sweeping so dangerously near the ground, the miller's picturesque house with its tall poplars, and the thicket of trees that hid the mill-pond.

I had been told that fish have such an acute sense of seeing and hearing, that I should have to crawl like a Red Indian when approaching the bank, and not utter a sound, or they would not attempt to bite. So, out of sight of the water we set to work to get our tackle ready. All went well until I had to place one of the red worms on my hook. It was a part of the performance I had not rehearsed, and the worm was slippery and wriggled, and my small hands trembled with excitement and impatience. I made a prod at the middle—the fattest part—of the wretched creature, and nearly drove the hook into my finger. At last I managed to get the hook into the worm, who objected to the proceedings even more than I did, and twisted and twirled so horribly that I had to ask my brother to come and see what could be done to make matters better—and, finally, with becoming caution, we approached the pond.

There, on the edge of a tolerably high bank, we sat down in dead silence, and after solemnly taking the depth and adjusting the floats, we cast in our lines—and waited. The pond was said to hold plenty of tench and a few perch, and I had been told that these two fish negotiate a bait differently.

It was a very warm day, and insects sported about in every direction.

"Yes! It was a bite!" The float trembled slightly, and almost imperceptibly glided away without bobbing. "Yes! It *must* be a bite!" I thought again: "It must be a *tench*!" for I had been told in what manner a tench seized bait. In an agony of suspense, I looked at my brother, who merely shook his head! The float travelled on and began to give sundry little curtsies as though about to disappear. Again I looked at my brother, and he gave a nod of assent. But, alas, that instant a dragon-fly of the blue kind alighted on my rod and apparently went to sleep.

Now, I had a great dread of dragon-flies, partly because of their name, partly because of the rustling of their double wings and the ferocity of their appearance, and also because of their traditional tendency to attack human beings, more especially children.

What was I to do? I dare not lift the rod, and in the meantime the float had disappeared under the water.

"Philip, Philip, do help me!" I cried out. With his rod my brother knocked the horrid thing off, and I struck so vigorously that the

TENCH.

line flew right over my head, with a tench at the end of it weighing about half a pound.

All day long we fished. But we caught nothing more, and at sunset returned home.

After supper my brother read to me Izaak Walton's remarks about the cooking of tench, carp, and pike. We determined to profit thereby, so the next day, after I had exhibited my tench to all our friends in the village, we proceeded to clean it and to stuff it with herbs and fresh butter. We persuaded the carpenter's wife to act as cook, but it turned out an awful, greasy mess of tough skin, many bones, and muddy flesh; yet we ate it with gusto, and survived to tell the tale.

Shortly after this we left Bexhill for Hastings—the old-fashioned Hastings of years ago—and put up at an old house in the picturesque London Road. On its south garden-wall grew a magnificent jargonelle pear-tree, whose maturing fruit I coveted.

Whenever possible, I went to the rocks off the fish-market at low tide.¹ It was a fine preserve for crabs, shrimps, anemones, and other marine produce. Unfortunately, in my eagerness to net some big prawns, I tumbled into a deep pool,

¹ Neither Hastings nor St. Leonards possessed piers in those days.

and so nearly was I drowned that my excursions to this spot were put a stop to.

Returning to London, the fishing fever still on me, I could not rest until a ticket was procured from the Ranger (or keeper, I forget which) giving permission for me to fish in the ornamental lake at Regent's Park.

There, day after day, I patiently waited by the water-side for a bite. In vain, however. Not one did I get, and as I never saw any other angler get one, I came to the conclusion that there was nothing to catch. Possibly the swans had eaten up all the small fry.

Some relatives at Wimbledon got leave for me to fish in a fine piece of water attached to Wimbledon Lodge, a mansion enclosed by a conspicuous high wall. There I caught some tench and perch ; but as Wimbledon was then somewhat inaccessible, my visits were necessarily few and far between.

One summer we children were taken to Windsor, where I first experienced the delight of punt-fishing. Our old boatman knew all the pitches for a long distance up and down the river, at that time comparatively deserted.

How I loved those trips ! We sometimes used a casting-net and caught gudgeon, which I was

allowed to pick out of the meshes ; but perch-fishing was the greatest fun, and once, when moored close to the Eton swimming-bath, my hook being cunningly baited with a live minnow, the float bobbed violently and disappeared as though viciously pulled down. I struck, and thought I was fast into a whale, and as my line had no reel, I was sore distressed, for my rod bent double and threatened to break every instant.

Help, however, was at hand, and, after a tough fight, I landed a big perch, nearly three pounds in weight and a perfect beauty, covered with bronze scales and barred with dark green, his whole body iridescent as that of a peacock. I had forgotten that on his back were spines which he could erect like a row of swords. I incautiously grasped my prize, and got terribly pricked. I was a proud (though wounded) boy, and had the fish stuffed, and it remained in my possession for many years, when one fatal day a deluded cat clawed it to pieces.

Before very long, I was allowed to go out fishing alone, and often spent hours on the banks of the Home Park, chiefly near the London and South-Western railway bridge, capturing dace and roach. I was either exceptionally skilful or

lucky, for I always returned home with enough for a dish, but as there were few competing anglers then, probably there were more fish than now in that part of the Thames.

Our next holidays were spent at Ryde, in the Isle of Wight, where we had apartments near the pier. In business-like fashion, I set to work to capture dabs and crabs from the pier-head. My funds, however, being scanty, and good lines, hooks, and leads somewhat costly, I was tempted to commit a base deed!

Somebody—an angel in the shape of an uncle—had previously run down from London, and had given me half a crown. The puritanical nurse who had charge of us knew of this gift and told me solemnly and severely that it was my duty to give one shilling of this “handsome sum” to the collection the following Sunday for the benefit of the Hottentots (or some such folk), on whose behalf a sermon would be preached.

Silently acquiescing, I determined to keep that same coin in my own possession, and let the Hottentot go to his doom. It so happened that I picked up a foreign coin (nickel probably, but of suitable size and appearance), and this I dropped into the plate, trembling with fear lest the nurse, whose contribution immediately preceded mine,

should turn round and detect the awful imposition, and I fully expected that the churchwarden, after the service, would seize me and publicly expose me as a criminal.

The whole of my uncle's gift went in the purchase of a splendid lot of tackle, and it was some time before the nurse ceased to wonder how I contrived to get so much for eighteenpence!

With a pennyworth of sheep's lights, procured from the butcher, I used to angle for crabs from the steps below the pier deck. It was precarious sport, for after the bait, with a stone attached, had been let down to the bottom and cautiously pulled up after resting there five minutes or so, a crab, or perhaps three or four crabs, refusing to let go of the delicacy, would appear at the surface, and just when being landed, drop off into the sea. I caught some large ones, but they were ticklish customers to retain in a basket, having a knack of screwing themselves out.

Hermit-crabs—those soft-bodied, boneless crustacea that take lodgings in any empty shell they can find, preferably a whelk's—I could have got by the dozen, but they were no good except as bait, for which I sometimes used them with line, plummet, and hook, for plaice, flounders, and crabs. Plaice caused the most excitement when

hooked, being game to the last, and big ones not easy to land.

I had been told that mussels made capital bait. So they did; but I could not manage to keep them on the hook, and could have easily used up a bushel or two without any return. However, I did once succeed in inducing a very tough one to remain *in situ*, and straightway caught a plaice of nearly four pounds in weight, in beautiful condition and marked with brilliant red spots. We dined off it the following day.

Another catch—off which we did *not* dine—was a cuttle-fish, a creature that rarely takes the hook except in the form of a triangle tackle. It terrified me, but a brother fisherman was kind enough to kill it and cut it up as bait for bass and conger.

In the Spithead, opposite Ryde, were the remains of several wrecks, where whiting, pout, or “bibs,” and other fish, assembled in big shoals, attracted by the molluscs that covered the timbers. These sunken wrecks the Ryde fishermen used to locate by means of landmarks, a steeple or a headland being brought into a certain position from the sea.

I used to be taken out for a day’s real sea-fishing, as a great treat. We used the old-

fashioned "chop-sticks"—a lead-sinker, through which was fastened a piece of cane or whalebone, whence depended two short pieces of fine line with a hook attached. The bait was lug-worms, disgustingly pulpy things with yellow seeds inside, and with deep red blood that left a lasting stain. We dug them out from the wet sand at low water.

Our boatman usually hit the bearings without much delay, and had evidently closely studied the tides. I found this kind of fishing was no child's play. At first I got very much mixed up with the long line when it was unrolled from the winder. Then I had to learn how to manage the plummet—to let it down, to raise it a little and let it down again to give motion to the bait. I was especially cautioned against letting the lead sink down to the bottom, lest crabs should eat off the bait; and I was warned to strike sharply at the least quiver of the line and to draw it up, and, of course, to re-bait when necessary.

I soon got into the way of it, and thrilled with delight when I had a bite, and often pulled up two pouting at a time, making the best score of all in the boat. The fish were small, it is true—generally, say, three to the pound—but my brother had the distinction of capturing a monster, a real silver whiting weighing three pounds,

To my sorrow, I soon had to say goodbye to these happy days, and begin life at school. But even at Homer House I was able to indulge in my favourite recreation. On Saturday afternoons, when not rambling about Lord Ebor's park, I went fishing, walking miles to some mill-pond (the Medway being too far off), where the good-natured miller, for the sum of sixpence, let me try my luck with the rod, but I never suspected, and he never revealed the fact, that often the very day previous to my visit he had drawn off half the water and netted many fish.

However, I caught a fair number of trout in the mill-stream, with the unsportsmanlike, but alluring, red worm. Beauties these troutlings (weighing each a half-pound or so) were, their golden sides studded with bright spots. They showed fight like bulldogs and made a capital fry!

At a place called the High Rocks, not far from Homer House, was a large pool, said to be well stocked with carp and tench, for the angling of which a charge of 1s. 6d. per day was made. I tried it several times, but caught nothing, and experience has since taught me that when one pays for a fishing privilege, one catches no fish.

Our headmaster, Dr. Primrose, was an enthusiastic angler, and used good-naturedly to take

me and another boy with him whenever he had leave to fish in any of the fine parks that studded the district. In one of these parks was a lake containing carp of enormous size and age. Dr. Primrose used to sit for hours on a camp-stool, solemnly smoking a big meerschau pipe, watching for a nibble, and trying all kinds of lure in the shape of paste. Close by were water-lilies and horse-tail reeds in abundance, and, inexperienced as I was, I knew that if he hooked a fish it would instantly make for the reeds. I also knew that it was not much use to fish for carp except early in the morning or late in the evening. Therefore I was not surprised that in the blazing sun the patient angler never got a bite. Just as the sun was going down, he thought of a plan. He allowed the bait—a well-selected red worm—to hang over a large water-lily leaf, and when, in response to his call, I ran up to him from the pursuit of trout in the upper part of the lake, I found him playing a very large carp that kept boring away to the friendly cover of the water-plants.

Gallantly the fight went on, but the line was so very fine that he dared not put any strain on it, and the carp slowly neared the reeds, and, to our disgust, slipped into them, breaking the

line, and escaped. It looked quite two feet long, and was at first described as weighing eight pounds, which estimate as time went on was gradually increased to fifteen!

The trout I had tried for were at the mouth of a stream that fed the lake, and they freely took to a worm diet; but I got rather tired of pulling up tiny ones, and after a time wandered away and discovered in a hollow, surrounded by bushes, a small, but deep, fishful-looking pool, into which I soon had my line, and the bait was instantly taken by one of the biggest trout I had ever seen. I hauled him ashore by sheer force, and full of ardour, I re-baited the hook, and caught another huge one. Then my luck ceased; I had evidently cleared the pool of fish.

Bursting with impatience, I returned with my catch to Dr. Primrose, and received his congratulations, noting the ill-concealed envy of my boy-companion. We carefully packed the fish, and on getting back presented them to the Doctor's wife.

The following Saturday Dr. Primrose again went to the same park, but alone. On his return he sent for me. "Well," he said, in unclassical English, "you *have* gone and done it!"

“Done what, sir?” I inquired, tremblingly.

“Do you know where you got those big trout from?”

I told him. He burst out laughing. “My dear boy,” he said, “that was the keeper’s private ‘stew,’ where he puts the extra-sized trout that he nets, intending them to increase and multiply unmolested. He came up to me to-day in a wrathful state of mind, told me that his favourite trout were missing, that he was sure it was the work of my ‘confounded boys,’ and that he would ‘take precious good care they did not catch any more.’”

I hung my head and pleaded ignorance, and was forgiven.

CHAPTER II

OCEAN FISH AND OCEAN FISHING

WHALES! I shall at once be reminded that whales are not fish. In many respects they are animals, but as they live in the sea, have been called fish from time immemorial (invariably so by whalers), and as this is not a scientific work on natural history, I shall, for the sake of convenience, write about them under their popular designation.

Probably I have seen more cetaceans in the ocean than most voyagers have. As a matter of fact, I was always on the watch for them. Let me try to recall my experiences.

I have a dim recollection of having in childhood been shown an arched gate outside a cottage near the sea, and being told that it was made of a whale's jaw-bone! Before I travelled I had seen a whale's skeleton in a museum, and had

read many tales of whaling in books with wonderful illustrations of boats being hurled into the air or crushed by these monstrous fish.

The Queen of Sheba exclaimed after seeing the wonders of Solomon, "Behold, the half was not told me." So, when near the Canary Islands, in the North Atlantic, the second mate, looking ahead with his binoculars, called out, "There she spouts!" and I saw, about three miles off, a jet of steam rising up from the sea, followed by another and another at short intervals, and, nearing the spot, heard the "blows" like very loud sighs, and saw two great whales roll lazily near the surface close to the ship, the oil from their sides smoothing the waves in their vicinity, and the stately movements of their tails causing eddies to form immediately behind them, I applied the Sheban ruler's observation to myself.

But what are whales? and what is their flesh and blubber like? Well, we know very little about them, in spite of the great advance made in zoology and navigation since the days of Aristotle and Pliny. Where and when they multiply we cannot exactly tell, nor how long they live. They do not come of age until they are twenty years old, and they may exist for a hundred years, or even, as some people think, for centuries.

However, we do know that whales, the largest objects of animal creation, are not fish ; they have no gills and have to come to the surface of the water to replenish their lungs with pure air, the young of sperm and "right" whales being from ten to fourteen feet long at birth, and suckled with milk (resembling that of cows to which rich cream had been added) whence butter has actually been made.

In fact, with the exception of the element wherein, unlike the seal-tribe, they spend all their lives, they have hardly anything in common with true fish. Their huge fins—"gloved-hands" they have been called—lying flat on the water, do not aid their progression, but act as rudders, the propelling power being in the prodigious horizontal tail, twenty-three feet long in large specimens, terminating in what are called flukes, that with up and down strokes can send them along at a speed of over twelve miles an hour.

Through blow-holes at the top of their heads, the vitiated air from the lungs is expelled. Condensing in the atmosphere, it assumes the appearance of steaming spray; and in some of the species, water taken in through the mouth is blown out also.

Vastness is characteristic of the whale's economy,

everything anatomically being on a huge scale, as, for instance, the sperm's heart and aorta (the principal blood-vessel), which are too big for immersion in a very capacious tub.

Beneath the smooth, naked skin lies a layer of blubber, ten to twenty inches thick, which keeps them buoyant in the ocean and warm in hyperborean regions, and, like a thick india-rubber fender, enables them to bear the enormous pressure of the superincumbent water at depths of 4,800 feet—a weight of 200,000 tons to each individual whale! ¹

Their brain is small, their ears are remarkably sensitive to distant sound even when they are under water, their eyes small but sufficient for their requirements, the lids having the comical power of opening and shutting, in fact, of winking. The whale's sense of smell is probably slight, and the nostrils are closed at will by a kind of muscular cone to keep out the water.

As to size, Dr. Scoresby records the length of his biggest "right" or whalebone whale to have been seventy feet; but the sperm whale is often eighty to ninety-five feet long, the rorqual a

¹ They have been known to "sound," or dive, with 12,000 feet of line attached to them—a very great encumbrance.

hundred feet ; and in the Melbourne museum is the perfect skeleton of a whale (a rorqual, I think) about 105 feet long.¹

Large whales are eighteen feet in diameter and about fifty-four feet round. Thus a sperm or a rorqual, a hundred feet long, would be represented approximately by a large and deep sailing barge. In weight, sperms and "right" whales vary from seventy-five to two hundred and fifty tons. The smaller cetaceans measure from twelve to twenty-five feet long. The family are generally of a shining blue-black above, and white or grey below.

Whales' flesh resembles coarse beef in colour and texture, and, properly treated, would make excellent dog-biscuits, or perhaps a substitute for oil-cake.

The cetacean family—and it is a large one—may be divided roughly into two classes: the toothed whales, and the toothless or baleen whales ; but there is some confusion respecting the exact nomenclature of several of them, and, doubtless, many kinds unknown to man exist in the great

¹ The Ostend whale of 1827—probably a rorqual—exhibited in London, was ninety-five feet over all, and a whale of the "right" kind was washed ashore near Lowestoft in October, 1899, measuring eighty feet.

waters that roll around the mysterious Antarctic continent.

We have the sperm or cachelots, the "right" whales, rorquals, and finners of several kinds, including blue-blacks. There are the bottle-nose or caing whales of the Orkney and Shetland Islands; black fish; the fierce grampuses or killers, with tall black dorsal fins—tigers of the sea, devouring dolphins, and even porpoises—and the belugas¹ or white whales, natives of Arctic seas, bluish-grey when young, glistening milk-white afterwards, sociable and gentle in disposition, and probably subsisting on plaice, flounders, and salmon. A living specimen was exhibited at the Westminster Aquarium in 1878, and fed principally upon eels. Besides these there are hump-backs, beaked whales, and the pigmy whales of southern seas.

The chief of the above cetaceans are the sperm, the "right," and the rorqual. Between the sperm and the "right" (best known of all whales) the difference in shape of head and in nature of food, is very remarkable.

In its enormous blunt head, like the fore part of

¹ In the summer of 1904 a beluga about twelve feet long was seen in Loch Struen for days, spouting half a mile from the shore.

a ship with its bows sliced off, the sperm has mighty jaws, the lower one set with teeth, sometimes weighing five pounds each, that fit into a groove at the side of the palate ; while its throat is capacious enough to swallow a man.

The head looks absurdly disproportionate, being one-third of the sperm's length, and appears to be an encumbrance. But it is not so. The bulk of it contains oil, so that it has a tendency to rise above

SPERM WHALE.

the surface, and thus elevating the blow-holes, aids the sperm in coming up from great depths.¹

¹ In January, 1905, it was ascertained that the break in the cable between Seattle and Alaska was made by a huge whale, whose jaws, when the cable was raised from the depths of the Pacific Ocean, were still entangled in the wires and rubber insulation. Experts declared that the whale had been dead a considerable time. This is not the first time that whales have been responsible for a cable breakdown, but seldom is such glaring and convincing evidence of guilt forthcoming.

It feeds principally upon cuttles, sometimes of monstrous size, and possibly it searches for these terrible decapods in the dim recesses of the ocean, dragging them out after a fashion no other creature could manage to do unscathed.

Sperms appear to have some means of inter-communication, for, when swimming in herds or schools, often two or three hundred strong, they rise, sink, and even spout, in unison, as if at the word of command from the bulls or leaders.

There can be no greater contrast to the sperm than the "right" whale. In size slightly inferior to the sperm, its means of propulsion are the same, and so are a few other anatomical details, but the head is quite different, being proportionate to its length, and modelled with fine lines like a clipper.

The "right" whale of the northern hemisphere is supposed never to cross the Equator, and is different from the Antarctic "right" whale;¹ while the sperm whale seldom comes very far north of the Line.

The construction of the right whale's mouth is its characteristic feature. It is fitted with a wonder-

¹ The "right" whales of Japanese Arctic waters are called "boweads," though they are the same as the Greenland whales.

ful arrangement of fringed plates, called baleen, depending from the palate, numbering quite three hundred, and sometimes weighing two tons. They fill up the sides of the whale's mouth completely, and act as a sieve or strainer through which the water passes and runs out again, leaving behind, entangled in the sieve, innumerable crustacea—the size of house-flies—that prey upon the minutest of animalculæ, swarming in Arctic seas to such an extent as to colour them for miles and miles. These crustacea, that constitute the “right” whale's food, deposited on its huge tongue (20 feet by 9 feet), are swallowed down a throat smaller than a man's hand.

It had always been a puzzling question how this baleen, so much longer than the space it occupies in the whale's mouth—the blades being placed at right angles to the long axis of the jaw—was packed away when not in use; but a discovery made by Captain Gray, of the whaler *Eclipse*, enabled Frank Buckland to explain it.

“When the whale,” he says, “closes its lower jaw he first gently pushes backwards and upwards towards the palate the anterior plates of the baleen; the posterior plates go back under pressure in succession, till all the plates of baleen lie back in the mouth packed beautifully in regular order one

over the other . . . the bundle of hairs from the tips of the baleen fit into a hollow at the edge of the jaws." A marvellous mechanism, which caused the great naturalist to remark that no theory of self-development, but only the omniscience of Him who on the fifth day completed the work of creation, would account for.¹

Last in my summary of the whale species is the huge rorqual, slender and elegant, in outline like a

WHALEBONE, OR "RIGHT" WHALE.

clipper, distinguished by having a dorsal fin which is conspicuous as it tears along the surface of the water. It swallows shoals of small fish, such as herrings and mackerel, and has a small and apparently useless fringe of baleen, but no teeth. When fish are scarce it perhaps uses the baleen to catch crustacea.

¹ Whalebone was in December, 1904, worth £3,000 a ton for choice lots, or more than a sovereign per pound weight.

It is exciting sport to attack the rorqual, as it goes at great speed, being preternaturally cunning and agile ; unfortunately, when killed, it sinks.

Commercially, it used to be almost worthless, but lately, both it and its cousins, the smaller fin-backs, have been extensively utilised in Scandinavia, where small steamers with a special kind of bomb attached to a steel line are used to capture them, the bomb killing them instantly, and the line securing their carcase. In 1887 there existed a fish-preserving factory at Aberdeen that from 200 tons of the blue whale produced 5,000 lbs. of edible extract, each pound yielding 100 pints of soup. The flesh when properly treated resembled reindeer meat without any smell. Not a particle of the *débris* of the carcasses was wasted, but converted into glue, guano, &c. Other kinds of large fish were turned into soup, sausages, and biscuits.

CHAPTER III

OCEAN FISH AND OCEAN FISHING (continued)

AFTER this long introduction I must relate my cetacean experiences.

Seldom are whales seen close to the Straits of Dover, but I recollect that many years ago, when crossing over to Calais, a "school" came close to the mail-packet, and one whale, a sixty-footer, suddenly rose close to the side, and, frightened by our paddle-wheels, arched its back, and dived clean under our hull, rising again about a mile away on the other side.

South of the Line, and just out of the tropic of Capricorn, we (the passengers and crew of the fine old ship *Superb*) sighted several sperm whales. Probably, out of curiosity, eight great fish came alongside and rather alarmed the skipper, for although his ship was of good tonnage and teak-built, it would have been no joke if several hundred

tons of living whale flesh had rubbed up against her sides. There was, however, no getting rid of the creatures, and they kept us company for some time, doing their ten knots an hour without any apparent effort.

Seen so close, their skin looked remarkably smooth and oily, and their somewhat clumsy-looking frames beautifully adapted for slipping through the water with a minimum of resistance.

Until we neared Port Philip Heads we saw no more whales, except a great distance off ; but one lovely morning, when the land about Cape Otway was sighted, and the sweet scent of mimosa blossom and the not unpleasant pungent smell of bush-fires was in our nostrils, two gigantic sperm whales, bull and cow, deliberately crossed our bows near the surface, so close that if the breeze had freshened at the moment we should have run them down or been forced to alter our course.

Everybody crowded on to the forecastle head, whence they could trace their full outline, as with the greatest nonchalance they slowly, very slowly, forged ahead and just cleared our cut-water. One of the passengers, armed with a rifle, before we could stop him, impulsively fired a shot at the bull, who took not the slightest notice of the ball as it buried itself in the blubber. The man received a

sound rating from the captain, who told him that the ship might have been rammed and sunk if the whale had been resentful.

My next experience was on a voyage to South America, the west coast. When in lat. 33 S., not far from Juan Fernandez—sighted in the distance, and recalling the Robinson Crusoe who did *not* live on that island—a mighty rorqual came bowling along on our starboard beam, displaying above the surface his dorsal fin like a danger-signal. He must have been going at the rate of fifteen knots an hour, for, though we were spanking along before a good breeze, every sail set, he passed us as if we were standing still. Most likely he was hurrying to his fishing-grounds off the island, which swarms with rock-cod, cavalhos, congers, and mullet.

It is strange to think of these great rovers of the seas, free to go and come from one island to another, or to distant coasts in search of shoals of prey in shallow waters.

While off the coast of Peru, when I was walking the deck on a bright moonlight night, the stillness—for there was but little wind—was suddenly broken by a series of loud “blows,” or spouts. The ship was surrounded by whales (young sperms we thought they were), youngsters about forty feet long. They were in playful mood,

courting perhaps, and in the clear light we could see them splendidly. They gambolled like kittens, rolling over and over in pure enjoyment of existence, and spouting vigorously. Suddenly they disappeared, and as suddenly reappeared, always within a few hundred yards of our ship, whose hull they may have mistaken for some very big relation of theirs. This went on far half an hour, and had our craft been a whaler, she might have been filled up with oil and spermaceti.

Curiously enough, a day or two after this, we fell in with one of the old-fashioned type of whalers "hove to," "trying out" the blubber of a large sperm, the smoke from her furnaces nearly hiding the masts from view.

In "Animals I Have Known" (chap. xiv.) I describe my adventures with a picnic-party of jolly skippers at the Ballista group, near the Chincha Islands. We then had the following experience with whales as we were sailing merrily home in the evening, the whale-boat dancing before the steady trade-wind, breasting the waves like a cork. When half-way across, a sperm whale rose ahead of us, and, waiting, as it were, until we got abreast of it, acted as a kind of escort. We could have touched it with an oar, and only then realised (familiar though we were with whales

as seen from the ship's deck) the monstrous proportions of these leviathans. It must have been over ninety feet long, and towered above our little craft like a ship's hull.

To tell the truth, we were all somewhat nervous, as much depended upon the humour of the whale. We knew that if, for instance, he were an old bachelor, morose and cruel, that had been cast out of the "school" to live alone, he might turn upon us and crush the boat to pieces with his jaws.

Luckily, the cachelot proved peaceful, and, majestically moving its tail, and winking at us with one of its small eyes, took its departure.

Arctic whales are generally found in the neighbourhood of icebergs or ice-floes, where their food abounds, but in Antarctic regions they are not necessarily seen near ice.

On one of my voyages, a memorable one, we were driven far south in the South Pacific by continuous northerly gales, and when in lat. 60° ran into a vast collection of icebergs, amongst which we remained more or less entangled for twelve days.

The following is an extract from my old diary, recording the incident :—

"*December 12th.*—Surrounded by icebergs of

every variety of height and size, dimly seen in the fog. At breakfast-time the mist cleared completely, rising like a great curtain, and we found ourselves running into what was literally a vast harbour, whose walls were table-topped bergs, many of them thirty miles long. The ship was "hove to," and looking from the foretop-mast-head, the captain with his glasses could see nothing but ice in the far distance, and so determined to go about and make for the north. But the detached ice continued—in one day I counted eight hundred, and then gave up reckoning. Luckily, being the Antarctic midsummer, there was practically no darkness, and there was no fog, but every ten minutes the ship had to alter her course to avoid collision with these ice-mountains, some of which were six hundred feet high. A collision would have meant certain death to all on board, for even if the boats were saved, the nearest land is separated from us by a thousand miles of the most terrible sea in the world.

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January 24th.—The crew are worn out and are ice-blind from continually watching; but, thank God, to-day, after nearly a fortnight's frightful anxiety, we have seen the last of the ice, and are

bowling along on our proper course in the midst of bergless blue water. . . ”

Now throughout that time, hardly an animal or bird was noticed amongst the ice—just a few whale birds and a solitary whale. But when we rounded Cape Horn and were near the Falkland Islands, the ship was for several hours surrounded by them.

At the line of junction, or the space where the Atlantic north-east and south-east trade-winds meet (neutralising each other), to the north of the Equator, a belt of calms is formed, known to sailors as the “doldrums” or “rains,” most aggravating to sailing-ships, the clerk of the weather never apparently being able to make up his mind regarding it, and vacillating between the selection of squalls, puffs of air from all directions, hours of dead calm, or torrential showers of rain.

A good many fish are often seen in the doldrums, and once I espied a large school of black-fish—a species of whale, twenty feet long, black and white in colour, and with a short triangular back fin—chasing the bonita, albacore, and flying-fish, that abounded.

On this voyage the doldrum weather finally broke up with a series of heavy squalls accompanied by several water-spouts (fortunately some

distance off), and a steady trade-wind sprang up from the north-east.

One afternoon I mounted into the mizzen-top, a favourite post of mine, whence a more comprehensive view of the sea could be had than from the poop. Glancing round, my eye was caught by a frightful commotion in the water about twelve miles off on the port bow, the sea being lashed into foam around a big whale, while every now and again a comparatively small fish reared itself up on its tail and fell upon the leviathan's back. "What's up?" bawled out the skipper in response to my shout. "Come and look!" I replied.

In a moment he was by my side. "Why! it's a whale tackled by killers—threshers some people called them," he exclaimed. "Keep her off a point!" he called out to the man at the wheel; and, with her course slightly altered, the good ship was close up to the combatants, who were too absorbed to notice her, and then she being brought close to the wind, we forged slowly ahead with them. The captain, I must add, was an old whaler, a most intelligent man, and like most sailors, a close observer of nature.

Two killers—gladiator-dolphins or sword-grampuses¹ (the names are interchangeable), about

¹ Flesh-eating whales, with formidable jaws.

twenty-five feet long—were furiously assailing an old right-sperm, rushing at it, and with their terrible recurved teeth snatching huge lumps of quivering blubber and flesh from its sides, until the water all around was thick with blood. The poor old whale lashed its mighty tail in impotent rage, bringing it down upon the water with smacks that could be heard a mile off. It was rendered helpless by its own bulk, for its nimble adversaries could twist and turn about five times to its once. It tried to dive, but was either too exhausted or too flurried. One of the killers then jumped up and, like a flail, beat upon its back. The poor thing could only moan and spout, until at last, driven to desperation, it reared its great body upright like a pillar, clear out of the sea, and in falling back its 250 tons weight of flesh sent the spray in all directions like the breaking of a cataract, while its cowardly enemies, first one and then the other, set to and attacked it again as though by preconcerted arrangement.

The skipper could stand it no longer. "Back the main yard!" he shouted, "and get ready forward there with the port signal gun." We happened to carry a couple of really smart brass cannon that, strange to say, were always in perfect order. "Load her with one of the new shells from

the magazine, Mr. Robinson." (This to the mate.) "Aye, aye, sir." Then the skipper, waiting until he got one of the killers in line clear of the whale, took careful aim and fired. It was a splendid shot ; the shell exploded right beneath the beast, who disappeared, as did its mate, who probably dined off the *dissecta membra*.

Wonderful to relate, the poor crippled sperm wearily sculled itself up to our ship, and lay, quiet as a lamb, under the keel. Our skipper would not let it be disturbed, so there it rested for more than an hour, when, somewhat recruited, it came out, gave a vigorous spout by way of showing gratitude, peaked its tail, and, diving to unknown depths, disappeared.

Now I must keep my promise, and briefly describe an old-world ship that used to hunt these ocean monsters. In the beautiful harbour of Hobart lay a real old-fashioned whaler, hailing from Nantucket, U.S.A., which, after a long cruise, had put in for water and provisions. Her name was the *Susannah*, and if Londoners who saw the so-called convict-ship on exhibition off the Victoria Embankment a few years ago can recall her appearance, they will have a fairly good idea of what the *Susannah* was like.

She was about 350 tons register, stumpy to a

degree, her bow and stern almost alike, and with a good sheer, her beam about a quarter of her length, which I estimated at 120 feet, her rig that of a barque, her masts set very closely together without the slightest rake, and the bowsprit sticking up at an angle of forty-five degrees. Her big topsails, hanging loose to dry, and with four lines of reef-points, were on single yards.

Near the main royal masthead was the crow's nest, not the barrel we are accustomed to see in pictures of Arctic expeditions, but a small, double platform secured to cross-trees, above which were fixed two padded hoops, the height of a man's waist, upon which the watcher could rest his arms, and in the roughest sea stand and scan every acre of water for miles around.

Perfectly flush was the *Susannah's* deck, but in the centre, between the fore and main masts, was brickwork, looking like a sacrificial altar, whereon were set two caldrons with lids, reminding one of a Gargantuan kitchen. Beneath them were simply-constructed furnaces, "jacketed" by water tanks to prevent fire. A wooden hopper to hold the raw blubber stood by the side of the furnaces. Her rigging was, of course, hemp, the thick shrouds being attached to very wide chain-plates or channels. At her taffrail were queer wooden

davits, whence hung the dinghy, and from her low, heavy bulwarks were suspended on each side, from similar davits, three of the most perfect models of clincher-built whale-boats, painted a pure white, about thirty-five feet long, sharp-ended at bow and stern, and with graceful sheer, all ready to be lowered at a moment's notice, propelled by sixteen-foot oars, and steered by a great nineteen-footer.

Clumsy as the *Susannah* looked, there could be no steadier craft in a gale of wind, and I was told she would ride like a duck, as dry as a bone, over the great billows of the southern seas, when the decks of ships five times her size would be drenched with salt water.

I hired a boat and boarded her. She looked very weather-worn, but was scrupulously clean. The smell of train-oil, however, could not be washed away, and she reeked of it. The fore-castle was very low and stuffy, and, judging from the number of berths, there was a large crew. Below, in the hold, were many puncheons and huge tuns full of oil, for the *Susannah* had been lucky, and was almost a full ship. Below a small skylight, was an apology for a cabin, and the state-rooms (!) were almost in darkness, being lighted by very small glass ports.

I exchanged civilities with the Yankee captain,

who showed me over his ship, and offered me crackers and cheese in his sanctum ; but, as I fancied they tasted of oil, I did not appreciate them. He then produced a bottle of Bourbon rye whisky, but even that seemed to have contracted the prevailing odour. However, I thanked him for his hospitality, and soon afterwards went ashore.

CHAPTER IV

OCEAN FISH AND OCEAN FISHING (continued)

ALTHOUGH the poet Drayton writes of the "wallowing" porpoise, few inhabitants of the sea surpass it in symmetry of form and grace of movement.

Its adaptability for speeding quickly through the water can hardly be excelled by any living thing. Many a shipbuilder has taken the porpoise as a model for his sailing-clippers, and a racing-yacht built exactly upon the same lines, would probably outsail even the famous *Shamrocks*.

The porpoise's skin is perfectly smooth, and polished as if it were blackleaded, and its form is so elastic that by the up and down action of its horizontal tail it can move in the most graceful curves, presenting hardly any resistance to the waves.

The porpoise is a kind of small whale, with many very sharp teeth. Around our coasts it eagerly pursues herrings, mackerel, and pilchards, and in chase of salmon and trout comes far up certain rivers. Some years ago a small porpoise haunted Putney Reach, playing about between the bridge and Hammersmith, but was shot by some "sporting" boatman, who was afterwards fined for carrying a gun without a licence.

PORPOISE.

Porpoises are familiar objects at the seaside, and occasionally one is exhibited in London on a fishmonger's slab, having become hopelessly entangled in the herring-fisher's drift-nets, when pursuing the shoal.

European porpoises seldom exceed four or five feet in length, but in the wide ocean they often measure four times as much. They are, as a rule, of a bluish-black colour above, and when they roll

their almost white stomachs and flanks of a light shade of black are plainly seen, but the pelagic kind vary considerably in colour and markings.

Being gregarious cetacea, they delight to hunt in schools. When near the surface of the water, the tail flukes and the back with its dorsal fin can be seen. Then they dart a little way down, and in coming up to breathe make a puffing noise, which Frank Buckland compares to the deep sigh of some ardent sweetheart.

A large school of porpoises in rough weather charging down upon a sailing-ship in mighty battalions is an impressive sight. Once the sea around us was covered for miles with them, and they gambolled about our ship, swiftly passing and repassing her bows, as though encouraging her progress.

Then began the fun. Porpoises are harpooned from the bowsprit—for they will take no bait—so the first requisite is a keen-edged whaling harpoon of iron, tough yet pliable, that will bend double and not break. This should be ready for immediate use, as porpoises are erratic and sometimes sheer off at short notice. Unfortunately, though there are generally a couple of these irons on board ship, they are usually stowed away amongst the boatswain's stores, and at the critical moment have

to be looked up, and, when found, are rusty and blunt, and minus their wooden shaft.

A well-stretched line is another requisite. The line, as a rule, is to hand, but is not *stretched*.

A block is also required for the jib-boom, and a skilled harpooner is essential with a bow-line or noose ready to his hand at the bows.

All these, with the exception of the harpooner, we had actually in readiness on board our vessel, and when the boatswain, standing on a rope beneath the bowsprit,¹ burning to distinguish himself, hurriedly and clumsily struck a passing porpoise, he only wounded it. The poor creature—its flesh torn by the barbs and streaming with blood—rushed away, pursued by its cannibal companions, who speedily rent it into a hundred morsels.

Then the captain, an old whaler, condescendingly came forward to the bows, and, wielding the weapon with the greatest deftness, sent it with an imperceptible effort deep into the side of a large fellow just behind the pectoral fin, where it held fast. "Haul away!" he cried, and the hands on the forecastle, pulling with might and main upon

¹ Sometimes the harpooner takes his stand at the bottom of the martingale or dolphin-striker, a short perpendicular spar beneath the bowsprit.

the slack of the line, lifted the quivering body clear up to the jib-boom end ; the captain dexterously slipped the noose over the porpoise's body and closing its grip round the broad fluked tail, the " fish " was easily landed on the forecastle head, and thence on to the main-deck. It was quite dead, having been stricken through the heart. It measured fifteen feet, and we estimated its weight at from four to five hundredweight.

On cutting the creature up, that it was a mammal was at once apparent, its internal organs being like those of a pig, and its flesh resembling pork. Its liver, brain, kidneys, and a choice portion of the meat were reserved for cabin use ; the remainder went to the crew, who, before consuming it, hung it up some days to make it tender. It had a decidedly fishy flavour, but all the same, it is possible that, if very hungry, and if nothing else turned up, one might reconcile oneself to it as an article of food.

Porpoise usually figured at banquets in the olden time, and was allowed to be eaten in Lent, as being not flesh, but *fish* !

There is an old saying that " when porpoises swim to windward foul weather will ensue within twelve hours." Our porpoises came *with* the wind, yet in less than twelve hours we encountered one of the most awful gales I ever witnessed.

As the wind freshened, sail after sail was taken in. It became cyclonic, and in its fierceness beat down the heaving, rebellious sea and prevented the billows from rising. The uproar was frightful, and the wind played upon the rigging as upon a giant Æolian harp. I could not hear a sound of the captain's voice, although he was bawling within a few inches of me. Then came a sudden lull, the ominous pause before the climax. The angry sea had time to rise; and rise it did, mountains high, with foaming crests of indignation at having been restrained. Then, without a moment's warning, the blast was resumed, but from a different quarter—luckily, not ahead. We scudded before it under bare poles for several hours, when, for a moment, the four men at the wheel—old salts as they were—appalled at the towering waves, lost their nerve.

There was a fearful crash. Tons of water fell with steam-hammer force upon the port quarter. The good ship staggered like a stricken hart, stopped dead, and, as she slowly began to answer the helm, gathered way as if painfully wounded, and resumed her course dead before the wind.

We recovered breath, and looked around. Inboard, on stout iron davits, there had hung a fine whale-boat. I say *had* hung, for there was

not a vestige of it to be seen. The davits had been snapped clean off, and the whole thing had disappeared, as well as many feet of thick bulwark; also a small deck-house which we male passengers had appropriated for a card and smoking-room, and had vacated only ten minutes before its destruction.

The ship had broached to, *i.e.*, had been allowed for a second to present her side to the great seas, and, but for the skipper's promptitude, would have foundered from the weight of the successive waves that poured upon her deck.

Finding it was time to run no more risk, the ship was slowly brought head to wind, a ticklish operation, and there she snugly lay, shipping very little water, and with only a rag of a fore stay-sail set to help to keep her steadily to windward.

Night set in, and with it a terrific electric disturbance. Incessant lightning played upon the deck, while the thunder drowned the hurly-burly of the storm. Weird St. Elmo lights, large blue globes of electricity, appeared on the three royal mast-heads and on the iron-bound yardarms, looking ghastly in the pitchy darkness.

In the after-hold was a consignment of gunpowder—about ten tons—and our suspense may be imagined, for we knew that should the lightning

strike the kegs, ship and crew would be blown to atoms.

But the long, awful night passed, and with the dawn the hurricane subsided, and sail was set. Then we ran into a dense bank of fog so thick that one could not see one's hand when brought close up to the face. It lasted for hours, when it lifted suddenly like a curtain, and all was clear around us.

After some days of fine weather we got into warm latitudes, and I began to look out for sharks.

At one time I was possessed with the idea that these sea-tigers were confined to the tropics, although I was aware that all round the Scilly and Channel Islands large sharks (not dog-fish) abounded in the deep water, and were sometimes caught by the pollock and conger fishermen. In crossing the Bay of Biscay I learnt otherwise.

The Bay was smooth; in fact, I have never seen it anything else, though I have traversed it a score of times, once just after the foundering there of the ss. *London* in a memorable gale; but there is generally a mighty swell and heave—the relics of some westerly storm—which produces an uncomfortable motion of the vessel.

As I walked the poop with the captain, he

WHITE SHARK.

stopped short, and, looking over the taffrail, said :
“Look! There goes a Bay of Biscay shark ;
about the biggest I’ve ever seen ! I shouldn’t
like to tumble overboard near that fellow !”

I followed his glance, and saw, not a basking shark, or sun-fish, as it is erroneously called, but the real thing, the *squalus carcharias*, or white shark, with its tall triangular dorsal fin, its body ash-colour above, whitish beneath, its eyes unmistakably cruel. As it rolled over—thirty feet long it was—its terrible mouth seemed hungering for prey. It was swimming lazily, just keeping up with the ship alongside the quarter. The breeze freshened, and we left him behind, but I met many of his kith and kin later on in other latitudes.

Captain Jones told me that in the old days a line-of-battle ship was wrecked off the north coast of Spain, and that many of the crew, in trying to swim ashore, were devoured by sharks near Cape Finisterre.

When we reached the tropics, small-pox and dysentery broke out amongst the steerage passengers, who were chiefly poor people from Glasgow and Edinburgh, whose insanitary habits and oatmeal dietary rendered them—especially the children—peculiarly liable to the latter illness. They died off so rapidly that almost every day

two or three tiny corpses, sewn up in canvas and weighted with iron, were committed to the ocean. Almost simultaneously the ominous fins—at a distance resembling the necks of champagne bottles—would appear from every quarter, and we knew that the mortal remains of those babes and sucklings did not descend to any great depth.

Sharks undoubtedly follow ships where death is expected, but only when they have perceived a gruesome evidence of it. For, weight a corpse as much as you will, it sinks but slowly in the buoyant four-mile-deep salt water of the Atlantic, and sharks can dive!

I shall not forget a touching incident during this serious outbreak of disease. For the sake of a better atmosphere than could be obtained in the hot steerage, an emaciated woman had been brought on a mattress on to the poop. She was rapidly dying of dysentery, and her baby, but a few weeks old, had been buried at sea two days before. "Oh, my *puir bairn!* my *puir bairn!*" kept repeating the woman in her delirium. "The sharks have got ye, my sweet babe! Don't throw *me* to them."

Next day, the poor woman's body—over which

the sublime Burial Service was read while the ship was hove to and all hands were present, shrouded in heavily-weighted canvas, and covered with the red ensign—was slid from the grating into the Atlantic, that “vast and wandering grave,” to await the day when the sea gives up the dead which are in it. It brought to my mind Chantry’s beautiful monument in Gloucester Cathedral of a woman ecstatically rising from the waves (she had been buried at sea) with her child clasped to her bosom—a statue as lifelike and haunting as Roubillac’s better-known Nightingale monument in St. John’s Chapel, Westminster Abbey.

Leaving this painful subject, let me describe shark-fishing at sea, and how we caught ours.

First of all, we must have a special kind of hook, for, remember, we are angling not for a conger that might turn the scale at 100 lbs., or a halibut of 500 lbs., but for a fish whose weight is reckoned by the hundredweight, and for which the biggest Redditch conger hook would be as of little use as a hat-pin. The proper thing is bigger than the largest butcher’s hook, measuring five inches across the bend, and should be made of the finest tempered steel, with a very sharp point, and connected by a swivel with a few feet of well-

tested chain, for many a shark has been lost by a badly-forged hook or defective link.

For the line, one of the ship's small ropes, say the fore studding-sail sheet, will do very well provided it is sound ; and the more there is of it the better.

As regards bait, salt pork is the best, and if it be a little green or rancid it does not matter, as Mr. Shark is not fastidious and does not use his nose. A chunk of four or five pounds will suffice and must be well secured on the barb and shank of the hook, and, as an extra precaution, seized on with a piece of spun yarn. When sharks are expected, the line attached to the chain and baited hook should be ready at the ship's stern.

Now for our capture. We were in readiness. The breeze had gradually died away, the sea had subsided into a calm, and reflected the bright light in rainbow hues, while each roll of the ship made the sails flap with a thunderous noise, and with much detriment to the canvas.

Leaning over the stern, the doctor closely examined the rudder and presently called out, "A shark is not far off. Look !"—pointing downwards. Craning over, we saw two or three small striped fish near the sternpost. These were the pilot or rudder fish that follow the shark to devour the

parasitic insects off its body, and not, as hoary nautical tradition avers, to act as "guide, philosopher, and friend."

The doctor was right. We saw the unmistakable back fin of a huge shark slowly advancing towards the ship. The bait was lowered a few feet under water, purposely with a splash, and a turn taken with the line round a belaying pin on the rail. We had a group of willing helpers at hand, and one man ready with a bowline.

There was hardly any "way" on the ship, and the line hung almost perpendicularly, and the pork glistened in the water in a ghastly way, suggestive of a human limb.

Up came the monster with its pointed snout, malignant eyes, and general predatory appearance. It looked at the bait suspiciously, and sheered off for a cruise round the ship. Having reconsidered the matter, and being undeniably hungry, it again approached the meat and covered the bait, as it were, with its head, turning slightly over in the process.¹

The second mate, who superintended the proceedings, gave a tremendous jerk to the line, the barb went home, the shark was well hooked, and

¹ The notion of its turning literally on its back to seize its prey is apocryphal.

the struggle began. With a bound the creature tried to make off, but the line was skilfully played out—the belaying pin regulating its speed—to its utmost extent, and another line was bent on. The strain gradually slackened, and at last ceased. “Haul in your slack!” cried the excited mate, and like a huge log the beast was pulled closer and closer. It had shot its last and only bolt, and was hauled, hard and fast, under the stern. The bow-line was then arranged round the line, dropped down over the shark’s head and body, and hauled taut behind the back fin, and thus the shark was lifted on to the poop. “Stand clear!” we all cried, as the huge thing was pitched down upon the main-deck. When the lines were cut, it revived and rampaged about furiously, seizing a stout wooden capstan-bar in its awful jaws and grinding it to matchwood. An over-inquisitive boy, getting too near it, received a blow from its powerful tail which knocked him flat on the deck, to everybody’s amusement but his own.

The shark’s writhings had to be stopped, so the carpenter, armed with his biggest and sharpest axe, after much skirmishing and many futile blows, contrived to sever its backbone and to chop off its head, but half an hour elapsed before the muscular contraction (especially of the heart) ceased.

On cutting open its body strange objects were found—empty meat and sardine tins, tin pannikins, fragments of the ship's cat that had departed this life the day before, a sheath-knife, a clay pipe, and part of a little child's foot and a sock, which made us fear that the poor bereaved mother's conjec-

REMORA (SUCKING-FISH).

ture concerning the fate of her child was indeed a true one.

The shark's skin—attached to which was a remora, or sucking-fish, one of those strange creatures with an apparatus on the crown of its head by which it adheres so tightly to the shark's stomach that it can only with difficulty be got

away—was carefully removed and utilised as sand-paper. The backbone (to be turned into walking-sticks) was the legitimate prize of the second mate, and the jaw I purchased from the carpenter. It was a grim and terrible apparatus, with five rows of saw-edged, triangular teeth, whose sharpness I unpleasantly experienced when cleaning the thing, cutting two fingers to the bone. Its flesh, white and firm, was eaten by the sailors. The flesh of large sharks has a musty flavour and their blood a horrible smell ; but a baby shark is by no means bad eating.

Our prize was sixteen feet long, and, judging by the development of its rows of teeth, must have roamed the ocean many years. It was of the ordinary white kind that swarm near solitary islands like Fernando Noronha and Los Roccas and snatch the fish from the fishermen's lines at the boat's side.

CHAPTER V

OCEAN FISH AND OCEAN FISHING (continued)

DOLPHINS. The traditional idea of these fish, as shown in almost every sea-picture or piece of sculpture from the earliest times, is a marine creature with arched back and upturned nose, spouting water like a whale, but from two orifices at the top of its head. Neptune and the Tritons are always depicted with these lively attendants (sometimes harnessed to their sea-chariots), and I suppose ninety-nine out of every hundred persons on a first voyage would even now expect to see some such fish and anticipate its changing into all the colours of the rainbow when dying.

These fish, known to sailors as dolphins, to foreigners as dorádos, are true fish with vertical tails; but the real dolphin is a cetacean common in the Mediterranean.

Dolphins—or dorádos, as the Spaniards call

them—are elegant in form, about four feet long, from thirty to forty pounds in weight, and many-coloured—ultramarine, blue, red, and silver, with orange-green tails; dazzling-looking objects as they leap out of the water in pursuit of flying-fish, but in their death-throes the hues rapidly subside into a dull grey.

They go in schools, and love to escort a ship, playing about her in joyous fashion, darting swiftly to the surface every now and again like beams of light. In Addison's "*Metamorphosis of Ovid*," book iii., the mariners of Dionysus' vessel are seized with madness, spring into the sea, and are changed into dolphins.

"Full nineteen sailors did the ship convey ;
A shoal of nineteen dolphins round her play."

The old-fashioned way of catching them is from the jib-boom end, by a kind of rough fly-fishing, but the easier, and by far and away the most exciting, method is with a spoon or other artificial bait from the stern.

The fisherman who chooses to adopt the former method secures himself with a lashing to the extremity of the slender, tapering spar called the jib-boom, a perilously conspicuous position, whence the great ship can be seen, as it were, advancing

towards him, her cut-water pushing the waves on one side as she triumphantly sails on her course.

He has a not too long cod-line, a stout conger-hook baited with a strip of white bunting or linen, or, better still, with a piece of salt-pork skin, cut so as to roughly represent a small fish. Describing a curve with his line, he occasionally, with a jerk, lets it dip into the crest of the approaching waves. Suddenly a guileless dolphin makes a dexterous spring at the lure and hooks itself, when lo! the ocean angler has a fish weighing perhaps forty pounds, dangling at the end of his line, the ship, as she rushes along, dragging the whole affair at a sharp angle beneath him.

The fish struggles violently, but the fisherman steadily hauls. The thin spar vibrates, and then the fisherman appreciates the advantage of being well lashed. It is an exhausting and difficult business getting the "catch" on to the deck. An expert always has with him a sack or big basket, which he fixes so that he can plump the dolphin into it as soon as it is hauled up. In this way he can, unaided, eventually make a large bag.

For the second method, the best lure is a newly caught flying-fish; failing that, an imitation one, a stout spoon-bait, or the largest and gaudiest salmon-fly procurable. When the ship is going at

a moderate speed, the line is cautiously paid out, and, a hundred yards or so having run out perfectly clear, it is slightly jerked, and the fisherman sees, with a thrill of delight, a streak of silvery light in the dark blue water shooting out from beneath the hull, then another, and still another.

They are dolphins. Making for the bait, they disappear. Then comes a tremendous tug at the line on the part of the fish, and a handsome jerk on the part of the angler, and he is fast into a dolphin! It is played at first like a salmon, but it wearies at last, and is triumphantly hauled over the taffrail, a by no means useless prize, for fresh dolphin-steak is not to be despised.

Another way, as Mrs. Beeton would remark. The "grains" is a weapon resembling a Neptune's trident—a quintet of barbed points that by a screw and nut arrangement can be used either in a line or at right angles. The socket is fastened to a light ash-shaft with a heavy ball of lead at the top, and a line attached. When a fish is struck the shaft turns upside down, completes the impaling, and secures the fish.

Other oceanic fish, usually captured with a line from the jib-boom, or with the grains if skilfully wielded, are the bonitas and albacores, both belonging to the mackerel family. The former are hand-

some fish, with four dark blue stripes on each side, are about three feet long, and sometimes weigh twenty pounds. They roam in large shoals, their chief prey being flying-fish, which they ruthlessly pursue. Their flesh resembles beef, and, like many other ocean fish, their entrails occupy a very small space in their bodies.

BONITO.

Albacores resemble tunnies. They usually weigh about 250 lbs., and have been known to turn the scale at 400 lbs. In length they measure seven or eight feet, and have a great dorsal fin with crown-like spikes, and are covered with large scales like a suit of armour. Their colour is silver, blue, and green.

To catch an albacore with hook and line is fine sport, a whole flying-fish being the best bait. It is

as much as six men can do to play the monster, so furious are its rushes for liberty, and even when exhausted and brought close up and its capture certain, it will, as I have witnessed, make a final dash with such vigour as to run out nearly a hundred fathoms of line. It then usually succumbs, and is hauled up like a log.

The fish I saw captured was in magnificent condition, glistening with health—which reminds me that rarely or never is a fish that is weak or off colour caught at sea, for the simple reason that if injured or weakly it is instantly snapped up by its comrades. Thus only the fittest survive.

We found that, as with the tunny, the choicest part of the albacore was the belly, very much like veal. Some of the other portions were pickled, and made very passable salt beef.

Far away from the land, wanderers perhaps from the shallow waters of the Gulf of Mexico, where sun-fishes abound, one comes across a few solitary specimens either asleep near the surface, their back fin showing, or lazily rolling along, looking for all the world like a big cart-wheel, or a huge turbot swimming on its edge.

The sun-fish is well known from its marked resemblance to a sun with two rays, the dorsal fin being connected with the ventral, which latter does

duty as a tail. Frank Buckland says: "Let any one utilise the inner surface of his own hand, imagine all the fingers taken clean away from the palm, draw a fish's eye on the skin at the base of the forefinger, and a pectoral fin in the centre of the palm, erect a thumb as high as possible, and imagine another thumb to match affixed directly opposite the upper one to the lower part of the palm, and you have a fancy portrait of the curious sun-fish, fins and all." They are good-sized fish. I have seen them five or six feet in diameter and half a ton in weight, often in company with sharks and taking not the least notice of them.

They have small mouths and no real teeth—the jaw being like a turtle's—and their eyes are large. They are harmless creatures, vegetable-eaters, and browse at the bottom of the sea, varying their diet with molluscs. Their flesh, containing but little muscle, is said to be poisonous, and is full of oil, for the sake of which they are sometimes captured, though often when the fish is harpooned the oil escapes, being more active than it looks. A better method is to shoot them with a rifle, and I recollect seeing one that had been thus killed floating in Corio Bay, Geelong.

Sun-fish have been found in the English Channel, and one, weighing 250 lbs., was captured off Cornwall on June 22, 1850.

The following paragraph appeared in the *Globe*, September 26, 1904 :—

“The Press Association says a novel capture has been made in the river Medway at Rochester. A man named Buckingham went to witness the launch of a barge, and noticing a fish leap from the water and fly along the surface, he struck at it with his walking-stick, with the result that he was able to capture it. It proved to be a fine specimen of the flying-fish, measuring fifteen inches in length. The ‘wing-fins’ are very prominent. It is most unusual for so tropical a fish to come to our chilly shores.”

As soon as an outward-bound ship approaches the tropic of Cancer—*i.e.*, lat. $23\frac{1}{2}^{\circ}$ N.—flying-fish generally commence to make their appearance. I say *commence* because at first they are seen either singly or, at the most, half a dozen at a time. Sometimes when watching the dark blue water stirred into motion by the steady trade-wind, one is astonished to see an object resembling a big dragon-fly jump up like a jack-in-the-box and skim along in the air close to the surface for sixty or even a hundred yards, and then, as if shot, drop with a splash into its native element.

It is a flying-fish, probably pursued by a dolphin or an albacore, and its only hope of escape is to

make use of this singular power of flight. It is possible, however, that they leave the water merely for the sake of exercise, and that their flight is one of joy and not of fear.

It has frequently been stated that while the long fins continue moist, flying-fish can sustain themselves indefinitely in the air, flapping their fins like a bird. But I have watched them day

COMMON FLYING-FISH.

after day with a powerful field-glass, and have never seen them do anything of the kind, but I have also observed that they generally fly at an angle to the wind.

The flight, which at the outside does not exceed 150 yards, is almost exactly like that of a partridge, but is not performed by the vibration of the wings, but rather by a rush under and out of the water, the wind materially aiding.

That they fly on to the deck of deeply-laden ships at night, attracted by the binnacle lamp, there can be no doubt, though it has been denied ; and it is also true that they have been known to come through the big square ports of old-fashioned craft.

Sometimes, in a very light wind, the Barbados method of luring them is resorted to. A boat is lowered, and rotten fish pounded up, contained in a bag, is let down over the bows into the water ; the oil exuding creates a dead calm, attracting the fish that are waiting for a fresh breeze to spring up. They rise to the surface, and if dead silence is maintained, approach the boat, and are simply scooped up with a large landing-net ; but if there is the least noise they instantly make off. In Barbados, so successful is the method that the boats have been known to sink from overloading, but when safely landed they sell at the rate of six pounds for a penny. But at sea few captains allow their boats to be let down for this kind of fishing.

There are several varieties of these gaudy oceanic fish—the common, the sea-swallow, the mesogaster, and the guinea-man. This last is a large kind with four wings, which are merely an abnormal prolongation of the pectoral fins. South

of the Equator flying-fish are larger than those north of it, but their extreme length is not more than eighteen inches. In appearance they resemble herrings, and, like them, are excellent fried. Their colour is generally brown and blue above, orange

PILOT-FISH.

at the end of fins and tail, and their wings a deep blue.

In my description of shark-fishing I mentioned that the doctor, looking over the stern, discovered three or four pilot-fish playing about close to the rudder. They are beautiful little objects, nine inches long, the size and shape of small mackerel, to which tribe, the *scomberidae*, they belong.

Our sailors all declared that pilot-fish could not be caught with hook and line, and the captain said the same. Our doctor was a born fisherman, and between us we hit upon a plan of catching one as a specimen. I happened to have with me a roach-line and several small hooks. With these and a piece of pork fat, one scorching hot day in a dead calm, we began operations.

Directly the almost invisible line, weighted with a bullet, was lowered, the fish went for the bait, and we caught one, leaving the rest in peace. It was a little beauty, a glittering emerald-green, its sides striped with broad bands of ultramarine, its much-bifurcated tail a lovely blue, each tip being snowy white. It reminded us of a par. It was placed in a jar of spirits, and consigned to the doctor's collection.

Stray pilot-fish have been captured in Ramsgate Harbour, probably following a ship ; but at Falmouth they are by no means uncommon, dozens having been seen during October, 1856, in various parts of its beautiful harbour.

CHAPTER VI

OCEAN FISH AND OCEAN FISHING (continued)

WHEN I stepped on board the *Superb*¹ for the first time, my ideas about turtles in their native element were rather hazy. I knew that, although found at sea, and living a considerable part of their lives away from land, they were not fishes, but marine reptiles.

Once, when going along Leadenhall Street, I noticed an inquisitive and expectant crowd blocking up the pavement round the tail of a big van that was backed up to the entrance of the "Ship and Turtle Tavern." On joining the group, I found they were gazing at several large turtles that lay helplessly on their backs in straw, and somebody suggested that they looked like a set of aldermen, drunk and incapable, after an old-fashioned city dinner!

On one of my birthdays, I remember being

¹ I made several voyages on the *Superb*.

taken by a relative, whose business lay near the Mansion House, to Birch's, in Cornhill, and being shown a lot of turtles huddled together in dark tanks in the cellars, and being told that only a very small portion of their insides could be utilised—hence the costliness of the soup. I also learnt that *calipash* meant the flesh from the upper, and *calipee* the meat from the lower shell of the edible chelonian. Finally, in an upper room, I tasted for the first time a plate of clear turtle, and with it a glass of Madeira that *en regle* had, in the cask, voyaged several times to India and back before being pronounced fit for bottling.

This constituted the extent of my knowledge of turtles. Thus, when during the awful gale described in a preceding chapter, a turtle was espied to windward of us, I noticed how unlike the Leadenhall Street turtles it appeared, and how thoroughly comfortable and lively it seemed to be in the turmoil of the great waters.

Gradually it came alongside, all but within striking distance, when, to our disgust, although both harpoon and grains were ready, the furious wind and sea drifted us to leeward out of reach of the turtle.

Later on, some hundreds of miles from the island of Ascension, we managed to secure one.

Why turtles should wander such distances from the comparatively shallow waters where they graze at the bottom upon membranous fuci, it is difficult to tell, as seaweed, except in the Sargasso Sea, does not float upon the surface of mid-ocean. It is certain, however, that female turtle regularly come ashore at Ascension from very long distances, during December and the following six months, and lay their eggs.

Anyhow, on this occasion, there was the turtle, the real unmistakable green turtle, not far from the ship, and we determined to make it ours. It being a dead calm (not a "flat" calm, for on the ocean's surface there is always a perceptible heave and swell of the great waters beneath), we approached the captain and begged the loan of a boat, which was granted, two experienced hands being sent with us.

We had read that should the turtle be asleep—as turtles so frequently are, or appear to be—a dexterous swimmer might dive, come up under the turtle, and with a skilful twist turn it helpless on its back. But we did not build our hope of soup upon any such acrobatic feat.

Harpoon and grains, polished and sharpened to perfection, were in the bows, wielded by the two experienced hands. With muffled oars, in dead

silence we approached, and ceasing to row, slowly sculled the boat up to the unsuspecting victim.

Habet! And the harpoon, describing a parabola in its flight, was buried deep through the soft shell into the turtle's vitals. Asleep? Not a bit of it. Off it went like a steam-launch, with the haft of the harpoon sticking out of its back like a mast. But only for a short distance; the wound was too deep, and the turtle succumbed at the bottom of the boat, but not before it had, with its sharp-edged beak, nearly severed a finger of one of us who had incautiously poked it about the head. It was, as we subsequently found, a splendid female full of eggs, and weighed about 5 cwt., just the proper size for table use, the monsters of 7 or 8 cwt. being rather coarse.

For a wonder the ship's cook—nautically the "doctor"—was a real artist, and not some broken-down A.B., or negro, whose only recommendation was that, being black, the dirt on his person was undiscernible.

Our "doctor" was no sailor. He was a land-lubber, but could just manage to take his station at the fore-sheet, when the ship went about and let go as the stentorian order, "tacks and sheets," rang over the decks—a station hallowed by the

tradition of centuries because of the proximity of the aforesaid rope¹ to the cook's galley.

What the "doctor" had been ashore we never found out, but we concluded that he had been a cook in some city restaurant, had got into trouble, and had been obliged to leave his country unostentatiously. However, he gave us, in the cabin, the most perfect turtle-soup, thick and clear, with the eggs in it, as it is served in the Leeward Islands, and which in England is represented by forcemeat balls. This was followed by turtle-steaks or cutlets—a dish, when the flesh is fresh, fit for the gods.

En passant, I would remark that all our food was excellent, and the pea-soup, cooked with a lump of very fat salt pork, was unsurpassable for its sustaining qualities in cold weather.

During the long and tedious calms that delay sailing ships in the neighbourhood of the Equator hundreds of medusæ (sea-blubber) are always in sight. They vary from one inch to as much as twelve inches across, and in the China seas are as big as a keg. Crimson and white in colour, cylindric,

¹ Foresheet, or rope attached to the lower corner of the big foresail, running through a block cut at an angle into the bulwark, and made fast to a stout cleat on the top rail.

bell, or mushroom-shaped, they are mere masses of water cells, out of which, when the creature dies, the fluid runs, leaving only an imperceptible shred of membrane.

Some propel themselves by means of cilia, or hairs, which act like oars, others by paddles at the circumference of their discs, and others by an umbrella-like contraction and expansion of their bodies. These invertebrates have stomachs that can digest crabs, and with their tentacles or filaments below they can catch and retain small fish. They vary in colour, but at night, especially when the water is agitated by waves or by the rapid passing of fish, they assume the most brilliant hues, emitting blue and silver light.

One very fine, but dark, night a number of dolphins came about our ship, evidently in hot pursuit of something, darting in all directions like arrows. The sea was a mass of phosphorescence, and the vessel's wake a broad pathway of silver. At the bows each wave broke into sprays of brilliancy. Far below, we could see the entire form of the dolphins. They left a train of fire behind them, like rockets, as they chased their prey, while myriads of medusæ floated around like lights.

These jelly-fish are harmless to man, but not so

the *physalia*, or Portuguese men-of-war. This medusa, which grows to a large size, must not be confounded with a nautilus. The latter has a shell, while the medusa has a tough, membranous, bladder-like body with a kind of serrated dorsal fin, a short curved tail, and, streaming below the bladder, a thickish central tentacle, surrounded by many very fine antennæ. It looks something like a brilliantly coloured cocked hat, or a glengarry cap, floating aimlessly on the water; but it has powers of locomotion, by means of tentacles, and a blue and purple sail-like membrane (erectile at will) at the back fringed with rose-pink, that catches the wind and helps it along.

At times the ship passes by an immense number of these men-of-war of all sizes. They can sting like gigantic nettles, and if brought on board, inexperienced passengers are entreated by the more knowing ones not to meddle with them.

Once, when our ship's carpenter was bathing in a sail secured to the side (a precaution against sharks), he was so severely stung by one of these "Portugees," that he became paralysed, and afterwards developed a disease like the itch, probably caused by the acrid matter in the beast's tentacles, and not, as some of us suggested, by any electric property in them.

In Sydney Harbour I once swam up against a large specimen, and half my body was so benumbed that I with difficulty got ashore. When I tore off the tentacles, they left long red lines on the flesh, which ached and stung for many days.

Now I must discourse about the Gulf-weed (*Sargassum bacciferum*), which is carried into the North Atlantic by the Gulf Stream.

When Columbus, a thousand miles to the west of the Canary Islands, found the ocean covered with weed, no wonder his crew were alarmed, and imagined they had reached the *ultima thule* of navigation, and that the weeds concealed submerged rocks or land.

This was the famous Gulf-weed, which gives its name to a vast extent of salt water, known as the Sargasso Sea. Mysteriously it floats, unattached to the bottom, in relatively shallow water, whose soundings seldom give more than a hundred fathoms, a pretty berried plant, not unlike the branches and leaves of the mimosa. It does not look like seaweed, resembling more a land plant, and is of a vivid olive-green colour, but though often carefully bottled in salt water and brought home, the tint fades, and gives one a poor idea of its beauty *en masse*.

At first, isolated groups of it are passed, then it

thickens hourly, and finally, if the ship's course be through the centre of the sea, which it seldom is, it becomes dense enough to impede navigation, and the water looks like a meadow thick with grass. We only touched the edge of it, but contrived with a bucket to scoop up a fair quantity for examination.

The weed is the home of all kinds of small creatures—crabs, strange molluscs, delightful little sea-horses, curious jelly-fish, and the spawn of cuttle and flying-fish (the latter resembling white currants), also berœes (nutmeg-shaped medusæ), from half an inch to an inch long, tentacled, and provided with paddles. So fairy like and translucent are these, that they are invisible save when their paddles send out iridescent hues on the water, and thus catch the eye.

No doubt shoals of fish hover beneath the weed, which must be a splendid feeding-ground, but they rarely come to the surface. We saw none.

Looking over the ship's side when a lively sea is on, the water appears to be devoid of animal life; but let a tropical calm set in, and it is at once evident that the ocean's surface is studded with minute organisms. To catch them, our doctor had provided himself with a big meshed landing-net mounted on a long rod, but I had to improvise one out of some stout muslin and an iron cask

hoop fastened to a line—a clumsy but effective apparatus.

With a rope tied securely round our waists, the doctor (a stout, elderly man) and myself used hour after hour to endeavour from the mizzen channels¹ to capture specimens—no easy matter while the vessel slipped along. Directly a desirable object came anywhere near we went for it, the doctor prodding not very deftly with his net, while mine, reaching further, often dipped up something. Even when my companion did manage to get his net under a minute specimen, he could not secure it, as the mesh was too large, whereas in mine they stuck fast, and I scored.

We, of course, had the use of our hands, but when the ship rolled we rolled with her, the water once submerging us to the waist. But we cared not ; our only concern was lest a stray and hungry shark should choose to make a snap at us.

Most of the organisms we caught were unknown to us, and even with the help of the doctor's library could not be identified. However, two delightful little creatures we discovered to be respectively *Hyalea Tridentata* and *Ianthina*. The former was a fragile, turtle-shaped, translucent

¹ Broad, stout, wooden ledges set at right angles outside the ship to spread the shrouds that are attached to them.

yellow shell about half an inch long, with tiny yellow paddle-like wings springing from lateral clefts in the shell, with which it travels over the surface in hurried but fine style. The shell is closed at the sides, but is open anteriorly. The latter was an exquisitely formed winkle of a pure ultramarine tint, so minute as to be almost invisible to us as we bent over the water.

As to ocean fishing generally, it would be well for the modern enthusiast to provide himself before starting on a long voyage with plenty of the best tackle, and thus avoid the necessity (a common occurrence in former days) of worrying the mates for the loan of lines and hooks.

Let the lines be well-plaited "Manchester" in forty-fathom lengths, and let the hooks be suitable for any fish up to a hundred and fifty pounds weight. Have plenty of boat-shaped and pear-shaped leads, and a good supply of wire gimp, also some three-inch stout Mahaseer spoons, silvered and gilt, with treble hooks at head and tail, attached by swivels to rust-proof wire traces, and do not omit some artificial flying-fish and a few of the largest and gaudiest salmon-flies procurable for dolphin and albacore, and, lastly, have ready a few chop-sticks and paternosters for harbour-fishing.

As soon as you can, tow your lines overboard to get the kinks out, for a sea-fisherman's line should be like a piece of wire. Some big winders will prove handy.

I mentioned swivels for the spoon-baits. If these are absent the line unravels and gets into a frightful mess when hauled up. The captain and I spent nearly a week, to the amusement of the passengers, in clearing a long, tangled line, of which we were joint owners. We were unmercifully chaffed because, although we were constantly fishing, we caught nothing until the end of the voyage, when, approaching the coast of Australia, we captured barracouta, of which more anon.

Fishing-tackle, together with harpoons and grains and a double-barrelled gun, with cartridges, should be kept ready in all the large boats at sea, besides biscuit and water, which should be periodically overhauled.

A stout frying-pan, with a few tins of suet and dripping or a bottle of salad-oil, for cooking the catch, is always useful ; while, if in the bows of the boat there is a piece of sheet-iron, a fire can be safely made, which can be used for cooking during the day and, in case of possible shipwreck, act as a signal of distress at night.

Fish always assemble round a floating object, and, for the want of means of catching them, many a boat's crew has starved to death. If they were stranded on a solitary island or reef, the gun would secure birds and the fishing-tackle fresh fish for all.

I have only touched the fringe of the great subject of ocean fish. In the beaten track of navigation their variety is not great, but what is contained within the boundless wastes of water where no ships "draw furrows through the main" no man can tell. There are tribes of fish that are strictly oceanic, that breed, live, and die in mid-ocean and never approach land.

H.M.S. *Challenger*, the King of Portugal's yacht, the *Amelia*, and the Prince of Monaco's fine steamer have proved that fish exist in the great depths in profusion. The Prince actually set traps for them successfully at the depth of three thousand fathoms; and possibly the future, with its mechanical and scientific development of appliances, will witness fishing with hook and line at the almost inconceivable depth of four or five miles.

When we recall the fact that three-quarters of our globe is water, and that on the earth, though pretty well explored, there are still undiscovered

regions where unknown birds and beasts exist, who shall say what the untraversed portions of the ocean may not contain !

To fit out a big yacht like the *Veronique* to search for hypothetical treasure in a lonely island in the Pacific may seem romantic ; but to the nature-lover, to roam from sea to sea supplied with every means of securing and preserving, in the interests of science, the yet undescribed denizens of that "great and wide sea, wherein are things creeping innumerable, both small and great beasts," appears a far more useful and philanthropic enterprise.

CHAPTER VII

AUSTRALIAN FISHES

AUSTRALIA used to be considered a non-piscatorial continent. Mr. J. F. Vesey Fitzgerald, ex-Colonial Secretary of Victoria, writing in 1881, says :—

“The rivers do not contain many fish of any great value, either for the angler or the table. . . . The sea is well supplied with fish, but few of any superior quality have been taken.” Even Mr. F. G. Aflalo, in the Introduction to his “Natural History of Australia,” remarks that, “The sea-fish absorb most of one’s attention, as the rivers only furnish a couple of fish of either great commercial value or scientific interest. . . . For table purposes, they (the sea-fish) are a long way behind the products of colder seas, and a number of our most important families are either wanting, or, if present, systematically neglected.”

Until a generation ago, there seemed to be

justification for such opinions, fresh fish being almost unprocurable. There were no fish-shops in the big cities, but fish was intermittently hawked about by Chinamen, who would occasionally put to sea, secure a good catch, and thus manage to pick up a living out of a despised little industry.

People up-country sometimes procured a dish of eels from the nearest creek or station dam, or a Murray cod from the large rivers, and in Sydney there was always a demand for oysters (easily obtained from the numerous bays and the inlets of its fine harbour), which were largely exported (shelled, in bottles) to Melbourne and Queensland. Imported tinned fish—salmon, cod, ling, bloaters, and sardines—was mostly consumed, although an abundant supply of the live article existed within easy reach.

The reason of this was lack of enterprise, in plain English *laziness*, on the part of the colonists, and the cheapness of beef and mutton; though this more solid dietary was not suitable for a climate whose summer temperature frequently registered 90° in the shade.

Now all is changed. There are excellent fish-mongers in Brisbane, Adelaide, Sydney, and especially in Melbourne, where, at the bottom of Spencer Street, is a fine fish-market with up-to-

date refrigerating chambers. Brisbane, too, has a good market in connection with Geddes & Co.'s freezing-works.

The piscine resources of the Island Continent have now been recognised and developed ; fisheries are officially preserved and encouraged ; the use of ice has enabled the fisherman to bring in his catch in excellent condition from distant grounds ; while choice fish from other countries have been acclimatised and widely distributed.

Certain districts of Australia have become anglers' paradises, and fishing has developed into a perfect craze with Australians ; and if an epicure, dining at a good hotel or restaurant, is not satisfied with the fish course, he must be hard to please.

Australian visitors to London often complain, not only of the dearness of fish, but of its insipidity, comparing it unfavourably with their own Murray cod, schnapper, mullet, ceratodus (lung-fish, or Queensland salmon), barracouta, and the excellent Tasmanian trumpeter, which combines the best qualities of sea and fresh-water piscines. Personally, I prefer this fish to any other I have tasted ; but in Australia all the foregoing are of necessity eaten perfectly fresh, since they will not keep, even if refrigerated, but rapidly decay.

Australians maintain, and with reason, that our

BARRACOUTA.

fish, excellent as it is if consumed, I was going to say, *on the spot*, but at any rate within a day after being caught, deteriorates as alarmingly as their own when kept in ice ; and they assert that most of our fish in England is preserved from decay for weeks on ice, and when served up, disguised in piquant sauces, has no more flavour than a piece of flannel !

There is no gainsaying this. I have dined with wealthy epicures, upon whose tables the turbot and Dover soles have been flabby and tasteless—so difficult is it to ascertain, even from the best shops, how long the fish has been outside its native element.

Doubtless, as Mr. Aflalo remarks, the flesh of our northern fish is firmer and finer than that of southern fish. But we seldom have the chance of testing its excellence.

Ice kills flavour in fish, flesh, and fowl, and probably the savage tribes who eat their fish raw get more enjoyment out of it than we do.

The chief characteristics of Australian sea-fish are their brilliant colouring, protruding teeth, and objectionable development of spines, while truculence is depicted on their countenances, as well it may be, for they are in constant warfare with their kind.

My first experience with these submarine men-of-war, was in Bass Straits. In the last chapter I said that neither the captain nor I scored a single piscatorial point until we neared the Australian coast, when we captured barracouta. This is how we managed to get them ; but I must first explain that the barracouta is related to the sea-pike, and ruthlessly pursues any fish it can grapple with. It runs to a good size and its strength is tremendous.

We had been told by a passenger returning to his home in New Zealand, that barracouta were generally caught with a "Maori-jig," *i.e.*, with a piece of red wood as bait, and a large bent nail as a hook. But some one, a second-class passenger (Heaven bless him!) had brought from London a genuine old-fashioned pike-lure, consisting of the tip of a rufus-coloured calf's tail, from which the bone had been removed, a champagne cork forming a rough imitation of a fish's head, boot-buttons doing duty as eyes, while a morsel of leather boot-lace improvised a tail, the whole cunningly hiding two formidable hooks with swivel and strong wire trace. It was just the very thing! So we discarded our spoon-baits, and our strips of red and white rag, and promptly purchased the calf's tail.

We got a couple of new log-lines, half an inch

in circumference and about nine hundred feet long, from the ship's stores, stretched them, and the tail, accurately weighted to ensure its remaining just beneath the surface, was towed astern.

The ship was going steadily before a six-knot breeze, and, to save the trouble of periodically feeling the line to ascertain if there was a bite, the skipper improvised an ingenious little tell-tale apparatus by looping up about a yard of the line and tying it up with stout cotton in such a manner that if violently tugged at the cotton would snap and cause the line to set going an old watchman's rattle fastened to the taffrail, which could be heard all over the ship.

Hours passed by with no result, and we began to feel depressed, and reluctant to meet the cabin passengers.

We were now well in the Straits, and when the dinner-hour (four o'clock) arrived and we sat down with the others, many sarcastic remarks were addressed to us regarding the *fish course*! Just as the soup-tureen was being removed, in the midst of a solemn pause a tremendous rattle was heard on deck. We all rushed up, to find the line as taut as a harp-string, and, at the end, a bar of silver jumping and writhing frantically.

It took two of us to haul the fish in, and it

MURRAY COD.

turned out to be a splendid barracouta, 15 lbs. in weight, a long, narrow piratical-looking fish, somewhat resembling a British pike. To get at the hook was a difficult matter, as the creature's jaws would have closed like a shark's upon anybody's hands. But we managed it, and the fishing was resumed.

Evidently we were running through, or were being accompanied by, a shoal of barracoutas, for every fifteen or twenty minutes the rattle sounded, and by ten o'clock we had a score of them on deck, enough for all hands. We found them excellent eating.

Amongst the chief fresh-water fishes of Australia—many of them found alike in Victoria, New South Wales, Queensland, South and West Australia, and in Tasmania—is, first, the Murray cod (belonging to the perch family), which abounds in the great river that runs a course of 1,300 miles, averaging, even in summer, a width of 240 feet and a depth of 16 feet. The "cod" is found also in the Darling, the Lachlan, and the Murrumbidgee rivers, which, after flowing respectively 1,200, 700, and 1,400 miles, unite with the Murray before it debouches into Lake Alexandrina, near Adelaide.

Murray cod are caught either from the banks or from a boat, not, like our perch, with rod, line, and

minnow, but with sea-tackle, and big worms or pieces of meat as bait. Sometimes they require a good deal of downright hauling to get them to land, as they often exceed 50 lbs. in weight, 100 lbs. being about the maximum. They are also netted, and sent down to the cities alive in tanks, arriving in prime condition.

In the long reaches of still water, hemmed in by living walls of delicate silvery mimosa and deep green wattle-trees, these giant perch delight to swim, not in company, but solitary and idly (for they are lazy fish), or, for a change, in some little current of water, or, like their English cousins, in a back eddy of a river, where, after rains, the water ripples merrily over the rocky bottom; and, when the water fails, and leaves even the Murray very low, the cod readily accommodate themselves to the confinement of any deep water-hole that may happen to be left.

So much is this fish appreciated in Australia, that from the Murray alone, fifty tons' weight have been taken in one year. Why the efforts to acclimatise it in England should have failed is surprising, for our rivers and climate are suitable for it, and, except pike, the cod would have no enemies to contend with.

Next in importance as a food fish is another

perch, called the Palmer, or Murray perch, generally captured on night-lines. It is excellent eating, and runs up to 50 lbs. in weight, and has a singular habit of grunting under water.

Then there is a silver perch, that cannot be induced to take bait, but is caught in a seine net. Next is the fresh-water black fish, seldom exceeding 1 lb., somewhat rich, but pleasant to the taste; while in every dam and pool are fine eels, not very long, but very thick in the body.

The cat-fish, like its American relation, is hideous, but makes fair food. The curious barramunda, or *ceratodus*, of Queensland (called "salmon" by the colonists, because of its pink flesh), is dark green in colour, and, unlike a true fish, has lungs as well as gills, resembling the amphibious *lepidosiren* of South America and the African *silurus*. It lies in deep pools, and, when caught, spouts like a whale from blow-holes. A fact associated with this fish is that, feeding as it does on aquatic plants, it can be captured by a hook baited with them.

Besides the foregoing, there are sundry small fish—graylings, or fresh-water smelts, bony breams (but what bream is not bony!), fresh-water herrings, and so-called mountain trout (the real article, together with perch, carp, and other British

fishes, having been successfully acclimatised throughout the Island Continent); while in Tasmania brown trout (attaining the prodigious size of 30 lbs.), salmon trout, Loch Leven trout, Californian brook trout, and all the best English fresh-water fish, abound, especially the perch; and the picturesque little island is fast becoming, like New Zealand, an ideal angler's resort.

In the Hobart reservoir at the Sandy Bay rivulet, high up the slopes leading to Mount Wellington, perch attain to a large size.

No rivers can be more suitable for the development of British salmonidæ than the Tasmanian, fed by streams that from snow-capped hills rush down ever clear and cool. Therefore, the lordly salmon, that hates warm water, has been a signal success, evading by its swiftness all its foes, which are chiefly the voracious barracouta and the wily shark.

Let us now take a trip up the Derwent to the famous salmon ponds at New Norfolk. It is a lovely morning, hot, but the clear air produces a feeling of exhilaration; to breathe it is like drinking champagne. There is not a cloud to be seen, and the water in the beautiful harbour is gently rippled by a light southerly breeze. The little paddle-boat *Tamar* is making a great fuss at her moorings,

warning all and sundry with her steam-whistle that she is about to start.

At last the din ceases, and we are off. The entrance to the river is not far away, but just round the point, where are the pretty botanical gardens, upon whose heights stand the most picturesque Government House in the Antipodes.

On each side the rocky banks close in, backed by hills, and on one side by the snow-peaked Mount Wellington and Collin's Bonnet, each 4,000 feet high, at every turn of the river presented to us from a different point of view.

Sometimes the Derwent widens out into broad, lake-like pools, and at intervals it narrows. On the left we pass Glenorchy, with its hop-gardens and oast-houses, looking as if a bit of Kent or Sussex had been pitched down there.

Now we steam by lofty cliffs, as on the Rhine, and at some of the bends there seems no exit beyond. Always picturesque is the scenery, and ever beautiful the contrast of bright mimosa with their background of sombre green trees that we see on every available piece of soil.

But here we are at New Norfolk, where a fine bridge spans the Derwent, and we sit down to a comfortable luncheon at the "Star and Garter," whose garden slopes down to the

water's edge, like that of its namesake at Richmond.

"Let us," says Henry Kingsley, in "Geoffrey Hamlyn," "breakfast in Scotland, and lunch in Australia," and I heartily agree with him. What could be nicer than the fresh salmon *en Mayonnaise* with cool salad, cold teal and quail, a superb rock melon half hidden by green figs, luscious grapes, big cherries, and a frosted jug of delectable claret-cup with morsels of ice bobbing about the surface; and—on the sideboard—sundry bottles bearing the familiar name of Bass—a perfect repast on a warm day!

Six miles off, at Redlands, were the fish-ponds, and thither we drove in a buggy, between tall English hedges, not of hawthorn, but of sweet-briar, growing most luxuriantly, hop-fields, and orchards.

We alighted and saw the salmon and trout-fry in their earliest stage, fresh from the ova—their eyes like pin-heads—lying quiescent at the bottom of their troughs, looking for all the world like barley-sugar drops. Then in a succession of ponds were the youngsters in various stages of development, until, finally, we saw them in a pool close to the river, mature enough to be turned out or transported elsewhere.

Deep down in one of the pools were certain black bars, which, being disturbed, revealed their silver sides. They were the matrons, whence came the ova.

And now for a Murray cod. We took the train at the Spencer Street Station of the Northern system of Victorian railways, for Echuca, on the Murray River. The shortest route is *viâ* Seymour, 144 miles, but we wanted to see Sandhurst, which made the journey twelve miles longer.

Sandhurst is the Bendigo of early nugget-of-gold fame, but rather different in appearance from the Surrey military college at York Town, surrounded with its fine trees.

After taking a turn in "Bendigo" we went to Echuca, situated on a peninsula formed by the junction of the Murray and the Campaspe Rivers, headquarters of the wool trade. The Murray runs through the public park, beautiful because Nature has been simply educated, and not tormented, into formality.

The river was in fairly full flood, and time being no object, we decided to take a trip in one of the smart paddle-steamers, about the size of those that ply on the Thames, but very flat floored, much broader in the beam, and drawing next to nothing,

in view of the droughts that turn even the big Murray into a series of water-holes connected by a mere trickling stream. They are lighted by electricity, and passengers are made most comfortable.

Our destination was Renmark, in South Australia, about 250 miles down the river. We passed the junction of the Edward with the Murray, whence in 1864 some young live cod were captured by the fishermen of the Murray Fishing Co., and shipped in a barrel hung on gimbals per the *Lincolnshire* for conveyance to London. They, unfortunately, died on the voyage.

We passed Mildura, the irrigation colony which promises to grow enough fruit not only to supply all Australia, but England as well. The steamer swiftly floated by long reaches with low banks and park-like stretches of flat land, in some places strangely resembling the view across the Serpentine in Hyde Park. Here and there we saw a picnic party on the shore trying to keep cool, or some boating-men lazily paddling or idly fishing. And then our pleasant trip ended at Renmark, the sister colony of Mildura.

Not far from Renmark the river banks on one side slope upwards to picturesque cliffs, thickly studded with mimosa bushes, growing between

square boulders, the opposite shore heavily timbered, and the whole bearing some slight resemblance to the scenery round Richmond Hill, though close inspection of the scraggy gum-trees soon dispelled that illusion.

We had chartered a boat and taken with us a black, well known as an expert fisherman; and we set out. Joey was a genuine Murray River black, about forty years old, well formed, with broad forehead, big mouth, small but brilliant black eyes, flattened nose, deep chest, thick black hair, and somewhat poorly developed legs. He remembered the time when the blacks used to swim after the cod and transfix them with a short spear, using at night a frail canoe, with a bright fire burning at the bow to attract the fish. Just under the cliffs we moored the boat in deep water, and Joey disappeared in the bush to obtain bait. He returned sooner than we expected, with a kerosine tin full of large lob-worms, the biggest I ever saw. Heaven knows where he got them from! He also brought a supply of the huge white grubs, fat and succulent, that are found on the bark of certain trees in Australia, and are eaten uncooked by the aborigines.

These with some raw beef constituted our ground-bait, and, it being warm, we antici-

pated that the cod—like our English perch—would be on the feed the whole day. And so it turned out.

We pitched upon a spot where there was a back eddy from the current which at no part of the river ran too swiftly, and after casting in some grubs and morsels of meat we waited five minutes and then commenced operations, baiting our paternosters with a couple of lobs to each hook.

Ten minutes, and no sign of a bite! Then I felt a tremendous tug, as if a diver had signalled from below. I struck sharply, and off darted what seemed to be a small porpoise. Nearly all the line ran out; then the strain suddenly ceased, and I was able to haul in my catch—a fine Murray cod of thirty pounds weight, in perfect condition. More ground bait, and my friend caught one about the same size.

Then we went further down the bank, repeatedly shifting our ground, never catching more than one or two specimens at the same place. Noon brought luncheon and a welcome rest, as our arms ached with continually pulling at the lines. But we went at it again, keeping on until near sunset, and had such good sport that we nearly filled the boat. We were able to send fish to

all our friends in Melbourne, and to supply the visitors at our hotel with a supper of perfectly fresh Murray cod, tasting better than the finest mullet.

CHAPTER VIII

AUSTRALIAN FISHES (continued)

NOW I must mention the sea-fish of Australia, and describe how they are caught.

A generation ago sea-angling was a neglected and even a despised art, but now in the estimation of Australians (who excel in it) it is perhaps second only to horse-racing. As a rule it is specialised—that is to say, a man exclusively pursues one kind of fish, and is seldom an all-round angler.¹

First in importance comes the schnapper, a large red sea-bream, abundant all along the southern coasts of Australia (very seldom north of latitude 21 S.), also in New Zealand, but not in Tasmanian, waters.

The sides and back of the schnapper are bright

¹ The Victorian tunny, proved to be identical with the Mediterranean, and erroneously called the bonito by Australian fishermen, is a fine large sea fish, whose flesh might be more utilised than it is.

VICTORIAN TUNNY.

crimson, its belly silver; its long dorsal fin is armed with formidable spines, as are also its anal and ventral fins, while the old males have an extraordinary bump on the top of their heads, which gives them a truculent appearance. In weight they run up to 12 lbs. and even to 25 lbs.

At one time schnapper-fishers had not far to go from town to pursue their favourite sport. Thirty-three miles south of Melbourne is the township of Mornington, a pleasant watering-place on the eastern side of Port Phillip Bay, generally known as Schnapper Point, showing that its vicinity was considered a good pitch for that fish. Now anglers have to go farther down the bay, as far as the bend behind Point Nepean at the harbour entrance, or outside the Heads, and fish in the Pacific Ocean.

At Port Jackson schnapper used to be caught just within the Heads, but now they have to be sought for fifty miles up or down the coast. Probably their food has failed, or the incessant steamer traffic in the harbours has disturbed the schools and driven them to less busy quarters.

In South Australia, round about Kangaroo Island, that shelters the Gulf of St. Vincent from the ocean, the schnapper is captured for Adelaide. The mode of fishing for it is the same in each of the three Dominions.

Dining with an old colonist at his comfortable residence in the suburb of North Adelaide, my host casually asked me if I cared to go out on a steamer belonging to a fishing company in which he was interested. Of course I said "Yes." "Well, we shall have to start from Glenelg [one of the ports] to-morrow evening, sleep on board, and be on the ground the first thing in the morning." "All right," I replied. "Then meet me," he said, "on the pier at nine o'clock to-morrow. You cannot mistake the *Spencer*. She has a black funnel with a broad band of blue, on which are the letters *A.F.C.* [Adelaide Fishing Company]. I'll ask several other fellows, and we'll have a jolly old time, if only the weather holds as it is. If it blows hard, don't trouble to come down, for the *Spencer* won't move from her moorings for all the schnapper in the world."

Nine o'clock saw me on board in a roomy saloon with six congenial spirits all animated with a burning desire to distinguish themselves. A good supper, one pipe apiece, and we turned in early. All hands were roused long before daylight—I believe about 1 a.m.—and, casting off the pier, we reached Kingscote Harbour, Kangaroo Island (a seventy-mile run) about sunrise.

The eastern sky flushed from faintest rose to

flaming red as the sun flashed his rays along the Pacific and lighted up the sombre cliffs and forest behind us. Long lines of pelicans went clattering out to their feeding-grounds, cormorants and gannets became active (a good sign for us), in the distance a couple of whales were spouting, and overhead a few black-backed albatrosses were flying around very lazily, the calm not suiting them.

By this time we were ready for a large dish of fried chops and oceans of strong tea, and then, the tackle having long before been got ready, we were able to get to work. The bait—pieces of squid and mullet cut up—was dealt out to each in a wooden box. Overnight lots had been cast for positions along the bulwarks, and each man scrupulously kept his own station, the number of which was chalked on the deck, throughout the day.

At a given signal from the steam-whistle the stout lines—each weighted with a 2-lb. lead and armed with a large snapper-hook on a half-foot of snooding—were simultaneously thrown overboard. Our skipper knew his business, and had brought the *Spencer* to anchor just over a particular rock, where was a shoal of fish, and at once we were hard at it pulling in snapper.

Then I appreciated the use of thick gloves, for it is no joke to haul up ten fathoms of heavy line.

a lump of lead, and a 12-lb. schnapper. The fish did not show much fight, and there was no real sport, it being more a question of skill in striking at the right moment, and of strength in pulling the schnapper to the surface.

We kept on until the ice-well was getting half full. Presently I felt an extra strong tug at my line, and, thinking it was a big fish, struck hard; but, after hauling in a few yards with some difficulty, the strain suddenly ceased, and up came, not the body, but the head only, of a large schnapper. It had been bitten clean off! Everybody laughed, but in a moment or two each man was going through a similar experience. "A school of sharks!" was the cry. "All lines in board!" and we weighed anchor and moved away some miles further down the coast of Kangaroo Island through the Backstairs Passage towards Encounter Bay.

There we again found our fish, and, with an interval for dinner (a repetition of breakfast, plus bottled beer for those who did not care for tea), we worked hard until evening, when we returned to Glenelg, tired but exultant, realising that, although amateurs, we had done our part in securing an abundance of fresh fish for the good people of Adelaide next morning.

Fresh schnapper is considered excellent eating, but I cannot agree with those who place it on a level with Murray cod or trumpeter.

In Spencer Gulf, gar-fish, known locally as Long Toms or Green Bones, abound, and are taken by whiffing as in England, or with rod and line from a pier-head. As at home, there is a

COLONIAL SALMON.

prejudice against eating them, because of the colour of the bones ; but, all the same, they make a capital fry.

A handsome Sydney fish is the *Arripis salar*, called, like the *ceratodus* of Queensland, salmon, to which, however, it bears externally, and from a gastronomic point of view, but a fanciful resemblance. Sydney also boasts of an essentially Australian fish, the "Serjeant Baker," a local

appellation said to have been conferred upon it because in the early days of the colony it was first caught by a soldier of that name. It really belongs to the *Scopelidæ*, a group which includes the well-known "Bombay Duck," and is scientifically known as *Aulopes*.

Both in Victoria and New South Wales the jew-fish (called king-fish in Victoria) are plentiful. Large and ferocious-looking they are, sometimes seventy or eighty pounds in weight, gracefully outlined, and with formidable teeth. They are gregarious, and like the ceratodus of Queensland, have a habit of grunting under water.

The blue groper,¹ belonging to the wrasse family, is a fierce-looking fish, and attains a weight of fifty pounds, sometimes even as much as eighty pounds. It has thick, projecting lips and solid white teeth. Essentially marine, it dwells in rocky, weedy pools along the iron-bound coast. Like the British wrasse, it has beautiful rainbow colours, but they fade away after death. Fishing for them and for jew-fish off Port Jackson is exciting work.

At the North Head an almost precipitous wall of rock, two hundred and fifty feet high, faces and defies the Pacific Ocean waves as they roll in over

¹ Garoupa, groper, groupa. Confusing terms for possibly the same fish.

six thousand miles of water from South America, the nearest land. It was here that, many years ago, after an awful gale during the night, the lighthouse keeper looked over the edge of the cliff and saw a few timbers. They were all that remained of a fine ship, the *Dunbar*. In the darkness she had missed the harbour's entrance, and was dashed to pieces against the cliff, every soul on board, save one, perishing, not even their bodies being recovered.

The keeper's attention was arrested by something white fluttering in the wind on a narrow ledge near the sea, and discovered that it was a seaman apparently dead. A long rope was procured, and with great difficulty he was hoisted up, and was found to be still breathing. He recovered and lived many years to tell the tale of his awful adventure. The ship had struck without the least warning, and a mighty wave had swept him off the forecastle and flung him senseless high up on to the rock where he was found.

But we have come to the North Head to fish, and not to yarn about shipwrecks.

With a very strong and long line, a big hand-lead attached, some spare hooks, and a bag full of "burley" (a vile-smelling mixture of rotten salmon, cheese, &c.) for ground-bait, and some soft

crabs, mussels, and little yellow-tails, as lures, my chum and I, after descending the face of the cliff in the most dangerous fashion by a series of narrow natural steps, took our places far apart on a ledge close to the water, and flung our lines as well as we could. The least slip and we should have gone over beyond hope of being saved. But what will not enthusiastic fishermen risk!

The burley began to take effect, and up came, at the end of my line, a struggling blue groper forty pounds weight at least. To secure it, I had to put my foot on its neck and stun it with a mallet I had with me, or it would at once have rolled off the ledge.

Then, with a yellow-tail for bait and more burley, I tried for a jew-fish. Making a great fuss and nearly dragging me off, up came a tremendous fellow, nearly sixty pounds in weight, and over four feet long, rich bronze-yellow with golden tints; but, keeping clear of his spiked back, I contrived to disable him. I afterwards caught a small one, and rejoining my friend, who had been equally successful, we fastened our catches to a long line, climbed up the cliff with the other end, and hauled up the fish to *terra firma*.

Frank Buckland says that the flesh of a maigre (jew-fish family) caught at Brighton in December,

1868, tasted like sturgeon and salmon combined. But the jew-fish's flesh certainly does not, the flesh resembling hake, and the blue groper makes but indifferent food.

Silver mullets, differing but little from the British, are very abundant in Australia. At certain seasons they swarm in myriads, and form an important article of diet, while in Sydney they are so cheap that they are used for bait. To the palate they are richer than the English mullet, and this to some people is a defect.

In Melbourne, for the benefit of an Angling Association, whose members fish for them with rod, line, and small red worm or morsels of boiled mussel, mullet are not allowed to be netted at the mouth of the River Yarra. These fishermen procure from a boiling-down establishment, where diseased sheep, oxen, and horses are reduced to glue and other useful articles, the residuum, an awfully stinking substance called Hashmagandy, compared to which burley is a delicious perfume. It is sold to them for the nominal sum of two-pence a sackful. Artfully placed in weighted bag-nets, and let down into the water where mullet assemble, they are so attracted by it that they often get entangled in the meshes. The mullet-catchers moor their boats almost side by side, and the fun begins.

A professional fisherman whom I knew very well, was given to transgress the regulations against netting, and one night fixed his net in the prohibited quarter, in spite of the harbour police, who now and again rowed by him. Towards morning a huge shoal of mullet swarmed into the net, and he had just time to fill his craft up to the thwarts, when the net broke. But he was able with a full cargo to row up the river to the fish market at daybreak, and dispose of it remuneratively, no questions being asked.

But I must be brief, and summarise. Australia boasts of the black rock cod and a splendid sea perch of sometimes eighty pounds weight and fine eating, but log-like and stupid when caught ; the cat-fish, to which I have referred ; conger-eels exactly like our own, from ten pounds up to an enormous size ; the ugly flat-head, singularly like the gurnard, very spiney, but good to eat ; splendid salt-water cray-fish, seven or eight pounds in weight ; also fine prawns and oysters.

Tasmanian sea fish include the king-fish, a kind of barracouta, from four to fifteen pounds, always caught at night near the bottom, with a barbless hook ; barracouta proper (previously referred to) from three to ten pounds ; gar-fish, soles, and remarkably good flounders. There are also other

fish common to Tasmania and the Island Continent besides: the famous trumpeter, the bastard (a kind of bass), and the real thing, which is the finest fish in Australasia, varying in weight from one to forty pounds.¹

This is how I went out to catch the last-named. Starting at midnight, the moon and stars making it light as day, a slight breeze setting in from the west, the fishing-cutter slipped from the wharf and made way down the harbour. The *Anne Eliza* looked anything but a mere fishing-smack, her lines being fine as a yacht's, and, as a matter of fact, she had been built for one; but her owner had tired of the sport and had sold her a bargain to the skipper, who used her for trumpeter-catching.

A run of twelve miles took us to the harbour mouth, where a lonely beacon warned mariners of the existence in mid-channel of a rock, euphoni-ously dubbed "The Iron Pot." On the way down, not very far from Hobart, I noticed on the cliffs a shot-tower, reminding me of those to be seen from the Victoria Embankment of the Thames. "That," said the skipper, "is the first of the kind ever built in Australia. It belongs to Mr. ———, whose father left it to him on the singular condi-

¹ Tasmania.

tion that when he died his coffin should be placed above ground, as that of his wife and some of his children had been. I have seen the place," he continued, "in Mr. ——'s garden, a circular stone edifice, open to the winds, rains, and snows of heaven, and through a grated door I saw the old fellow's coffin, with coffins of various members of his family surrounding it on the floor. Funny idea, wasn't it?"

As we sailed along the harbour shore, the sweet perfume of the mimosa, both white and yellow—real trees the size of hawthorns flourishing close to the water's edge—was so strong as to be almost sickly, and in the clearings between the groves, set in English-looking orchards and gardens, were charming villa residences of wealthy Hobart citizens.

Past the Iron Pot we entered D'Entrecasteaux Channel, recalling the fact that in 1792 the French admiral of that name, when in search of the unfortunate La Perouse, sailed up the lovely Huon River, whose mouth we passed, and gave his ship's name, *Récherche*, to the sheltered bay we were bound for, sixty miles from Hobart.

Next morning I was up early taking an appreciative look round at the hilly and densely wooded land, a good example of Tasmanian scenery,

which, as a rule, is a charming combination of mountain, valley, hill and dale, high forests, rich pastures, open plains, and swift, sparkling streams.

We weighed anchor and drifted, rather than sailed, a short distance, guided by certain landmarks. Then we anchored. Casting out a quantity of burley, we threw in our lines, and the fun began, as trumpeters always go about in troops, and, like perch, are bold biters. Before my lead could touch the bottom I was fast into a fish which turned out to be the genuine article, about twelve or fifteen pounds weight. "Mind the spines!" cried out the skipper. "Keep your burley going!" And following his last advice liberally I soon had a school round my line, for I kept them there as did my companion. "Mind you don't let one go, or we shall lose the lot," said the skipper, and at that moment just as I had a fish on the surface, safely as I thought, it broke away, and, tearing madly downwards, frightened the school off and spoilt our sport. So we weighed anchor and tried another spot, with such success that they only ceased to bite when there were none left.

I was never so tired in my life as that evening when I got home; but a glorious bath, and a dinner graced by the presence of a magnificent fifteen pound trumpeter made sufficient amends.

Monstrous rays are found in Australia, the small ones—sting-rays they are called—being a great nuisance to bathers. They bury themselves in the wet sand, and are not detected until you step on them. Once in Sydney I trod on one with my naked foot, when, whipping round its tail, it buried its horrible spikes into my flesh, the pain being agonising, like a scorpion's sting.

Australia is the home of sharks, tiger, carpet, blue-points, fox or threshers, grey nurse, hammerheads, &c., all voracious and objectionable, varying in size, and sometimes attaining to enormous proportions.

Sailing one day in a small boat in Sydney Harbour, off Dawes Point, I was attracted by something unusual going on aboard a small brigantine at anchor. Ranging alongside I found the whole crew desperately fighting a shark that they had deeply harpooned; but all their efforts seemed to have no effect in bringing the beast nearer. At last it came up to the surface, gave a mighty roll, bent the harpoon double, snapped the line, and got away. I had a splendid sight of it, and have no hesitation in saying it was thirty-five feet long, and that in the thickest part its body was as large as a bullock's.

Some people assert that sharks are not

CARPET SHARK.

ferocious, that they do not preferably attack man, but are cowardly and need not be feared, as shown in the fact that the South Sea Islanders and the West Indians ignore them. This is certainly not true of sharks in Australia. Many fatalities are recorded of victims to the ground-sharks, and all swimming-baths in the various harbours are carefully protected by iron netting. Divers tell blood-curdling stories of contact with these monsters, and it is probably only their strange appearance in a helmet with glass eyes that deters the shark from attacking them. Instances of hordes of sharks following boatloads of shipwrecked crews in the Pacific, threatening every moment to capsize them, are common enough.

There is a gruesome tradition in Sydney that years ago, when the emigrant ship *Catherine Adamson* went ashore on Middle Head, the rescuers pulled into their boats many a still-palpitating corpse, from which these sea-tigers had torn off legs and arms and great bits of flesh; in some instances nothing but the head remained.

I was once badly scared in Sydney. In a cove close to where I lived on the North Shore, the back fin of an immense shark had been seen for a week, when suddenly it disappeared. Not

caring to be disappointed of my early-morning swim across the cove, I looked carefully round, and, perceiving no sign of the shark, made straight from point to point in deep water. When half-way across, one of my legs accidentally struck the surface of the water, and I thought the shark was after me. I had about half a mile to swim; I dared not look back, but expected every instant I should lose a limb or limbs. I never in my life swam faster, and when I reached land, panting and exhausted, I found I had been the victim of a false alarm, as not a shark was visible.

I must not conclude this notice of Antipodean fishes without a brief reference to those of New Zealand, although I have no personal experience of any, save barracoutas in Bass's Strait, of which there are an incredible number, and perhaps they afford more real sport than any other Australian fish, for they show determined fight.

Fly-fishing can be indulged in with beautiful trout, 3 lbs. to 4 lbs. weight, that readily rise to the lure. Then there are heavy trout of 20 lbs. weight to be captured by spinning, or with native whitebait, at night. There are also salmon to be caught, besides several kinds of fresh and

salt water native fish—groupers of 112 lbs., yellow-tails 6 feet long and 120 lbs. weight, and giant cavallos, also eels of great size and abundance. The trout fishing is practically free ; and truly New Zealand has become one of the world's angler's paradises, of which, alas ! there are but few left.

CHAPTER IX

SOME SOUTH AMERICAN FISHES

UTTERLY unlike the coast of the Australian Continent is that three thousand mile stretch of sea-shore on the west side of South America, extending from the Gulf of Panama to the Straits of Magellan. A steady, and seldom fierce, south-east trade-wind blows along it most of the year, with intervals of dead calm, and, though the coast is generally precipitous, it can be safely approached by boats, so that fishing close up to the rocks in deep water is possible, and it is there that lurk the rock-cod, so abundant in those regions. I need hardly repeat that this is not the cod so familiar to us Europeans. It is related to the Ophiodons, and is a formidable-looking but harmless fish, rather ill-proportioned, its head, with its huge mouth, occupying one-third of its entire length.

The rock-cod possesses the commendable habit of biting boldly and quickly, so that if the bait remains on the hook, and is not allowed to touch the bottom, where scores of small fry and crabs are ready to pounce upon it, a ship may always be sure of getting a boatload from almost any rock or islet on the Peruvian, Bolivian, or Chilian shores; while the outlying groups of islands, such as the Galapagos, the Cocos, belonging to Costa Rica (the scene of Earl Fitzwilliam's recent sensational abortive search for treasure in his yacht, the *Véronique*), and Juan Fernandez, swarm with rock-cod. But, as a fishing ground, none surpass the Peruvian Chinchas.

As I pointed out in "Birds I Have Known" (chapter vii.), the guano deposits formerly existing on the Chinchas were due to the number of seals and the innumerable birds that were attracted thither by the abounding fish around.¹

Four, out of a great variety of species, came specially under my notice. In chief, a remarkably handsome, silver-coloured specimen of *cavallo*, called by the local fishermen *pescá blanco* (white fish), four or five feet long. These

¹ Pisco, an adjacent town on the mainland, probably derives its name from the Spanish *pescádo*, or *pescu*, the Andalusian equivalent for *fish*.

we used to catch in very deep water, with a live mullet as bait, and if any were about when the lines went down we were quickly made aware of it. From a culinary point of view they were most welcome, the flavour resembling that of salmon.

For horse-mackerel, a coarse member of the *Scomberidæ* family, we tried the old method of whiffing, as practised at home, but with little success, until we discarded the traditional strip of fish's skin, and substituted a living mullet; and then, what fights we had! Imagine being fast to a mackerel three feet long, and thick and strong in proportion! ¹

Horse-mackerel do not appear to go about in shoals, but in small parties, and utterly decline to take any lure while playing about the stern of a ship at anchor.

One of my favourite recreations at the Chinchas was spearing small fish with a special kind of grains, which we improvised by cutting a piece of stout tin into a strip about nine inches by four inches, and firmly securing to it at right-angles, and at intervals of one inch, ten large fish-hooks that had been bent straight. We then

¹ Off the coast of California the tuna, a kind of mackerel, is sometimes six or seven feet long.

wedged the strip of tin into the cleft of a light pole, the butt of which was weighted with lead, and attached the entire apparatus to a fishing-line.

Throughout the day when the sea was calm and the wind light, every now and again the water, within a circumscribed area, would suddenly appear to be boiling, as if dashed up by a shower of hail. This would come on without the slightest warning (save for the hovering overhead of pelicans and gannets) and would last several minutes. Then, from the midst of the tumult, the formidable head of a sea-lion or seal would pop up, its mouth full of something, and the sea would resume its normal appearance.

These agitations were caused by great shoals of small fish coming to the surface, either to play about and feed, or to escape from their pursuers below. When we wanted a supply, three or four of us would get into a boat, watch for a "rise," and quietly scull in its neighbourhood. Presently we would find ourselves on the very edge of one, the fish showing no alarm at our presence. Then we would deftly pitch the grains like lances into the thick of them. They would disappear, but reappear floating upright, with, as a rule, four or five fish impaled on the hooks. In one hour we

could easily fill the boat, and the catch was always welcomed on board, as the fish tasted like grey mullet (which they resembled in appearance), and a capital relish when pickled in vinegar made with peppercorns.

Catching rock-cod was capital sport, and there was a constant demand for them by certain skippers I knew, who, in return, used to provide my ship with a turtle or turkey for cabin use.

From the wooden piles of the lofty pier at North Island, I used to gather as many mussels as my little boat would hold, and before starting off, used to open them and store the contents in a large tin of salt water, and thus have them at hand while fishing.

With a fair wind the small craft would bound over the wavelets, and carry me safely to the lonely Middle and South Islands of the Chincha group, where, in the channel between the two, I would anchor in deep water alongside some big rock, that stretched out from the precipitous shore. I used to feel like Robinson Crusoe, for there was no sign of humanity around me; no living thing, save birds above, and—as I hoped—fishes below, neither was there a building on either of the islands.

The sun shone brightly, the sky was intensely

blue, and the clear water gently waved the beautiful sea-weed that could be seen far beneath the surface.

To keep a fine, fat mussel on a fish-hook is not so easy at it seems. Come off, it will, however dexterously attached. Even the friction of the water as the lead runs the line out, is sufficient to unfasten the slippery morsel. In my first essay with rock-cod, no sooner did the lead appear to touch bottom (I was using an ordinary sea-rig tackle), than I felt a smart tug, and, pulling up, found the mussel gone, and the fish also! This was repeated so many times that I became exasperated, and at last did, what I should have done at first—I secured the bait with an india-rubber band. Again came the familiar tug, but this time, on striking, there was a heavy drag and a quivering of the taut line, and I contrived to get the fish up to the thwart.

It was a large-headed, wrasse-like fish, with formidable fins, and I should have been inclined to let it go had I not known it was a rock-cod, fully eight pounds in weight.

Next came a monster that I could barely lug into the boat, but luckily, like its predecessor, it was not very lively. My arms being tired, I carelessly let the bait lie at the bottom, and a

hideous fish (which the Chincha Islanders dub "leather-jacket"), palpably unfit to eat, hooked itself.

I could always depend upon catching a dozen or more rock-cod, but six big ones were sufficient cargo for my yacht, the *Midget*, and after securing that number, this particular trip ended.

Once, when fishing near the North Island, luckily in a larger boat and with a companion, I was on the point of landing a small rock-cod, when a long, grey shadow with an extraordinarily shaped head, rushed up from the depths and swallowed codling and all. I struck, and found I had got something that pulled me half over the side. My friend came to my aid, and we played out the line. But how that beast did carry on! It shook its head like a bull-dog, tore about and seemed possessed with the spirit of mischief, until having let out nearly all the line, we feared we should have to cut it, but we contrived to get the anchor up, and let the big fish tow the boat. Of this he soon tired; his rushes became weaker and less frequent, and we came up to him and ended the struggle with a couple of revolver bullets in his head. That the line held was a wonder, but it was very strong, as was also the splendidly tempered Limerick conger-hook.

Our catch turned out to be a hammer-head shark about six feet long. The frontal portion of the head expanded on each side into a lobe, at the end of which were the eyes, the cruel mouth being in the centre beneath. The hammer-head shark has a well-earned reputation for ferocity, surpassing that of any of its relatives, as though the consciousness of its bizarre appear-

HAMMER-HEAD SHARK.

ance had soured its temper, just as that of Quilp, the lawyer dwarf, was soured by his deformity.

A glance at the map will show that the vast South American continent is more abundantly watered by rivers, great and small, than any other portion of the globe, and that they all lie on the eastern side of that unrivalled mountain chain, the Andes, stretching from Panama to Cape Horn, which constitutes their watershed.

There is hardly any rainfall on the west coast, and not a single river worthy of the name flows from it into the Pacific ; consequently there are no fresh-water fish. So to the mighty La Plata, San Francisco, Tocantins, Amazon, and Orinoco, with their innumerable tributaries, we must go for South American fresh-water fish.

Truly, these waterways are laid down on a vast scale. At Fray Bentos the river Uruguay is some ten and a half miles wide (half the width of the Channel between Dover and Calais), though the distance from Monte Video, at the mouth of the Plata, is two hundred and forty miles ! It is more like an inland sea or lake, than a river, and the wind often lashes the surface of the water (as seen in the picture) into real waves.

At the Fray Bentos¹ wharf, was lying an Italian galliot, a broad-beamed sailing craft, drawing very little water. She had discharged her cargo of timber, so for a few days the captain had nothing to attend to, and as he was an enthusiastic fisherman and could speak English well, I proposed to him that we should make a fishing expedition up and down the river and some of its tributaries.

He took to the idea ; so with a crew of three,

¹ Liebig's Extract of Meat Co.

including his excellent cook, and well supplied with food, we sailed away with just enough ballast to avoid disaster, and with a tremendous spread of canvas aloft.

At sunset we anchored with a kedge close to some low-wooded cliffs, fifty miles down stream. Next morning, the wind having entirely dropped, we had to remain where we were, and passed the time in scooping up with hand nets multitudes of small silvery fish, which, after being floured and submitted to the ordeal of the frying-pan, revealed themselves as rivals of the famous Thames whitebait.

For half that day, a gaucho, sitting on the cliffs near us, everlastingly smoking cigarettes, fished with what appeared to be a hop-pole and a cord. Occasionally, when he woke up from a nap, he pulled his line up, and we could see that his hook was prodigious, and was baited with half an orange. But he caught nothing.

We had been told that some of the River Plate big fish, if they could not be induced to take a flesh bait, would eagerly snatch at fruit. Of course, we ridiculed the idea, and set to work to catch small fish for live bait, and with morsels of beef succeeded in getting a good many, of what kind I am unable to say, except that they had

thick, scale-like armour, and were very fierce. To stop their snapping, most of them had to be promptly sat upon.

We made use of the survivors as lures, but again and again some monster of the deep bit them clean off the hook. At last, we reluctantly determined to try fruit. We had no oranges on board, but we had lemons, so scraping the rind to let free the juice, we furnished our hooks with whole lemons, and again cast out our lines.

Not long were we kept in suspense. There was a tremendous tug at the captain's line, and a similar one at mine. We were almost pulled overboard, for the fish fought like furies; but after a while we had them on the bulwarks, and, slipping ropes through their gills, got them on deck, when they bit at anything within reach, and behaved more like sharks than respectable freshwater fishes.

They were riverine dorádos (gilt-heads), five feet long, and of a beautiful orange colour, elegant in form, but with horrid-looking teeth. The day's fishing ended by our catching a few smaller specimens, which we found very good to eat, and, when cured, were not at all unlike smoked salmon.

Subsequently, I took a flying trip to Buenos

Ayres in the galliot after she had loaded up with tallow, hides, and horns, and we were becalmed close to one of the mouths of the Parana just off a *saladero*, or cattle-slaughtering place, the drainage from which was not of the purest. We fished for smelts and caught a good many, the foulness of the water suiting their not over-fastidious taste. But the River Plate smelt—a true *Osmerus eperlanus*, olive-green above, silver-white below, with a silver longitudinal and lateral band along the body, and charmingly translucent,—is not the little fish served up in England, deliciously fried in breadcrumbs, with sauce Tartare or Hollandaise, or posing as a garnish to a boiled turbot, but is a giant, twenty inches long and three pounds in weight.

Leaving the River Plate for good and all, I booked a passage and sailed by the Royal Mail steamer to Rio. *En route*, she slowed down off the mouth of the River San Francisco to pick up a jangada or native raft-canoe, one of several employed by the Government as dispatch boats to outlying parts along the Brazilian coast, and I had a capital opportunity of closely examining a specimen of these singular crafts.

She was literally picked up, hoisted by the steam-winch, and deposited on the deck like a

log of wood, with her navigator clinging on for all he was worth. It is no figure of speech to describe her as a log, or rather several logs of wood. A jangada is a raft made of trunks of light-wooded trees, six inches in diameter, straight, and uniform in size. These are stripped of their bark, sharpened at each end, and firmly pegged together by three rows of transverse wooden pins. Six trunks are usually employed, but the jangada I refer to had ten, her dimensions being twenty feet long by five feet wide. A little stool at one end served for the steersman, paddle in hand, while a larger one amidships was used by passengers, and a slender mast (sometimes there are two masts) supported a large sail like the lateen of the Mediterranean feluccas, which sent the craft along at very good speed, of course wetting everybody through and through, which, luckily, in those warm waters did not much matter.

The fishing jangadas, or catamarans,¹ were similar in construction, but still more primitive, often having neither sail nor stool, the centre being occupied by a gigantic earthenware jar full of sea-water, into which the solitary fisherman,

¹ So called in India. In Cingalese it is "catha-maran," i.e., *floating trees*.

who pursues his calling literally in the water, pops his catch to keep it alive.

Both kind of jangadas are safe, and go very long distances. The nets and lines used by the fishermen are the best in the world, being made of twisted cotton rubbed with the inner bark of a resinous tree which hardens in the sun, becomes proof against the action of salt water, and is peculiarly strong and elastic.

Outside Rio Harbour we cautiously steamed through hundreds of these fishing rafts, the scene at a distance looking like a troop of half-naked men standing upright in the water.

A visit to the market at Rio revealed how successful this kind of fishing was, and the same at Bahia, Pernambuco, and Para.

“Very early” is the motto of the markets in Brazil, and by five o’clock they are in full swing, housekeepers being intent upon providing for the day’s wants before the sun declares itself in full force.

It was a gay and lively sight—such a contrast to Billingsgate! Men and women of every shade from intense black-brown to light yellow, were jabbering together: the women with perfect figures clad in spotless white, their startling red and yellow turbans setting off their velvety

skins to perfection. Brazilian ladies were conspicuous by their absence, their servants doing the marketing.

Ignoring the magnificent and tempting display of fruit (oranges and pine-apples reigning supreme), we passed into a department abutting on the landing-place, where many catamarans were discharging their live cargo. Such a glitter, and

HORSE-MACKEREL.

such a variety of piscine form and colour! Truly the waters had brought forth abundantly! Dolphins, purple and gold (some of sixty pounds weight), black pig-fish striped with broad bands of violet, horse-mackerel, garoupas or groupers—a good market fish, very tenacious of life, existing for hours out of the water, 40 lbs. to 300 lbs. in weight, brownish colour sprinkled with grey above and with somewhat of red below, its fins

edged with a beautiful blue—king-fishes, deep red in colour, and a kind of salmon (caught off the Abrolhos rocks, four hundred miles away), which readily takes the salt, small sword-fish, rock-cod, albacore, bonitas, sea-eels, silver mullet, flying-fish (caught after Barbados fashion, *vide* Chapter V.), small porpoises, cuttles, rays, big gar-fish, young sharks, and many other fish, unrecognisable, ugly, but, as we were assured, edible. Here I may remark that the Brazilians cook fish admirably, and at all the restaurants in Rio and other large cities, fish in great variety is a prominent item of the *menu*.

The great Professor Agassiz, before his well-known visit to the Amazon region in 1865, stated that he should consider himself well rewarded if two hundred and fifty new species of fish were discovered by his party of naturalists. But after five months' labour, they had come across no fewer than one thousand three hundred! When we consider that Linnæus, in his sixth edition of the "System of Nature," concluded that the number of known species on the entire globe was not more than three hundred, and that Captain Wilkes, of the U.S. Navy, in 1840 collected only six hundred in his three years' voyage round the world, when three ships were employed, it

is obvious how superabundant fish life must be in the splendidly watered regions of Brazil, and how hopeless would be an attempt to describe in a solitary chapter more than a small percentage of the best known specimens.

In almost every river, the fish range in size from gigantic porpoises thirty-five feet long, and manatees (cow-fish) from eight to seventeen feet long—mammals that never leave the water¹—to sardines, and fish no bigger than a stickleback. The latter in certain localities furiously attack any one bathing, biting the flesh with their needle-like teeth; so that where they exist in hundreds, to bathe is to court death by phlebotomy.

The manatee is an extraordinary-looking creature with two small fins near the head, between which, underneath, are the female's udders. It has very small eyes and minute ear-holes. Its body is columnar, its neckless head a mere sausage end, and its skin lead colour, hard, and very thick; nevertheless it is generally harpooned. The Portuguese call the female the *peixe-boi*, or cow-fish, because of the udders, it being in no other respect like that highly respectable milk-giver. Its flesh is much sought after by the Indians, and resembles coarse pork, but the fat

Which is the reason I have included them in this work,

is fishy. Some people compare it to excellent veal—but *tastes differ!* In the upper jaw of its curiously shaped mouth, it has, besides molars, large incisors with which it drags up the long leaves of the sub-aquatic vegetation whereon it browses exactly like a cow.

Of edible fresh-water fish there are very many. The pirai, or piránha, is a kind of salmon, brilliant

COW-FISH, OR MANATEE

green and rose-coloured, flat-bodied like a bream, but saw-toothed like a shark, averaging 5 lbs. in weight, and so ravenous and indiscriminate in its tastes that it attacks the legs of human beings wading near the shore.

Then there is a fish called pescádo (cod), whose flesh when boiled is like that of cod. A delicious fish known as curimatá, and the tucunaré, hand-

STING-RAY.

some in appearance, with a peculiar peacock-like spot on its tail, are both captured with morsels of fruit.

Many succulent siluroids (generally scaleless fish) exist, one of them being the notorious electric eel, and another the surubu, with striped and spotted skin and long maxillary barbels.

As to strange-looking creatures, they abound. One of them, the needle-fish—much like a gar-fish, but with its long, slender, sharply pointed jaws of equal length—rushes into the midst of shoals of small fry, and transfixes them with its long spear. The sting-ray, with a slender, jagged-edged spike, three inches long, sticking from out one side of its long, fleshy tail, is capable of inflicting an agonising wound.

South American Indians catch these fish by poisoning the water of still pools and reaches with a decoction made from a certain creeper, when incredible numbers are stupefied, and rise helpless to the surface. They also catch them with nets, rods and lines, and even with artificial flies skilfully made of gaudy parrot feathers.

In one of the upper reaches of the Tocantins River, in a deep pool beneath the rapids of Machado, I took up my station in a canoe, armed with an orthodox salmon-rod, a hundred yards of

good line, and a conspicuous fly at the end of the wire trace, for ordinary gut would be instantly severed by the sharp-toothed tucunarés and peranhás I was after.

A vast number of fish were frantically but vainly struggling to ascend the current. At intervals some monster would make a dash into their midst, when they would leap into the air in clouds to escape their pursuers. All I had to do in order to secure some of them was to hit right and left with a paddle. But this was not fair angling.

At this point the river formed an arc of a great half-circle like a horseshoe. The banks were crowded with tall trees, from whose branches hung miniature gardens of many-coloured orchids and creepers. On the beach grew mimosas laden with odoriferous blossom, clumps of tall bamboos, tree-ferns, and palms. The rocks, around which the current swirled, were covered with vividly green mosses and aquatic plants, while gorgeous butterflies and equally brilliant humming-birds flitted about in every direction—all so unlike a salmon or trout stream at home.

However, I was after fish, and not after the picturesque. So, without waiting for a rise, I cast the line into the broken water. Never was there

such a rush! Hither and thither a well-hooked, heavy fish darted madly, startling every inmate of the pool into fits! About ninety yards of line ran out, and then, slowly reeling in, I got the captive within a few feet of the canoe, and was just able to see what it was, when away it went again, though somewhat less vigorously. Another reel up, and another bolt, and at last I lugged the creature on board the light craft, which by this time had drifted down stream into a quiet backwater.

Such a beauty it was! A pirai, weighing 10 lbs. if an ounce! Paddling up again to the rapids, I caught fish after fish almost without any effort. In an hour I had sufficient tucunarés, peranhás, &c., of all colours and sizes to feed a ship's crew.

Thus ended my experience of South American fresh-water fishes.

CHAPTER X

SOME HARBOUR FISHES

“WE shall sight Diego Garcia by three o'clock this afternoon,” said Captain Ruthven, of the Orient liner *Chimborazo*.

We were in the Indian Ocean, about lat. 5 S. and long. 75 E., and as the hour indicated approached, none of the passengers, though armed with powerful field-glasses, could detect the least sign of land. The bright sunrise had degenerated into a dull, hazy forenoon, and when at 2.45 p.m. the look-out man sang out “Land ahead!” we could see nothing but a row of tree-tops springing apparently from the water, which was dashing furiously against some invisible barrier. When close up we were able to trace the outlines of the atoll. We carefully steamed through the solitary narrow opening into perfectly smooth water, and dropped anchor alongside the coaling hulk.

These atolls being novelties to most of us, we got up very early to take a look round. A ring (300 yards wide, not more than 10 feet high) of heaped-up fragments of coral, upon which groves of cocoanut-trees flourished, presenting to the deep ocean *outside*, a broad and solid wall, enclosed a fine harbour fifteen miles long, and from two to five miles broad, with a perfectly protected anchorage. The harbour was edged by a dazzlingly white sloping beach of powdered coral, the water being a vivid green, exquisitely clear, with a bottom of spotless sand.

To our disgust no one except the ship's doctor had been allowed to go ashore the previous evening, owing to passengers of other mail-boats having injured the cocoanut-trees which produce the copra of commerce, *i.e.*, the dried kernel of the nut from which the oil is obtained. But the doctor's services were required at the township, where some five hundred natives employed in the copra business lived; and when he returned after breakfast with his face swollen almost beyond recognition, so bitten was it by the mosquitoes that had kept him company in his bedroom, we did not regret our restrictions, more especially when he divulged to us how horribly persecuted he had been by the fleas that breed in the sand. He dilated upon the

beauty of the living coral grouped in shrubs and groves on the outer reef barrier, covered with polyps of brilliant colours, and told us that between the shrubs roamed gorgeous fish, and yellow and crimson prawns, while at the bottom were purple sea-urchins and exquisite shells carried along by their spotted tenants. These, however, and the semi-nude darkies, land-crabs, and cocoanut-groves, he said, constituted all there was to see, and he complained that the shipping agents had given him a very indifferent dinner and breakfast.

The question was, how to get through the long day, until the coaling was finished? We made up our minds to fish.

Of course, there were neither hooks nor lines on board. Luckily, I happened to have four sets of tackle, and of these I lent a couple to some third-class passengers, and one to the mosquito-bitten doctor. The only procurable bait was mutton from the chilled-room, while the tackle was the ordinary sea paternoster with extra big leads.

My line seemed to run out a tremendous depth, and I waited patiently for a nibble, but without success. I then procured the "innards" of a fowl, and made a fresh essay. Eureka! A sharp tug, and up came one of the most beautiful fish I had

ever seen. Of moderate size, it was brilliant with all the colours of the rainbow, and many others besides ! What it was I never knew, for the doctor, who had grown weary with non-success and the smart of mosquito bites, brusquely declared it unfit for human food, and annexed it for his "collection."

LUMP-FISH.

Then I caught a sort of lump-fish, its colour green, with shades of blue and orange red, and covered with knotty wart-like excrescences ; repulsive, and obviously uneatable. Suddenly the lead came up with the hooks cut clean off by very sharp teeth, so I substituted strong gimp for the ordinary trace. This time I secured a species of

file-fish, brilliantly coloured, but, as one of the natives on board declared, poisonous. Then a member of the chœtodontidæ family, a coral-fish, or gilt-head, whose awful mill-stone-like teeth left little doubt that it lived upon the live corals, crushing the hard covering, and devouring the polyp's thick, fleshy body within.

TRUNK-FISH.

Finally, I caught a few trunk-fish with formidable jaws, and covered with osseous plates jointed together like armour. By high noon everything ceased biting, so I relinquished the sport, and went to see how the steerage anglers had fared.

I found them in a state of great excitement

surrounded by an interested crowd, for, after capturing several fish resembling mine, they had caught one that grunted like a pig ! It was of a bluish-green colour, and about two feet long, not ungainly, but with a big head, upturned snout, and perch-like dorsals. As it lay on the deck it made a noise like a small porker protesting against coercion.

Some of us had heard two or three kinds of Australian fish make queer noises under water, but never on *land*. This one seemed able to breathe out of the sea, and as one of the Diego Garcia boatmen expressed by signs his abhorrence of the creature, we guessed it was regarded as unwholesome, and restored the poor thing, which we dubbed "pig-fish," to its natural element.

A much greater cause for excitement presently arose. Two huge sharks were observed leisurely approaching the ship's stern, husband and wife, no doubt, swimming side by side, thirty feet long, if an inch, and bulky in proportion. Every one ran for a shark-hook, but the mate declared there was not one on board. We suspected he was fibbing, to save his decks from being messed about with a shark catch. Be that as it may, there was no hook to be found, so one of the cabin-passengers went below and brought up his rifle, and another

passenger, at imminent peril of tumbling into the shark's jaws, leant out of one of the stern windows, armed with a double-barrelled gun loaded with swan shot. Up came the precious pair, looking for something edible, but received instead a volley, and we expected to see them roll over, but all they did was to lash their tails and deliberately make off.

We persuaded the second officer to pursue them, as we were convinced that one at least must be mortally wounded. He reluctantly followed in a very small boat, so slowly that the sharks (which could be traced for some distance near the surface) outstripped him and disappeared. The rifle bullet had probably been deflected, and the swan shot had failed to penetrate the tough skin.

We afterwards heard that this was the only pair of sharks in the harbour, over whose finny inmates they reigned supreme. They were well known, were almost tame, and were allowed to go unmolested because of their value as scavengers. They each had a special *soubriquet*; and, indeed, I am not sure that the priest had not solemnly blessed them!

At 3 p.m. we weighed anchor and left the harbour.

There are certain days, few and far between, in every climate, when the physical conditions are perfect. The day we sailed for Diego Garcia was one of these—earth, sky, and sea, harmonised, reflecting their concord upon humanity. Everybody on board was in good humour, and probably the super-excellent luncheon of which we in the saloon had partaken, had something to do with it.

The temperature was perfection, 75°, and a very gentle breeze, which just rippled the deep blue water, kept us all cool. The steamer was steady as a rock, and slipped along smoothly and noiselessly.

After clearing the atoll we passed by several uninhabited lovely coral islets. Cocoanut-trees studded the low-lying land, and clouds of pretty little snow-white terns hovered over the silvery beach in search of molluscs. Every prospect pleased, and we felt that to cruise about here for weeks would be to temporarily regain Paradise, for we had forgotten the mosquitoes, the fleas, and the sand-flies !

Here it may be noted that the Chagos Archipelago belongs to Great Britain, and is in the jurisdiction of the Mauritius Government.

The harbour of Aden, and also the Suez Canal, turned out to be barren fishing-grounds. Sharks

were too plentiful in the former, and we caught a few of the brutes, one of whom had recently devoured a Somali boy as he was diving for coins alongside the ship.

In the Suez Canal some silvery fish resembling salmon-trout had been purchased from the Arabs

SPEARING SWORD-FISH.

by the steward, and served up at table. The Arabs declared they had been caught in the Bitter Lakes, but they had most likely been netted in the fresh-water canal.

At Port Said I was ashore the whole time, and had no opportunity of fishing, but my angling friends in the steerage told me they had caught

some gar-fish, and several bass of insignificant size.

In the Straits of Messina, near Reggio, we slowed down, and finally anchored for a few hours to allow the overheated engine bearings to cool. It was smooth water, and flocks of gulls were hovering over certain spots, denoting the presence of small fish, probably mullets or sardines. Presently there glided up to them three or four fish, of which nothing could be seen except a tall dorsal fin, with a still larger one several feet behind. We had observed a couple of men on the cliff waving their arms like the pilchard lookout men, or "huers," of Cornwall, and all at once, half a dozen boats, each rowed by eight men, shot out from the little harbour and rushed towards the spot where the mullet were playing. We guessed they were after the sword-fish (for such the creatures were), and it was most exciting to watch the quick darting of the flashing harpoons, the frantic leaping of the startled fish, and to hear the triumphant shout when all were transfixed and secured. In one of the steamer's boats I went to interview the fishermen and to look at their catch.

The flesh of *Xiphias gladius* is compact, white, and of excellent flavour, and as it is in request, the fishery is an important one in the Mediterranean.

No one could fail to recognise the sword-fish, with its peculiar snout issuing from its upper jaw, though it sometimes is confounded with the saw-fish, the difference of course being that the long beak of the former is a bony blade, while that of the latter—a member of the squalidæ or shark tribe—is serrated on each side. It is no uncommon thing for the sword-fish to measure fifteen, or even eighteen feet, over all, the sword monopolising one-

SWORD-FISH.

third of that length. The colour is blue-black above, and silvery below. So minute are the scales that they are not apparent. The great tail is like a double scythe, and there is one re-curved, very sharp, dorsal fin. The large eye at the base of the beak has a comical, wide-awake, businesslike expression, and the mouth is toothless, though there may be teeth deep down in the gullet. Authentic instances of sword-fish attacking the

hulls of wooden ships at sea, and leaving in the timbers the broken-off ends of their swords, are not uncommon.¹ It is thought that they mistake the hull for a whale; but why the narwhal of the Arctic regions, with an equally formidable weapon, does not do likewise, is unaccountable.

We were in luck that day, for all at once the men began to gesticulate more violently, and in a peculiar manner, signifying that a school of tunny was approaching. Instantly the boats, in which I had observed long nets (for Italians, who are born fishermen, never lose a chance for lack of necessary gear), made great efforts to get across the path of the school leisurely moving in their direction. They succeeded, and as the tunnies came up to the wall of meshes ahead of them, they seemed to lose all presence of mind as the long and deep net gradually, like a seine, encircled them. Then, by

¹ In May, 1904, the Newfoundland schooner *Wildflower* was struck amidship by a sword-fish on the Grand Banks. The fish, which weighed 580 lbs., was unable to withdraw its sword, and while struggling, prior to being harpooned, almost overturned the little craft.

On July 10, 1904, a "sworder" attacked a boat off Block Island, penetrating its sides and wounding one of the crew; and in August of the same year, a seaman on board the *Blanche*, off Boston, was grazed by a sword-fish's blade which attacked the boat.

ENCLOSING TUNNIES IN THE NET.

some contrivance that I could not follow,¹ the bottom edges of the circle of nets were pulled together by ropes, forming a kind of cage whence was no escape. Every fish was slaughtered, and the sea was red with blood.

They were from four to six feet long, and weighed from twenty-five to a hundred pounds; but there was one huge creature quite ten feet in length, and about six hundred pounds in weight. In fact, tunnies are the largest edible sea fish, having been known to measure as much as fifteen feet.

The sword-fish and the tunny belong to the same family as the mackerel. Take a mackerel, magnify it enormously, and, with some trifling difference in the dorsal fin, which is proportionally much longer, you have a tunny.

Some of the tunny's scales are very large, and form an armour-like sheath at the back, but below they are as small as a trout's.

Amongst other delicacies in Fortnum and Mason's shop may often be seen tunny preserved in oil, and this is much liked in the south of France. But it is preferable when perfectly fresh, as we experienced when, having purchased one of

¹ Probably something resembling the Cornish "tuck" net process.

KILLING THE TUNNIES IN THE NET.

twenty pounds weight, we had for supper some cutlets cut from it sprinkled with salt and vinegar, and fried.

On one of my voyages out to Brazil in a mail steamer, we put into St. Vincent, Cape Verd Islands, to coal, remaining there nearly twenty-four hours. The mountainous island of St. Antonio, towering up 5,000 feet, its sides clothed with tropical vegetation, first met our view. Then, separated from it by a narrow channel, came the absolutely barren volcanic islet of St. Nicholas, with its horseshoe-shaped harbour, its miserable pop-gun fort on one of the points, its settlement close to the beach, and in the background its range of desolate and jagged hills, some of whose outlines suggest the recumbent profile of Wellington, Washington, or Napoleon, whichever you please.

After exploring the wretched hole, whereon it is said only a single tree grows, and after climbing the summit of the range and sinking ankle-deep at each step into volcanic scoria, I went fishing, and had good sport with rock-cod and horse-mackerel, good to eat if small, but if large, somewhat coarse. As a light breeze sprang up, I hoisted the modest little sail, and "railed," or "whiffed," as for mackerel, with a small cavallo,

I was nearly pulled out of the boat, but managed to let go the sheet, and allowed the fish to tow the boat along, stern first, the sail, of course, and the resistance acting as a stopper.

After dragging me all over the harbour for some

A CATCH OF TUNNIES.

time, an object of interest to the crews of the ships at anchor, my steed came to a dead stop, and, coming up to him hand over hand, I found on the surface, utterly exhausted, a dreadful-looking shovel-nosed ray. I at once cut the line and let him go.

I afterwards caught a strange fish with dark skin and a bright purple stripe, looking as unwholesome as it really was. But it made a beautiful specimen.

Next, I nearly ran down a large, slumbering shark; and, seeing a number of exquisite little paper nautili gracefully floating, their tentacle wings spread, and their fragile, fluted shells reflecting the sunshine in a hundred changing shades of colour, I steered for them, but they, being sensitive to the least sound, heard the splash of water on the boat's bows, and drew in their sails. Their equilibrium being thus disturbed, their shells capsized and they disappeared to the bottom.

Finally, I landed at some rocks where were many deep pools, and began to explore. They were perfect aquaria; no artificial ones could give an adequate idea of their beauty, and lying flat down by the margin of one of them, I gazed entranced.

It was like a luxuriant flower-garden. There were sea-anemones of every hue and kind—dahlia, sunflower, marigold, carnation, and many others undefinable—the most beautiful being a monster crimson one with cream-coloured tentacles. Minute fish, like gobies and blennies, lurked under seaweed or stones, darted out, and, as if frightened at

PAPER NAUTILUS.

their own audacity, immediately vanished. There were living madrepores, disc-shaped, and covered with a few short tentacles, whose convolutions, resembling the human brain, give them their popular name of "brain-stones."

Strangely shaped crabs crawled along the sandy bottom, and sea-urchins walked with rapidity by means of foot-like spines, or rolled themselves along with a wheel-like motion. They resembled hedgehogs or huge horse-chestnuts, and their spikes, of which they have hundreds, after death fall off, leaving a hard, round shell, something like an egg, covered with stony warts.

I tried to hoist up some of those at anchor on the rocks within reach, but only cruelly injured my fingers with the spines. At last, with a stout gaff I contrived to move and secure a few very large ones as trophies, and for days afterwards the neighbourhood of my state-cabin was studiously avoided, while the inmates of these shells slowly decayed !

But there was the blue-peter flying on the mail-boat ! A gun was fired to warn everybody that she was about to sail. So I reluctantly tore myself away, thinking that, could only one of these pools be transported, just as it was, to London, and kept fresh, what a fortune the enterprising transplanter would make !

CHAPTER XI

SOME BRITISH FRESH-WATER FISHES

AT the Golden Eagle Hotel in Homburg, whose *cuisine* was of the high-class German order, we used to delight in Rhine salmon (only slightly inferior to that of the Tay), zander—a delicate pike-perch served with a piquant accompaniment—and the popular Teutonic New Year's delicacy, stewed carp with white wine sauce. Until then, I had never realised what a capital table-fish carp could be made. So much is it appreciated, that, in Berlin alone, 3,000 tons (equivalent to 3,000,000 fish, averaging their weight at 3 lbs. each) are usually sold during Christmas week, 5,000 tons being for New Year's festivities alone!

My instinct of acquisitiveness was always aroused upon seeing the fine carp rise to the surface of a lake adorning the Kursaal ground at Homburg, smacking their lips as they imbibed

copious gulps of air. My admiration of these noble fish—dubbed by Izaak Walton, “the queen of rivers, a stately, a good, and a very subtle fish”—was deepened when I made acquaintance with the choice Prussian carp in the Empress Frederick’s gardens at Friedrichshof, for they were tame, and almost took pieces of bread out of my hand.

CARP.

In Lord Tollemache’s splendid park at Helmingham Hall, Suffolk (the finest moated building in England), there are several large stews with stores of huge carp that I have longed to angle for as I have watched them sunning themselves on the surface, or lazily rolling over and over in utter

indifference to my presence. Evidently, they were too well fed to be lured by any but a very artfully selected and novel bait; and would have to be netted when required for table.

However, before long I had an opportunity of catching some carp in a moat encircling a certain house in Kent—a delightful old ivy-covered, two-storied building with a wilderness of out-houses clustered around one side, the three other sides engirdled by velvet lawns, shrubberies, and flower-beds, the whole converted into an islet by a square moat, crossed by a small bridge at its narrowest part. Tall elms, kitchen-gardens, orchards, and lush pasturage fittingly framed the charming picture.

In the moat were known to be large quantities of roach and eels, while rumour spoke of rudd and carp. It was seldom fished, except by the ladies of the moat-house and their visitors, by way of passing the time, and I never heard of their catching anything more than a few roach.

Strolling about the grounds in the twilight (I admit I was not alone!) I heard at an angle of the moat some little distance from the house, the unmistakable smack of a carp's lips. Just there the water was deep—an ideal carp-hole—so borrowing an idea from the French, who in their turn

borrowed it from old Izaak Walton, I ground-baited the place next day from a punt with a piece of weighted turf, the size of a large pie-dish, and, to the short blades of grass, sewed as many red worms as were necessary to conceal it. This I left for two

THE MOAT, YALDING VICARAGE.

days, and, after taking the exact depth with a plummet, I stole to the spot early in the morning with two rods and the finest of tackle, the bait for one being a scoured red-worm, and for the other a well selected liver gentle. Soon one of the little floats began to bob and curtsy, and finally dis-

appeared. Until the line got clear away, I did not strike, and then struck but gently. The rod bent double, and, as there were no water-lilies or rushes, I gave plenty of scope, then reeled up, and, with a landing-net, brought to grass a splendid carp that pulled down the steelyard at 6 lbs. By breakfast-time I had half a dozen, including one of 8 lbs. weight. I secured them in a box with holes, and placed them in a clear, running stream to rid them of their muddiness. I then selected a couple and gave them to the cook, who scoured them with salt and water, inserted a savoury stuffing, according to the immortal Izaak's recipe, and stewed them in German fashion. They were immensely appreciated, and I congratulated myself on having introduced a new culinary "sensation."

Those elegant, and, as Frank Buckland affirms, *useful* little fish, the bleak, that feed on insects and garbage at the mouths of sewers, abounded in the moat. They played about the surface in shoals, but declined to bite at anything solid, and were hardly worth enticing with an artificial fly.

Eels, however, the common or sharp-nosed kind, took *any* bait that was allowed to lie on the mud, which was pretty thick, owing to the accumulation of dead leaves which fell into it every autumn. When a dish of eels was required, they were

usually caught in traps. Personally, I left them severely alone, as an eel wriggling on the grass, twisting and turning the line into hideous, slimy confusion, is an abomination; and die they will not, unless the head be half severed. Experts tell us that the vitality lies in the tail, but that appendage will not keep still long enough for us to put this theory to the test.

I said that angling was a recreation indulged in by the ladies of the house, worms and gentles being eschewed in favour of clean, well-kneaded honey paste. Once I performed the *gentle* office for a certain fair friend, then leaving her to her own devices, crossed the bridge to angle on the other side of the moat. She was fishing at a spot that had a beautiful background of an old red-brick wall, richly and deeply tinted by age, and covered with espalier cherry-trees laden with tempting may dukes and huge purple morellas. Suddenly I heard a faint scream, and, lo! there was Miss I.— running along the bank, her rod over her shoulder, a small eel at the end of the line which was dragging on the ground, and a cat making after the wriggling fish!

I had seldom seen so comical a sight, but I went to the fair angler's aid, when she explained that so great was her horror of eels, that when,

instead of a roach, up came this wretched thing, she fled, as from a snake. Why she did not drop the rod, is one of those things yet to be accounted for!

I went seriously in for roach-fishing, and made heavy baskets. At a fishing tournament, which

ROACH.

lasted from twelve to six o'clock, with an interval for luncheon, I came in an easy winner, my catch numbering over a hundred, some being of good size, for I had taken the precaution to put down over-night at my "swim" plenty of ground-bait composed of pounded boiled bran and bread

mixed with sand and kneaded into balls, throwing them exactly where the top of my rod would reach over. I used as tackle a long single hair which I had contrived to obtain from one of the cream-coloured horses in the Buckingham Palace stables. I used two hooks (the upper just clear of the other), and a minute quill float, while for bait I had the cleanest and liveliest of sheep's liver gentles.

Roach-fishing requires a delicate and steady hand, and a quick eye for the least tremor of the float; the biggest fish often giving the gentlest of pulls, and when the float suddenly and entirely disappears, it usually is because some inexperienced youngster has rushed to the front and hastily swallowed the gentle.

Thus, when, in the midst of the tournament, my quill gave a quiet bob, I was not surprised to find what appeared to be a heavy roach, which, after delicate handling, I got to bank. It turned out to be a beautiful rudd of $1\frac{1}{2}$ lbs. weight, much resembling a roach, but with brighter red eyes and a slightly different arrangement of the dorsal fin rays.

Some of the roach (the proceeds of the tournament) after being kept in the larder all night, were cooked for breakfast. In less than twenty-four

THE MEDWAY, YALDING.

hours, I was down with what strongly resembled cholera, and so were all those who had partaken of roach. The doctor said we were suffering from ptomaine poisoning, the hot weather having had a malignant effect on the fish.

In the Beult, a beautiful little tributary of the Medway, were some ideal pools for bream. The schoolmaster, who had for days been privately ground-baiting one of these pools with lob-worms, let me share the sport; and for a few hours in early morning, and again just before sunset, we had good fun with them.

The Medway is very beautiful in this part of its course, winding between tree-like hedgerows and willows that dip towards the water, anon by flat pasturages whence the marvellous sky effects—the despair of artists—give the impression of unlimited space, as in Holland and the Lincolnshire wolds.

Here I caught many dace, those charming little fish with the liveliness of the bleak and the pretentiousness of the chub; while gudgeon bit boldly and freely, wherever the somewhat sluggish stream was at all rapid and the bottom gravelly. Gudgeon, to be eaten in perfection, should be cooked “on the spot,” *i.e.*, in the punt, or on some cosy landing-place. I hooked several chub, too.

They would rush out beneath the dipping willows, sniff at the cheese-bait, retire if not hungry, or swallow it at a gulp, and play a remarkably good game at trying to escape. They are handsome fish, but I cannot endorse Izaak Walton's pronouncement that they, with their labyrinth of bones, are "good meat."

In Chaucer's days, when pilgrims journeyed on foot from London to the shrine of St. Thomas à Becket in Canterbury Cathedral, they invariably rested on the final stage of their weary tramp, at an abbey, some twenty miles distant from their goal, where they were hospitably welcomed, and sent forth refreshed in body and soul.

Gone is that abbey, all save an archway or two, and a wall here and there. Gone are the abbots and priors, nought left but their bones crumbling to powder in the stone coffins that thickly strew a grassy close. No more do processions, to the sound of deep-toned organs, wend their way, amidst swinging incense, down aisle and nave to the high altar blazing with light and colour. No longer does the refectory table groan with good cheer, and the blackjacks of Kentish ale circulate amongst the half-famished wayfarers. Nothing remains as it was six hundred years ago, save a garden—wherein, surrounded by tall Madonna

lilies growing in formal flower-beds, sad-eyed Anglican nuns, breviary in hand, and wearing whimple and hood, wearily stroll—and a fish “stew,” used by the monks in pre-Reformation times.

In this “stew” I fished for pike. Though deep, its dimensions are absurdly small, 40 feet by 20 feet. Lined and edged with stone, it is perennially fed by a little stream of clear water from a distant lake, and on one side against the old garden hedge grow a few water plants. So exiguous is it, that I ridiculed the report that a very large pike had been seen half asleep near the surface.

I decided to use a snap-tackle arrangement, and for live bait a roach, which I had to catch, an easy enough operation, for the “stew” was full of them. I was encouraged to try for pike by the sight of several small ones poisoning themselves motionless in the water, after the manner of their parents. Stationed at one end of the stew, I was just glancing back to observe the nuns in the garden, when!—was I dreaming! or had I been mysteriously whirled into mediæval time! For there, facing me, was a veritable monk, with bare, tonsured head, cowl, and sandalled feet, rod in hand, just about to angle, and smiling exactly as

one would imagine a jolly old friar of orders grey would have smiled.

He was a member of an Anglican brotherhood, and he roared with laughter when I told him that he reminded me of W. Dendy Sadler's well-known picture, "To-morrow will be Friday."

I fished that "stew" all day without success. Determined not to be beaten, I essayed the following day with a novel lure which I thought would be more effective. Should there be a pike in the "stew," I thought it must surely be satiated with roach, while, probably, it had never seen a goldfish and would therefore rush at it. I brought this bait down by rail from London, and at every stopping-place had to renew the water, which at intervals had slopped over from the live-bait can ; otherwise the fish would have succumbed, but even as it was, they every now and again seemed to be at the last gasp for breath ! Still more troublesome travelling companions were some gentles that I once took with me in a tin, from out of which they escaped, and sprawled all over the compartment, luckily unobserved by my slumberous fellow-passengers.

Tenderly, as if I loved him (*vide* Izaak Walton), I secured a goldfish on the snap-tackle, and noiselessly cast in the line. Down went the fat, blue

float instanter, and remained down. Waiting just half a minute, I struck smartly. What a commotion! Having no reel or surplus line (the stew being so small), it was simply a case of sheer pulling and hauling. Every moment I expected the frail rod would break, and it did. However, getting hold of the line, I pulled up a pike of 10 lbs. weight, which jumped and snapped on the bank like a dog—until he received his quietus.

Borrowing a big dish, I ceremoniously presented the catch to the Lady Abbess, and I subsequently learnt that it was cooked in old-fashioned style for the community's Friday dinner, and was much appreciated.

The legend of there being a monstrous pike in the "stew" was disposed of. It transpired that a very large one had once had its home there, but had been shot by some wandering poacher when it was sleeping on the surface of the water.

Those who are not acquainted with the appearance of a pike would be surprised at the beauty of this fresh-water shark in full condition. The colour of my abbey pike was deep olive green, its fins were red, every scale intact and perfect, its head was like smoked mother-o'-pearl, and its sides barred with black. My next introduction to

pike was at Helmingham Hall, Suffolk, whose splendid moat I was one day admiring, when the kitchen door which abutted on it opened, and the cook came out and threw a piece of raw beef into the clear water. Instantly a large tame pike dashed up with a mighty swirl, bolted the meat and asked for more, which he got. My fingers itched, as every good angler's should, for a rod and

PIKE.

line, and permission from his noble owner to catch him!

Angling near London Bridge! What nonsense! Yet it used to be a common occurrence. Was there not, in Queen Elizabeth's time, a polar-bear kept in the Tower, that, secured by a chain, was periodically allowed to go fishing on his own account? Certainly, we are told so. So there must have been fish, though Bruin's share could not have been very generous.

At idle moments the citizens of London used to

take boat, and angle just above bridge, no doubt making good baskets of roach and barbel. In those days there was Thames salmon that ascended the river as far as Teddington. But as the stream became foul, salmon grew scarcer and scarcer, until in the Georgian era it was reported, as a very unusual circumstance, that six salmon had been netted off Cheyne Walk, Chelsea.

Chelsea Reach was then a favourite pitch for anglers, one enthusiast adopting the singular device of attaching a little bell to his float, so that when in his boat at night he could be made aware of a nibble from eel or other night-feeding fish.

Next, the angler's resort shifted to Putney, where, at the old "Star and Garter," merry parties used to foregather to banquet on whitebait, and water-souché made from flounders caught near the bridge. They are still occasionally captured, and, at certain time, I have seen quantities of roach swarming up the muddy creeks, but out of condition, with white fungus growth on their scales.

The factories at Hammersmith pollute the water, and there is no fishing until Richmond and Twickenham are reached. But London anglers, who revel in the delight of a quiet

day's outing in a punt, usually journey to Moulsey and Hampton Court. There, close to the station, they find the professional fisherman with his punt, fishing-rods, bait, and (by no means the least important) stone jar of sound ale—a good accompaniment to the contents of the luncheon-basket brought down from town. Comfortably ensconced in Windsor chairs at each end of the punt, they place themselves entirely in charge of the boatman, who has previously selected and baited a pitch in the rapid water beneath Teddington weir, and, with a minimum of exertion on their part, the fishing begins.

First, for barbel. If the stream below the weir could be almost drawn off there would be seen at the bottom amidst the plants that cover the stones many dark fish-forms with barbels, or barbules, on their jaws, all heading one way, and routing about like pigs in search of the insects that live on the plants. These are barbels, rather handsome fish with pale gold scales edged with black, and provide capital sport when on the feed. They are eaten by Jews on certain religious festivals, but are not very palatable.

With an old friend I found myself one beautiful day in a punt such as I have described. Our tackle was strong, and needed to be, for we were

soon at work with big fish, and had to play them most carefully, for, when hooked, barbels always try to cut the line with their tails, which are partly serrated.

After emptying the luncheon-basket, and, I think, the stone jar, we smoked our long church-

GUDGEON AND BARBEL.

warden pipes, and, lulled by the sound of the weir, we had a nap. Thus refreshed, we turned our attention exclusively to those lively little fish, the gudgeon, which, if present in force, produce much fun in the catching. They swim in shoals on gravelly bottoms that occasionally have to be

disturbed with a long and heavy rake. This causes clouds of mud to float down the river ; the inquisitive but unwary gudgeon comes up to see what is the matter, and takes the bait, a small red worm.

In gudgeon-fishing there are few pauses. They bite merrily, but the instant the float disappears the angler must strike smartly, and also whenever the float arrives at the end of the swim, for there may be a vacillating fish that cannot make up its mind to take the bait until it is about to disappear, when it makes a dash for it. We caught dozens in the gloaming, and, after bestowing our fees, and also our barbel, on the fisherman, we returned to London, and for supper had a splendid friture of fresh gudgeon, though it was perhaps not quite up to the standard of the French chefs, who excel in cooking this toothsome little fish.

During our tremendous struggle with the French in the early years of last century, certain precautionary steps were taken by the military authorities, in anticipation of a descent upon the south coast by our gallant foes. A chain of Martello towers was one feature ; a fresh-water canal was another. The latter began at the western boundary of Sandgate, terminating in the neighbourhood of Warehorne and Appledore,

and describing in its course a slight curve, facing inland.

The earth thrown up in the process of excavation was carefully arranged on one side as a rampart, and, wherever the canal turned at an angle, embrasures were left for placing artillery in commanding positions. Trees were planted in orderly rows on the broad surface of the rampart, and the whole work constituted a formidable obstacle to the advance of any force that had effected a landing. It would have to be stormed, and, being well defended with guns, it could hold out long enough for reinforcements to come up and drive the invaders back to the sea.

As a military defence, the canal and rampart have fallen into the sere and yellow leaf, but the trees have grown up, and the rampart provides a delightful promenade in summer, with a fine view of the sea and the graceful curve of beach ending at Dungeness. The breeze blows sweet and cool across the flats and saltings, the sun's heat is tempered by the shady limes and sycamores, the downs on one side rise in picturesque ruggedness towards Saltwood Castle, the ditch alongside the rampart smiles with forget-me-nots, and the quiet scene is enlivened by the distant crackling of musketry practice on the Hythe rifle-ranges.

The waterway has always been attractive to boating men and also to anglers, as it is reputed to be not only well stocked with roach, bream, and perch, but to contain a few pike.

For the sum of, I think, two shillings per week, leave and license is granted to angle for any of the above fish, but leave and license is granted also to rowing boats on the canal, and so shallow is it, as a rule, that the oar-blades churn up the mud at each stroke. Moreover, the fast-growing weeds which threaten to fill up the channel are periodically cut, and foul the water. As the trippers in their gondolas, "Youth on the prow, and Pleasure at the helm," pass the wretched angler on the bank, spoiling his swim and sending his float out of sight, unparliamentary language is provoked, and the proverbial "gentleness" of Izaak Walton's art is belied.

Then, after a while, a water-bailiff appears, from nowhere in particular (as is the wont of all keepers), and demands to see your ticket. Skilfully throwing out hints as to the best pitches, the best bait, and where to obtain it, &c., he sticks to the angler's side, until the latter, maddened by his persistency, pulls a coin of the realm out of his pocket and gives it to the bailiff, who, thus satisfied, takes his leave.

I used to tramp ever so far up that canal to get clear of the boats, and sometimes managed to catch a fair number of roach, which, though a little undersized, were appreciated by my landlady. I fancy she fed her children on them, but luckily her husband was head-assistant of the local infirmary!

Sometimes a horde of skirmishers, during military manœuvres, would come tearing along and occupy the bank, when angling would come to an abrupt conclusion.

I would suggest that, since the "civic fathers" of Hythe issue angling-tickets, they should take steps to restrict or regulate the boating, the two recreations being absolutely incompatible on the Royal Military Canal.

My recollection of Norfolk and Norfolk Broads is chiefly associated with fine catches of perch and bream. Engirdling the farmhouse where I put up, were ditches, or "cuts," connected with the river, about fifteen feet wide, deep and clear, and spanned only at long intervals by primitive plank bridges. The natives went about with leaping-poles, and visitors were expected to do the same.

I confess it was with trepidation that I made my first essay to leap over the "cuts" to the

fishing-ground. I found myself hovering in the air "between the de'il and the deep sea," in suspense as to whether the pole would fall short and souse me in the water, or send me on to the bank whence I started. But I got into the way of using

PERCH.

the pole, though perhaps with neither agility nor gracefulness.

Our destination was a tributary of the Waveney, where the stream ran pretty briskly. At a particular spot, under willow-trees and pollards, we always found a shoal of perch. It must have been a piscine social club, and the grubs that every now

and again dropped from the trees were doubtless a great attraction.

I think in one day we caught six dozen fish, none under 1 lb., several of 2 lbs., and one of 3 lbs. weight. This huge chap made a splendid fight for his liberty. We had no need for ground-bait, the grubs were sufficient, and every day there was always an assemblage of perch, though often we must have caught the entire shoal.

We had a small charcoal stove, with a supply of fuel, hidden away near the place, and we used to cook some of the perch on the bars for many a pleasant *al fresco* lunch.

As to bream! Though only too common in East Anglia, this fish is not very well known to Londoners. In London and in the Midlands, however, there is a considerable demand for this tasteless fish during the Jewish Passover. Izaak Walton describes the bream as "very broad, with a forked tail, and his scales set in excellent order; he hath large eyes, and a narrow sucking mouth; he hath two sets of teeth, and a lozenge-like bone, a bone to help his grinding." Walton devotes two chapters to bream and the catching of them, and his advice regarding them is pretty closely followed at the present day, except that instead of boiled malt as a ground-bait, a horrible compound of

bullock's blood, dog's greaves, meal, and oil-cake, worked up into a kind of pudding, and then rolled into balls, is generally used.

The biggest bream ever caught, says Frank Buckland, was one near King's Lynn, weighing $11\frac{3}{4}$ lbs., and measuring 2 feet 6 inches from the

BREAM.

nose to the fork of the tail,¹ and 10 inches deep.

Bream fight gallantly for freedom, but being soft-mouthed, if well hooked they seldom get off.

I think few of my London readers have ever

¹ The only correct way of measuring the length of a fish.

seen a lamprey—a strange-looking kind of eel, remarkably like a snake. It may be occasionally met with in a West-end fishmonger's shop, but as its appearance is unfamiliar to most people, I will give some particulars of this queer but very toothsome eel, gastronomically reported to be fat and delicate.

From the town of Worcester a succulent pie of lampreys is annually sent up for the King's acceptance, and, according to a very old custom, should His Majesty happen to pass through the borough, a lamprey-pie is presented to him.

Potted lampreys are a speciality at Gloucester and Hereford, at which latter city I first became acquainted with them.

Every schoolboy, of course, knows that Henry I. died in Normandy (1135), from eating too freely of lampreys; but I venture to suggest that it was not so much these delicacies as his anxieties and disappointments that killed him, as they did King John, who traditionally expired after a surfeit of peaches and new ale!

There are three kinds of British lampreys—the sea variety, the river variety, and the miniature lampreys. The first sometimes ascend streams in great numbers. Their colour is brown upon yellow, and they are three feet long. The second

LAMPREY.

variety average only about 2 lbs. in weight, and are black above and silver below. Both sea and river variety are mottled. The third kind, the lamperns, seldom exceed ten inches in length. The skin of all three kinds is scaleless, and this, together with the total absence of ventral or pectoral fins, gives them a reptilian and repulsive appearance.

The lamprey has no gills, but behind the eye, on each side of the head, are seven little sacs or holes,[†] through which it draws in and expires water, while with its sucker-like mouth it adheres to rocks and stones. This mouth is peculiar, resembling the broad end of a funnel, and is furnished with many small barbed teeth. The lamprey is supposed (for very little is known about its habits) to subsist on water molluscs and larvæ.

In the Wye at Hereford, above bridge, where that picturesque river, after winding through flat but pleasant fields of pasturage, suddenly contracts, and presses itself between fantastically rugged and wooded cliffs, there are some clear pools, two to six feet deep, quiet and modestly retired from the bustling current. There I used to catch lampreys, "bobbing" as for eels, *i.e.*, with

[†] In Germany, lampreys are called "seven eyes."

clots (fifty) of large worms strung together, secured with worsted and attached to a 12-foot length of whip-cord and short pole, which did duty as a fishing-rod. The clot I let down to the bottom, and every two or three seconds lifted it up, as in sea-fishing. After a vigorous tug, up came a lamprey, with its teeth entangled in the worsted. Just as it was about to fall off I deposited it in a box by my side.

With an eel-spear made of thin blades of steel, which opened and retained the fish between their serrated edges, I used to harpoon lampreys as they lay at the bottom with their heads firmly attached to the rocks and stones. But it was an uncertain way of getting them, as the undulations of their bodies rendered it difficult to take correct aim.

CHAPTER XII

SOME BRITISH FRESH-WATER FISHES (continued)

ADJOINING the pretty village of Newton-le-Willows, Lancashire, is a lake or mere, wherein all and sundry, on payment of one guinea per annum, or a small fee for the week or day, may angle.

Thither from the town of Warrington close by I, in somewhat sceptic mood, hied me to test the truth of the local assertion that I was "bound to have good sport."

First of all I had to hunt up the agent who sold the permits. As might be expected he was out, but his wife was in, and, taking my fee, she told me that the tickets were locked up, but that it would be all right if I assured the keeper that I was duly qualified to fish. I knew what that involved!

The mere was an ideal place; low-banked, with

trees here and there overhanging the deep water. "Perch? Oh yes, there are plenty high up the lake near the bridge, where the stream runs pretty briskly," said the keeper, who interviewed me immediately on my arrival. Red worms were undoubtedly the correct bait; but not a nibble did I have for an hour. So I tried for roach, as I had tangible evidence there were plenty of them.

Seated on a gravelly beach was an elderly mill-hand, a Lancashire "lad" (they are all lads and lasses in the Duchy) "at play,"¹ and he was using a beautiful roach rod, Nottingham tackle, and a quill float that lay flat on the surface. "Had much luck?" I inquired. "Neowt to boast on," he replied. "Oi've bin here sin' six i' th' mornin', and now it be noon, an' these be all Oi've gotten," pointing to some dozens of roach scattered around him. "You have some fine ones amongst them," I answered. "I only hope I shall be as lucky."

But I was not. Neither gentles, nor paste, nor anything I had, would tempt more than a few small, inexperienced fish to come near the hook.

At last I thought I would consult the "lad,"

¹ There was a strike on at the cotton-mills.

who was enjoying his dinner of cold bacon and bread and the contents of a flat stone bottle. He was affable, and revealed the secret of his success. He baited with morsels of potato, bits of which he occasionally threw in to attract the fish.

With this new lure I tried at a swim a little distance off—but no luck! Then up came the keeper again with sage advice, which resulted in the transference of a coin from my pocket into his, and of a dozen fair-sized roach from his possession into mine. Thus I basely and ingloriously escaped the ignominy of returning to my fair and expectant cousins empty-handed!

Our sport was considerably interfered with by sundry schoolboys, who, from the other side the mere, persisted in slinging stones in our direction. The moaning hum of these deadly missiles within a few feet of our heads was not pleasant. As evening fell I and the other anglers started for home; the youngsters, tired of their play, departed.

Warrington, though a rather dingy manufacturing town, is famous for certain things less prosaic than wire-drawing and cotton-spinning. It has historic associations, for Cromwell occupied its outskirts, and built redoubts during his advance

into Scotland ; and both the Pretenders encamped at Preston, not far distant, intending to take possession of Warrington Bridge as a stepping-stone to wealthy Manchester. In art and literature Warrington and its vicinity can boast of such representatives as Mrs. Barbould, Mrs. Gaskell, Henry Wood, A.R.A., Warrington Wood, the sculptor, and Luke Fildes, the painter of that most touching picture, "The Doctor."

Warrington is famous for its canals. Naturally, of these the great ship waterway from Liverpool to Manchester ranks first in importance—a noble work, which we must hope will eventually repay everybody concerned in it. I first saw the canal when it was being constructed, and again when its traffic was in full swing. It was most interesting to note how, at the hooting of a distant steamer, the great swing bridges turned round majestically by hydraulic power, fitted snugly into a recess at the side of the canal, leaving the watercourse perfectly clear.

Walking in the fields near the town one is startled by seeing the slender masts and big funnels of a steamer moving in the distance, the hull invisible. At all hours of the day and night the vessels are heard, and sometimes, should the bridge-keepers seem dilatory, the summons is

imperatively repeated. But no anglers, as yet, patronise the ship canal.

Then there is the River Mersey, so foul that no fish can live in it ; and there are sundry cross-cut canals, but the favourite is the old Bridgewater—Brindley's wonderful century-old work, forty-two miles long, and connecting the Mersey with Manchester—more useful than ever now that tugs have almost superseded horses in conveying cotton and coal from the seaports to inland mills. Compared with modern canals, it is narrow, of course, but sufficient for the trade, and has with age become picturesque in many places. At Walton (near Warrington), where the canal runs past Sir Gilbert Greenall's park, it is almost romantic. Walton is the Warrington "lads'" favourite angling ground, where the "lad," generally accompanied by a boy, well-provisioned, and with rods and lines of the best, goes early in the morning to his special pitch. There he sits hour after hour, occasionally rising to stretch his legs, or when a passing string of barges necessitates his taking the line out of the water. Not a word does he exchange with the anglers on either side of him. Now and again there is a murmur of excitement when a good-sized roach is hooked, a somewhat rare event, for,

although there are plenty of fish, the vibration of the steam-tug's propeller disturbs them. One week-day I watched the anglers for a good hour, and not one out of the score assembled got even a faint nibble. But Sunday is the favourite day for fishing in the Bridgewater, there being then less traffic.

These Lancashire anglers are a philosophic race, and, in spite of interruption and failures, work steadily on. The daylight gone, they fish on in the gloaming, and only when it is too dark to see do they depart, all the better for the fresh air they have imbibed. It is a capital way of spending their leisure, and keeps hundreds of men from the beershops and the attendant evils of football matches.

At intervals special excursions are arranged for these anglers from Warrington to Chester, their objective being the Dee; and then the railway platform is a sight indeed—packed from end to end with men burdened with fishing paraphernalia, until the “special” draws up, when they swarm into it.

My fishing experiences in Warrington were unsatisfactory. At first, bait was difficult to obtain, as under the name of “gentles” those necessary attractions for roach were not known.

All inquiries for them failed, until a burly butcher cleared up the mystery. "Why, it be *maggots* thee wants!" he said contemptuously. So for "maggots" I inquired ever afterwards, and got them.

I tried the Bridgewater canal, and left it in despair. I tried a lovely mere not far off, in Cheshire, but all the fish had apparently assembled at the far and inaccessible end. Then I heard that the Warrington Corporation issued permits to angle in the reservoir, where all kinds of fish abounded.

The reservoir was prettily situated near Hill Cliff, and close to the Walton Hall home preserves, where the head-keeper lived in a picturesque lodge. No sooner did I arrive at his gate than a pack of sporting dogs, affable no doubt when with the gunners, furiously rushed out into a kind of alley. Not desirous of making their closer acquaintance, I shouted out to a woman who came in sight to be good enough to bring the ticket to me, which she did, remarking pleasantly, "You needn't be afraid of those dogs. You might just as well have come inside. They're as quiet as lambs." But my idea of lambs differed from hers.

Now, a reservoir is supposed to contain water,

since that is the object of its construction. It is true there had been no rain for weeks, and that the month was August, but I was hardly prepared to find it in such an unprecedented condition of shallowness, with a wide, muddy beach intervening between the banks and the water. No boat was procurable, so I had wearily to tramp along the margin to the head of the reservoir, where a feeble stream trickled over a weir into fairly clear and deep water. There I languidly fished, the resultant day's sport being three small roach and a perch.

Returning home along the dusty road, I met two carts in succession, the carters being typical Lancastrians, familiar in manner and considering themselves "no man's inferior."

"There's a chap bin' a-fishing," said one to the other, over his shoulder. "Hast caught eowt?" called out to me the second carter. "Neowt," was my reply, "neowt worth speakin' on." For which adoption of the Lancashire dialect I was much complimented by my Warrington friends when recounting the incident.

In spite of the arid properties of the reservoir, I conscientiously worked out my seven days' ticket, but at the end of that time my answer to the carter's inquiry would have been unaltered.

At Sowerby Bridge, in Yorkshire, there was once a beautiful stream that wound its way for miles through wooded vales innocent of defilement ; but one day manufacturing man appeared on the scenes, recognised the utilitarian advantages of the situation, erected blanket mills, that, pouring the abomination of desolation into the little current, turned its waters inky black and killed its fish. I was staying at Sowerby Bridge some years ago, and was in an angling mood, but clearly it was hopeless to try that stream.

I happened, however, to hear of a mill-dam on the valley side that *might* contain something finny. True, I found it not particularly pellucid—an unpleasant scum lingered on its placid surface, nasty blue mud edged it, and the carcase of a dog, distended into a shapeless mass, was slowly bobbing about. But there were roach sure enough, for I saw them.

Under the burning sun I fished, my boots sinking deep in the unctuous mud (what will not an ardent fisherman endure?)—but no bites!

Returning home, my host, a doctor, met me in the garden. He asked me where I had been fishing, and I told him. “ Why, my dear fellow, don’t you know that typhus and cholera are rampant in

A TROUT STREAM.

the town, and that that dam drains the worst part of the infected districts? You are in for it!"

What the being "in for it" really meant I was left to surmise. But the doctor made me take my muddy boots off on the lawn and leave them there; then hurried me off to my bedroom, where I had to discard most of my apparel, which was conveyed away with a pair of tongs and, I believe, *burnt* (I never inquired as to what became of it, but I certainly never saw it again). I was then compelled to take an antiseptic hot bath, and finally, after much negotiation, was persuaded to swallow some horrible "preventative" mixture, with the saving clause that it was to be followed by a stiff B. and S. For days afterwards I was looked upon with suspicion, and, I imagined, avoided, which hurt me. But time went on, and, like the jackdaw of Rheims, I was not "a penny the worse."

From the Pennine hills, originated by perennial springs, ultimately developing into a full-grown stream, comes the Tees, whose transparency ceases only as it approaches dingy Middlesbrough.

One season I had permission to fish in this beautiful river for two miles on either side of Barnard Castle. Unfortunately there had been no

rain for weeks, and much water had run off from the almost unreplenished Tees, though there was still a respectable current. Even the High Force, a noted neighbouring waterfall, had dwindled to a thread, and save for a chain of pools, the stream was fordable everywhere.

The tree-covered banks were so high above the low water that it was easy to walk along the margin and cast a fly without danger of being "hung up." Deep down in the seclusion of the rocky cleft, the stillness only broken by the delightful sound of tumbling water as it swirled against the stones breaking into a myriad diamond drops, now gliding smoothly over the white rocks, and, here and there, reminding one of the rapids of Niagara in miniature. No sound of life, save the distant splash of leaping salmon or trout, the plaintive song of a robin, or the complacent twitter of a dipper, as emerging from his "scuttle"¹ under water, he shook the drops from his compact black back, flicked his short tail up and down, and perched upon a dry rock in mid-stream. Then I understood how accurately Sir Walter Scott, who had stayed for some time at Rokeby Hall, had described the surroundings. He says:—

¹ The dipper does not walk, but scrambles under water.

“That mighty trench of living stone

Where Tees full many a fathom low,
Wears with his rage no common foe;
For pebbly bank, nor sand-bank here,
Nor clay-mound checks his fierce career,
Condemn'd to mine a channell'd way,
O'er solid sheets of marble grey.”

I fished up-stream, my lure being, I believe, a brown palmer or a dun (popular flies in the district), and, although I conscientiously tried all the likely looking rippled water, I got not a single rise, yet the trout were plainly, too plainly, visible. They did not seem at all shy, but rather bored at my persistence as they watched the same fly float down towards them time after time.

The day was cloudless and very warm. How deliciously cool the spotted beauties looked, skilfully sculling themselves against the current with their transparent tails and fins! Presently it grew dark, heavy clouds rolled up from the Yorkshire moors and a smart shower came down. The trout were instantly hungry, and I soon had half a dozen sizeable ones in my basket. Then the sun shone out, and the trout retired to contemplation and repose.

Now to surprise them! Adopting an old device, I whipped a delicate strip of something (which I

shall not reveal) on to the lower part of the fly. A quiet cast across a shallow pool. The trout knew it was August, and that no May-fly (which was what it looked like) should be floating about ; but it was irresistible to a piscine matron who should have known better, and woman-like,

COMMON TROUT.

she rushed in where wiser trout feared to tread. A gulp—and the fly was hers. But paugh! There was no juicy taste in it, and she essayed to reject it, then turned to go, when a sharp pang went through her shapely jaw and she was hooked. Hither and thither she went. My rod bent double, and the line ran singing from

the reel. But it was no good, and after a gallant fight a capacious landing-net came into use. The fish scaled just 4 lbs., and was in resplendent condition, plump and firm, brightly silvery, the scarlet spots intensely ocellated,¹ and the yellow tints of the belly like gold.

By this time I had walked as far as the picturesque bridge, named after a ruined abbey, in whose chapel, says Sir Walter Scott,² once

“ . . . was seen unwonted sight,
In holy walls a scaffold dight !
Where once the priest of grace divine,
Dealt to his flock the mystic sign ;
There stood the block display'd, and there
The headsman grim, his hatchet bare.”

Beneath the bridge was a natural lock of limestone, deep and clear, and peering down I could see at the bottom, all heading one way, many dark forms, that occasionally rolling over, revealed the silvery sides of salmon, that king of fishes.

They were unattainable, however, for even if I had brought proper tackle I had only a trout license, and did not care to run the risk of a heavy fine. But I sat down in the delightful shade and thought out some facts and incidents respecting the two chief branches of the salmon family.

¹ Eye-like.

² “Rokeby.”

I tried to remember instances of some remarkable specimens of trout caught during recent years in Britain, and I succeeded in recalling the capture of a magnificent 16-pounder in the Test at Romsey, rivalling the 21-pounder of Loch Rannock, in Perthshire!

Old Father Thames at Shepperton weir yielded one (dead unfortunately) of 9 lbs. weight, 27 in. long and 14 in. girth; from private waters in the Midlands came a fine rainbow-trout of 9 lbs. 1 oz.—that transcendent “beauty” of the salmonidæ—acclimatised in England, and I think stocked in the Buckingham Palace lake; while from the Colne an astonished roach-fisher drew with his fragile tackle a handsome trout (8 lbs. 1 oz.), after a prolonged fight.

The appetite of a trout can be very voracious and indiscriminate. The following was the experience of a gentleman when fishing in a tributary of the Wey, near Guildford, in August, 1904. He landed a fish of $2\frac{1}{2}$ lbs. weight, and saw a tail protruding from its mouth; upon opening the body he found a partly digested water-rat, ten inches long.

Trout are not always carnivorous. They sometimes become graminiverous and even domesticated. On the River Test at Wherwell, near Andover, they

were at one time so accustomed to the bread thrown out to them that they would hardly eat anything else, and declined even to look at a fly, natural or artificial ; while as to tameness, a lady in Staffordshire had a large rainbow-trout which would swim to the edge of his pool and take from her fingers a worm or piece of meat, and come to her every morning for his ration of bread.

Some years ago, Frank Buckland, who loved salmon as did King William the "tall red deer," published a list of the monsters in his museum. It was headed, if I remember rightly, by a giant from the Tay, weighing 70 lbs. (presumably netted), a weight which, I think, has never been exceeded.

In Scotland, fish of 40 lbs. and 50 lbs. weight are caught every season, but the greatest rival to the Tay 70-pounder was one of 61 lbs. (also from the Tay) taken with rod and line—a British angler's record.

The West-end fishmonger's salmon averages about 10 lbs., and I recollect seeing the Aberdeen Corporation boat full up at the pier-head one evening, laden with almost living fish from the shore trammels. Of this cargo of silver nothing was over 15 lbs. or under 5 lbs. in weight.

The subject of salmon is an inexhaustible one.

Controversies, I suppose, there will always be as to its development, its habits, its food, its journeys to the sea, and its recollection of its own native river. Of one thing, however, there can be no question, *i.e.*, its singular beauty when fresh from the sea. Its outline and proportions, and its colour when

SALMON (MALE).

“clean run” and in good condition, are superb. As the season advances the silver brightness gives place to hues that rival the cock-pheasant’s lustrous plumage.

An amusing story of this fish is told of Sir Samuel Montagu, M.P., whose peculiar hobby was bi-metallism. He once sent Sir William Vernon

Harcourt a fine salmon. Next day there was a discussion in the House on the subject of bi-metallism, after which Sir William sent the following acknowledgment of the gift:—

“DEAR MONTAGU,—I have received your bi-metallist fish; it is as bright as silver, and worth its weight in gold!”

Opinions differ as to a salmon's best size for table use. Some people hold that the big fish are coarse, others that the medium or even smaller fish are better flavoured. Some prefer their salmon “all alive o',” others with the flesh well set.

It is said that the quality of salmon varies with the different rivers. The Tweed, the Tay, the Severn, the Wye, the Itchen, and the Shannon each has its enthusiastic advocates. But the controversy is no mere modern one. In Queen Elizabeth's reign did not an argument arise between Mr. St. Leger and one of the Bideford Bridge trustees as to whether a Torridge salmon caught above bridge was better and would eat as firm and as flaky as one from below bridge, which burning question was settled in English fashion by a wager, and, of course, a grand dinner!

Then there is the debated gastronomical point as to the best cut; whether it is to be found in the

middle, the jowl, or the tail. Mrs. Becton condemns the tail, but Mr. W. E. Gladstone always maintained that the best cut was one taken from the middle just where it narrows to the tail, and that a salmon to be in perfection should not exceed 6 lbs. or 8 lbs.

A DEVONSHIRE RIVER.

Personally I think a 4 lb. salmon trout, with its delicate pink flesh, is superior to any salmon, a continued dietary of which latter fish would soon pall upon the palate. But the idea that in olden times apprentices were fed upon this rich, satiating food is a mistake. What they had was the salted

"kelts," easily captured when helpless and emaciated after spawning, and so tough and nasty that no wonder the lads protested against it.

I left the lovely Tees, my next "trouting" being amidst totally different scenery at Moffat, in Dumfriesshire, a favourite watering-place for the well-to-do of Glasgow and Edinburgh.

It is famous for its chalybeate spring, where, for the modest sum of twopence, you can obtain a goblet of the clearest sparkling water. I was inveigled into taking the necessary two-mile walk (*de rigueur* before breakfast), and also into swallowing a large glass of this water, so nauseating in its flavour of rotten eggs that I felt sick for hours afterwards. Certainly there is no need to go abroad to undergo a "cure!"

The charming little rivers, Moffat, Annan, and Evan, are close to the town. Clear as crystal they are, with pebbly bottoms, and wind their course between solemn hills, crowned to their summit with purple heather.

There, along the treeless banks, out of sight as much as possible, I fished, and at every coil of billowy cloud the fish would rush at my two flies, fighting for them, until I had a basketful of those delightfully plucky little burn trout. To the horror of my economical Scottish housekeeper, I

ordered them to be cooked in West of England fashion, *i.e.*, fried in clotted cream.

Angling was varied by trips in every direction, especially to a beautiful waterfall, the Grey Mare's Tail, and to a most romantic pool, Beld Craig Linn. But I must leave fresh-water fishes, and put out to sea.

CHAPTER XIII

SOME BRITISH SEA FISHES AND FISHING

WHETHER the supply of fish around our coasts has or has not sensibly diminished, it is certain that herrings still exist in inexhaustible numbers. Providence seems to have produced them with the intention that whatever the inroads made upon them by their innumerable piscine enemies, or by man, their ranks should never be seriously depleted; for, although their roe yields but 20,000 to 50,000 eggs, as compared with the conger's 16,000,000 and the cod's 7,000,000, they are so prolific that if a single pair were allowed to multiply without hindrance for ten years, the result would be a mass of fish equal in bulk to our earth.

A faint conception of this may be gathered from the enormous size of the shoals. In 1877 one of H.M.'s cruisers met with a shoal four miles long and two miles wide—5,120 acres—that would

have occupied a space stretching from Kensington Palace to Blackfriars Bridge on the one hand and from Victoria Station to Portland Road Station on the other. Assuming the shoal to be only twenty feet deep, and giving to each herring the very liberal allowance of 72 cubic inches, we get the astounding number of about 20,000,000,000 individuals. And this was but one shoal out of, for all we can tell, hundreds and thousands. Battalions of dog-fish and endless multitudes of gannets could make little impression upon such hosts, and if every boat in our combined herring-fleets (*i.e.*, in the north-east coast fishery), caught 20 crans, or 160,000 mature herrings, the shoal I have described would be diminished by barely 1 per cent.

At Aberdeen the herring-boats leave the harbour pretty early in the afternoon, fish all night, and, when possible, return the following morning. A few years ago I was fortunate enough to be on the spot when the fleet arrived—a pretty and interesting sight. Scores of smacks with their official number and the letter “A” stamped on their tan-coloured sails drifted in with the incoming tide, the light breeze having failed, each, however, striving hard to get alongside the quay first; while dealers, old fishermen, helpers, and

"gutters" looked on with gathering excitement to learn the result of the night's toil. Up came the fleet amid a pandemonium of inquiries, replies, and shouts of welcome in broadest northern Doric.

Evidently they had been lucky, for the boats were full to the gunwales with fish that glittered like polished silver in the bright sunlight; and, not for the first time, I realised the beauty of a newly-caught herring.

Not a moment was lost. As soon as the wholesale dealers concluded their bargaining on board the boats, hundreds of eager helpers carried the fish in baskets to long, open sheds at the rear of the quay, where scores of women of all ages, clad in long rough blue flannel overalls and armed with formidable sharp knives, stood waiting behind big gutting-troughs. With lightning rapidity and with a dexterous and peculiar turn of the wrist they eviscerated fish after fish, casting the entrails behind them, and the fish into the trough, to be subsequently converted into bloaters, varying in saltness from that of the mild "breakfast" to the intensity of the "Glasgow magistrate." Very soon the "gutters" presented a hideous appearance—aprons, arms, and even their faces, being covered with blood and slime. But they did not mind it,

and chaffed with and smiled at the onlookers as they continued their arduous work.

I soon had enough of it, and proceeded to another part of the harbour, where the steamers were lying loaded with the result of long hours of their own trawling and the catches of the boats that remained on the fishing-grounds. On the wharf lay piles of cod and other hook-and-line fish, and innumerable flat-fish, from turbot to skate, while from the steamers' holds a multitude kept pouring out. Dealers, fishwives, and "cadgers" jostled one another in their eagerness to inspect the goods, nearly pushing one another over the slimy heaps; but at last, in orderly array, the lots were arranged, and business commenced.

I noticed that the cod varied greatly in colour, some being almost white in places, but I could not quite credit the statement that they had thus become albinos from having been exposed to the ice-blocks!

Almost deafened by the noise, I left, wondering why trafficking in fish should always and everywhere involve gesticulation and loud vociferation. But I returned to my hotel freshened by the suggestiveness of breezy sea-air, and feeling that in fine weather, at least, there is no need to associate "caller herrings" with "lives o' men."

The weather was settled fine, and as a small steamer happened to be going from Aberdeen to Lowestoft, I took a trip in her down the east coast, out of sight of which throughout the miniature voyage she seldom was. Past the Inch Cape Rock, where the pious monks of old placed the warning bell, removed so fatally, we steamed over a summer sea ; past St. Abb's Head, Holy Island, and Fern Island, hallowed by the Christianity of early Britain. Tees' mouth we sighted, which recalled my trout experiences. Right under the towering Flamborough Head we glided, and in imagination I could see the patient anglers on Bridlington pier fishing for pollack. Then Spurn Head. Next, the Wash—with its memories of King John—King's Lynn, and Sandringham House. Finally, through fleets of fishing-boats, Yarmouth Roads, to our destination, Lowestoft, which boasts of being the most easterly town in the kingdom.

When I arrived there had just been some extraordinary catches of herrings, some boats having secured 187 crans, or 150,000 fish, and the price had consequently fallen to 2s. 6d. per 800, or 26 for a penny—a slump, needless to say, that did not benefit Londoners, for fish-mongers suavely ignored the fact, and continued

to ask as much as before for herrings of rather doubtful freshness. Truly the ways of fish-vendors are past finding out!

Lowestoft has splendid facilities for its leading industry in the shape of docks, quays, sheds, ice warehouses, and railway sidings. On the principal quay were piled newly-caught herrings in tens of thousands. It is no exaggeration to say that they formed a rampart 100 yards long by 9 feet or 10 feet high and 20 feet wide at the base. How such a mass of fish could be dealt with and sent off that day to market centres puzzled me, until an army of packers came on the scene, when train-loads of boxes and barrels filled with herrings stowed in broken ice were dispatched with the utmost precision, and the quay, save for innumerable scales and other *disjecta membra*, was empty.

Walking down a side street of the old town of Lowestoft that afternoon, I came across the skipper of one of the fishing-boats carrying a large string of herrings, his perquisite. Impulsively I interviewed him in a quaint Mariners' Rest, or some such hostelry, and, his tongue being duly loosened, he revealed about the herring fishery much that I was ignorant of. It was arranged that I should go out with him in his craft, the *Mary Anne*, to see the process.

In company with hundreds of boats, the *Mary Anne* (whose crew consisted of the skipper, four men, and a boy) sailed away to the fishing-ground, a good store of rough salt in her hold, a mass of nets, and plenty of "tucker," in case the herrings should be slow in making their appearance, when she might be out three or four days, or even a week.

When clear of the roadstead, where the bones of sundry coasting vessels showed what winter gales could do, the skipper lit his pipe, and was at leisure to talk. "Miles of net? Yes," he said, "I reckon that each boat carries from one and a half to two miles of it, so that, taking Yarmouth and Lowestoft together, say two thousand boats, there might often be two thousand miles of drift-net down at one time."¹ He told me that the nets are no longer made of hemp, but of cotton, which is less visible to the fish. They are in pieces, each piece being 50 yards long and from 20 feet to 30 feet deep. At one edge they are fastened to a "back-rope," which holds them together. To this are attached, at intervals,

¹ In the year 1904 there were landed at Yarmouth no less than 40,559 lasts, or 533,378,800 herrings, sufficient to provide every man, woman, and child in the United Kingdom with a score of herrings apiece.

bladders, corks, or inflated dogskins,¹ and at each point where the pieces are joined together is a small keg. The lower edge is weighted, generally with stones, to keep the great wall of meshes (from 1 inch to 1½ inches in size) perpendicular in the water. The herrings come against this obstacle, and are caught by the head, which they cannot withdraw, the gills acting like barbs.

The skipper went on to tell how that, even if very successful, the crews of the Lowestoft fishing-boats seldom have much money to draw at the end of the season, as they lay in such an extraordinary quantity of provisions that their cost wipes out the profits.

By this time we were far from the land; the nets had been carefully overhauled and got ready for instant use, and a sharp look-out was kept for any indication of fish being about. There was, however, no oily gleam in the water, and there were no sea-birds. However, we sailed away, outstripping the others, and the afternoon ripened into evening.

Of course, the great difficulty in herring fishery is to know where the fish are. There may be

¹ In the Shetlands dogs are very scarce, as they are invariably stolen, knocked on the head, and skinned for this purpose.

myriads not far off, but no trace of their presence. They may be very deep down, or mid-way; and as, like armies,¹ they go in advance- and rear-guards, companies, regiments, and battalions, there may be miles of ocean between without a single fish. Another difficulty is that the nets may not always hit any great quantity.

Frank Buckland thought that "the progress of an army of herrings through the water might be illustrated by a flock of birds flying through the air." Now, supposing a net were floated haphazard in the air, on the chance of catching them, the birds might strike the net in a body at the middle of the net, while portions of the net to the left and right of it would catch comparatively few. So with the herring. If no indications exist of their whereabouts in the sea the nets would float purely at haphazard.

But our skipper was an old hand, and many of the boats were eagerly watching the *Mary Anne* to see when she would shoot her nets, so that they might follow suit, and share in the spoil.

Suddenly in the distance a solitary gull made a swoop down, and flew away with a herring. That was enough! Changing our course, away we went and found the surface water looking as though

¹ Herring. Dutch *Herr*, an army.

barrels of oil had been cast upon it. The sail was lowered, the nets were put out and fastened to the boat by a long rope, and silence reigned on board.

The night had fallen, our riding-lamp was carefully lighted, as it is most dangerous for fishing-boats to drift about with their nets at night without this warning to steamers, and many a mile of net has been lost and many a craft run down for want of the precaution.

As day broke we anxiously scanned the long line of floating bladders. They were all very deep in the water. A mighty catch! We carefully hauled in the great net; portion after portion was drawn on board, the iridescent half-dead fish were shaken out into the hold, and occasionally a layer of salt was scattered over them until at last the hold was quite full, and the empty net coiled aside in good order.

Perfectly satisfied—as were also the other boats that followed our lead, for they, too, were deeply laden—we hoisted sail, and with fifteen crans, or 120,000 splendid herrings, as cargo, we gaily sailed back to Lowestoft Harbour.

Mackerel and pilchards are also caught with drift-nets, and, where convenient, with shore seine nets, when great is the excitement as, the two ends of the seine being drawn together, a huge mass of

blue and silver, ineffectually struggling to escape, is drawn up on the beach in company with other fish, soles, plaice, dabs, mullet, and, sometimes, salmon. But my experience of mackerel has been chiefly with hook and line in Cornwall, the land of pilchards.

I think few people would pick out a pilchard from amongst a mass of herrings, and fewer still have eaten them fresh in London, where I have never even seen one. Indeed, even in Cornwall they are not largely in use, but cooked by the "scrowling"¹ process they are excellent. This method is to split them open and pepper well, place one fish flat on another, backs outside, and grill.

Once I remember in North Devon a smack put into Ilfracombe with a catch of pilchards, a rare occurrence. They were hawked about the town at a very cheap rate, but few people cared to try them. I did, however, as an experiment, and found the taste pleasant, though rather too oily.

An easy way to distinguish a pilchard from a herring is to hold the fish up by the back fin. If it is a pilchard, it will be perfectly horizontal; if a herring, it will dip down out of the straight. Both, of course, belong to the order

¹ The local term.

clupea, the pilchard being almost the same size as *harengus*, but rather thicker, its lines of back and belly straighter, its scales larger and fewer, and its dorsal fin further forward.

Pilchards used to come into the bays near the Cornish seaports, and were captured with the shore seines.

In 1846, when the late Queen went on a tour round Britain, the Royal yacht put into Falmouth Harbour, and thinking that it would afford Her Majesty some diversion, it was proposed that the royal party should witness the shooting of a seine of pilchards. Her Majesty and Prince Albert embarked in the barge, which was steered by Mr. Alfred Fox, a prominent Quaker of Falmouth, who related the incident to me many years ago. Seated in the extreme stern-sheets of the boat, he had the privilege of being in close proximity to the Queen. After rounding Pendennis Castle, at the entrance of the lovely harbour, they began to encounter the swell of the open channel, and he noticed that the lively movement of the barge seemed to affect Her Majesty to some extent. But the Queen was not to be daunted, and the long row was continued until the fishing-ground of Gyllynvase—a small bay at the seaward side of Falmouth

town—was reached. Here the net was shot, but, alas ! not even for the edification of royalty did a single pilchard condescend to be caught. Mr. Fox noticed that Her Majesty was unusually silent all the time, which he attributed to the effect of the waves !

CHAPTER XIV

SOME BRITISH SEA FISHES AND FISHING (continued)

WHAT the herring is to Scotland and to the east coast of England, the pilchard is to Cornwall—a great factor in its industrial life.

Pilchards are not largely found in any other part of Great Britain, though in Guernsey and Ireland they swarm, but, for some inscrutable reason, are disregarded. Three Cornish districts produce them—from Hartland Point in North Devon to Land's End, St. Ives being the centre; from Land's End to the Lizard, Penzance being the headquarters; from the Lizard to the Start Point in South Devon, Falmouth being the chief station—a somewhat restricted area, yet the "takes" used to be enormous, a catch of 27,000,000 in one day at St. Ives being recorded.¹ But

¹ On September 13, 1904, about 4½ million pilchards were caught at St. Ives, the largest catch of recent years.

either from capriciousness, or, what is more likely from a little-understood natural impulse, which makes them periodically change their *venue*, pilchards of late years have not appeared regularly in their old haunts, nor in such numbers as formerly.

August and September are the principal months for the pilchard fishery, both drifting and seining.

At Penrose, the little port of Landewednach (Lizard Head)—its miniature beach hemmed in by cliffs, the chine running up towards the old church¹ half a mile away—I witnessed the drifting process. The drift-nets were set at sundown, and in two hours' time hauled up. As they had enclosed but few fish, they were left until the dawn. Meantime the boats, each manned by six men, sailed about. To start the pilchards, the men stamped on the floor of the boats and produced a concussion which caused the fish, whose sense of hearing is keen, to "jump" and fill the nets, which were then emptied and thrown overboard again.

Different was pilchard-fishing with the seine in the open sea. I noticed on the top of a cliff several men, called "huers," or "criers," with big furze-bushes in their hands, intently watching the

¹ The most southerly parish in England.

offing, which, from their elevated position, they could readily do.

Presently, from various signs, the rippling of water or the presence at certain spots of gulls and gannets, they discovered a shoal, and waved their arms like frenzied Australian blacks. We on the beach understood what they meant, and the entire male population of the village went trooping to the boats, which they hastily launched, shouting "Hev'ah, hev'ah, hev'ah!" Then, by the preconcerted signals of the huers, a kind of wireless telegraphy,¹ the boats were steered towards the shoal. The chief seine was about 1,400 feet long and 60 feet deep, with corks attached to one edge and leaden weights to the other.

Rowing rapidly round the phosphorescent shoal, and paying out net the while, the principal boats encircled the pilchards as with a fence, while at several points the net was secured by anchors to keep it in its place and allow the catch to be taken out at leisure. This, of course, is only possible in fine weather, and the tides, which run very strongly and might carry away nets and all, have to be carefully considered. Now came in the use of the "tuck" net, bellied in

¹ I would suggest the employment of the Marconi system for this purpose.

shape—in fact, a kind of scoop—which was passed inside the chief seine, the ends drawn together,

PILCHARDS IN THE "TUCK" NET.

and the fish lifted in the "bunt," from the bottom, and with baskets brought into the boats.

Pilchards cannot be cured and smoked like herrings, because the weight of the body breaks

the neck, and the fish fall into the fire. Therefore they are prepared for the Italian markets—Genoa, Leghorn, Naples, and Venice—in a special manner.

In Cornwall pilchards are called “fair-maids,” a corruption of “fumades,” or “fumados” (though, curiously enough, they are never smoked). They are an important article of commerce, and are sent to the Roman Catholic countries of Europe—Spain and Italy—in great numbers during Lent; herrings, on the contrary, going to Protestant communities.

The method of curing is, briefly, as follows. The pilchards are carried by the wives and daughters from the boats to the curing-houses, where they are arranged in bulk, first by putting down a layer of French or Spanish salt (better and larger in the grain than English), then a layer of fish, and so on, alternately, until the mass is five feet high, the outside rows being laid with their heads out, and the inner rows at right angles to them.

They remain in bulk thirty days, during which period their oil, mingled with brine, drains away into pits prepared for the purpose. Bulk is then broken, and they are taken down, sifted clear of the dry salt, rinsed, and placed symmetrically in

hogsheads, the tails pointing to the centre and the heads out.

By means of heavily weighted levers, pressure is applied, the casks are re-filled and pressed three times a day for over a week, and at last they are fit to be fastened down. The resultant oil is valuable for several purposes, chiefly for mixing paints.

I have often seen the heading-up of these casks, and wondered how, even by way of mortifying the flesh during Lent, foreigners could consume these fair-maids. They smell like very fishy bacon.

At Mevagissy, near St. Austell, South Cornwall, a sardine industry was established some years ago, mainly through the enterprise of Messrs. Fox, of Falmouth, it being decided by the most competent authorities that young pilchards were identical with the real sardines, which are comparatively scarce even on the coasts of France, sprats being largely substituted for them. Pilchards were also put up whole in tins.

Both these products were excellent, but, somehow, the prejudiced public did not extensively patronise these essentially British goods, moderate in price though they were. Neither did they take kindly to the excellent Deal sardines, though

prepared with the greatest nicety, and put up in perfectly pure oil, superior to that of the foreign article.

It is satisfactory, however, to note that Cornish pilchards and Cornish sardines still figure in the Army and Navy Stores List.

That the pilchard industry is a paying one seems doubtful. The restricted market is a great drawback, but in view of modern facilities for cold storage on shore, and refrigerating on board ship, there may be developed a big trade in fresh pilchards to foreign countries. The fish are *here*, and would-be purchasers are *there*; the point is to bring the two *together*.

But now for more personal recollections of sea-fish and fishing.

At Falmouth I used to go out regularly in a small boat with one companion to fish for mackerel, pollack, bass, or anything that might turn up. We had ground-lines, but seldom used them, as whiffing was better sport.

Whiffing, known as "trailing" in fresh-water fishing, is the process of towing a slightly weighted line after a slowly sailing or gently pulled boat. The length of line let out depends upon circumstances, such as the tide, or the colour and roughness of the sea. The number of lines should be

limited to two in a small boat, one to each fisherman, as the management of a couple at a time, though frequently attempted, results in entanglement and confusion. The bait may be a spoon, or it may be living sand-eels, lamperns, earth-worms, smelts, a strip of pork skin, squid, or cuttle-fish; but the best bait, and one almost always used in Cornwall, is a slice of the tail of a freshly caught mackerel, its silvery skin being carefully cut off, without any of the red flesh, so as to flip about freely just below the surface. With properly adjusted leads of the correct weight, this is sure to be successful. Once, when unable to obtain a mackerel, I tried a bit of clay-pipe stem run up the line to the hook, and at the first cast I had a fish.

We used to row down the harbour, rounding Pendennis Castle, from whose thick walls peered modern ordnance, of which cannon more anon! When clear of the land, we hoisted our solitary little sail (there was generally a breeze), and made for the mackerel-ground, which, according to the time of year, might be in shore, or far off by the Manacles, or beyond.

As early as January, mackerel appear off the Scilly Islands; in Cornwall about the end of February. I found the month of May the best.

The lines were out at once, and the sport began. Twig went the line I held, and there was a thrilling vibration of something alive at the sea end. Surely not a mackerel, for it tugged and pulled like a big fish! No one who has not experienced it, can have any idea of the strength of a mackerel in the water. Hauling close up, there was a mackerel, an ordinary one, about ten or eleven inches long to root of tail, and perhaps $1\frac{1}{2}$ lbs. in weight.

Every one knows how beautiful even shop mackerel are, but a live one is simply a picture of opalescent colour to look at again and again. Soon we had on the floor of the boat a pile of these studies in blue, purple, green, silver, and gold. Then I caught a couple of big gar-fish (or long-noses) one after the other. While being unwillingly dragged over the surface, they looked exactly like water-snakes. They have a long, slender transparent body, and a woodcock-like beak studded with small teeth; their bones are green, hence the abhorrence with which they are generally regarded, but they are good eating.

Then we ran close inshore and whiffed for pollack. Pollack, or lythe, is a kind of large whiting,¹ and one of the commonest fish on all our coasts where there is suitable ground. It loves to

¹ Whiting, *merlangus*. Pollack, *merlangus pollachius*.

frequent rocks, either sunken or just above water, so that all Cornwall suits them to a nicety.

I have never seen pollack in London, but they are easily recognisable, being olive-brown on the back and sides, and the under jaw projects much beyond the upper. They sometimes attain to 20 lbs. weight. Being a very strong fish, we had to use stout lines, large hooks, and that most killing of bait, a sand-eel. "You may get a fish any moment," said my boatman, as he rowed past a beautiful rock shining like a jewel, where the smooth water gently lapped it. And I *did*; for a sudden jerk compelled me to let out nearly all the line, and I had a tremendous fight. It was most exciting work, for I had to play it like a salmon. At last it got tired. So did I; and slowly it was drifted alongside, and gaffed. It weighed about 12 lbs., and we decided to hang it up on the mast with a lump of rock-salt (which my boatman, for some reason of his own, had brought on board) in its head, for future consumption. It proved to be a fair imitation of cod.

This was the only pollack I caught on that occasion, for a very good reason. The strong tide had carried us away from the land off Pendennis Castle, and I had just missed a fish by striking too quickly, when bang went a cannon from the Castle

SHARK CAUGHT IN MOUNT'S BAY WITH SMALL HOOK AND LINE.

From photo by Gibson & Sons, Penzance.

then another and another, while solid shots plunged into the water near a floating target. We were in the line of fire; a shell flew shrieking close to us, and another prematurely burst over our heads.

The firing party must have failed to notice our small craft. To say we were not scared would be affectation, and we rowed for our lives, expecting every moment that a fragment of shell would send us to the bottom. Not until we were well under shelter of Pendennis Point did we breathe freely, for the sensation of being under fire is not an agreeable one.

At Penzance I chanced to arrive just after a shark (the *real* article) had been caught in the bay (*vide* the illustration) with an ordinary pollack line. It was fifteen feet long, but thin and evidently out of condition, and unable to make a good fight for liberty; otherwise the slender tackle could not have held it.

A monstrous, but harmless, basking shark had also been caught, surpassing in size both the one found at Falmouth, thirty-one feet long, and the one stranded in 1901 in Ballinskellig's Bay, County Kerry, thirty feet long, and eighteen feet in girth. Looking at the gape of this shark, one is inclined to think it was the fish especially "prepared" by the Almighty to swallow Jonah, it being a fact

that not whales, but sharks, are common in the Mediterranean.

Gigantic congers are not infrequently met with at Penzance and in the Scilly Islands, 100 lbs. being no uncommon weight, though none have

BASKING SHARK CAUGHT IN MOUNT'S BAY.

From photo by Gibson & Sons, Penzance.

exceeded that of the 160 lbs. giant, measuring nine feet, caught in the summer of 1904 off Plymouth after a desperate struggle.

The Scilly Islands would be a paradise for London sea-fishermen, were it not for their

distance from the metropolis, and the uncertainty of getting back to Penzance through stress of weather. In those islands they have a novel way of securing turbot, plaice, and other flat fish, which a friend of mine practised some years ago. He was royally entertained by the late Mr. Augustus Smith, "King of the Islands," who afterwards sent his guests on a spearing expedition. In the calm water they could distinctly see on the sand at the bottom, the shape of the fish, and with a long barbed pole they transfixed fish after fish, no easy matter when a heavy one came to hand. Once a lobster, presumably in love, was brought up, tightly clinging to a large turbot. Like Saul and Jonathan, in death they were not divided.

Of course, this kind of sport is only possible in exceptionally quiet weather, which is rare in the land of Lyonesse, but the sea is always wonderfully transparent.

I cannot leave the subject of Cornwall without mentioning two comical little fish, gobies and blennies, always to be found in the clear pools left by the retreating tide. They hide under the sea-weed, and can be enticed out of their retreat by small pieces of raw meat, dropped down to them through the exquisitely clear water. Both these little creatures are provided with an extensive

array of fins. Blennies have a Jew-like profile, and, like the chameleon, can move their eyes either in unison or independently in a most absurd manner. Gobies delight to bask in shallow pools, where, when motionless, they are difficult to detect, their backs being the colour of the sand on which they rest. Both gobies and blennies are so fearless that they can be taught to take meat out of one's hand.

The epithet, *Pyscoed* (the place of fishes), was of old appropriately applied to Tenby, in Pembrokeshire, and continues to be most applicable. I do not know any place in Britain, always excepting Cornwall and the Scilly Islands, where the amateur fisherman will be certain of obtaining such good sport. Fleets of smacks and boats are employed in Carmarthen Bay throughout the summer, and the variety of fish brought in is great—salmon, sewin, red and grey mullet, turbot, brill, John Dory, mackerel, pollack, whiting, herrings, plaice, flounders, dabs, gurnard, bass, bream, hake, conger eel, skate, and soles, which last, caught over night and eaten at breakfast, surpass in flavour any I know of, except, perhaps, those at Brixham, in South Devon. They attain a good size, but none have ever equalled the famous Torbay sole, weighing $12\frac{1}{2}$ lbs., whose skin, exhibited at

Sweeting's in Cheapside, measures 29 inches long, and 12 inches wide.

At Tenby I went out with two professionals three times a week, under a mutually profitable arrangement. For the consideration of a certain sum of money, I was to take all the fish I required, while they were to provide tackle and bait, and give me the benefit of their experience. It was also stipulated that I should contribute the provender, including the contents of a certain stone jar!

We used to commence operations by laying down a "trot," some four miles away from land. Now, a trot is a long, stout line, with snoods and hooks attached at intervals of about two yards, baited with cuttle-fish, sand-eels or whelks ("whalks" in the vernacular), and weighted with stones and big corks attached by thin cords to each end to mark its position. Very long cords are often used, with a thousand hooks; but ours was of modest proportions, say, a quarter of a mile in length.

After arranging it, which took some time, we left it for the night, carefully taking the bearings, so that we might find it in the morning, which we *did*, when almost every hook had a fish on it, or a big crab. First there was a large conger, which had to be promptly knocked on the head; then a

fine cod ; next, a turbot, and so on, until we had a boat-load to return with.

One of our expeditions was especially for whiting,¹ to a spot where an old wreck was submerged. I never had such sport in my life ! Fish after fish, often two at a time, kept tumbling in, when suddenly the whiting ceased to bite, and hooks began mysteriously to vanish, snapped off by something big.

"There be a girt skate about, I reckon," said one of the fishermen, and he proceeded to put out a strong line and a big hook baited with a large piece of whiting. A pause : the line tore through his fingers, and he shouted to his mate for assistance, while I stood by with the gaff. The two men just managed to check the strain, and after much struggling, there was slowly drawn into sight, looking like a round table, a huge skate with wings outspread, that offered tremendous resistance. I gave it a prod with the gaff, nearly

¹ On January 31, 1905, a remarkable catch of whiting, believed to constitute a world's record, was made by the Grimsby steam trawler *Arabian*, which landed 130 boxes. The vessel began trawling on the 27th, thus the great haul was the result of only four days' fishing. The fish were in excellent condition, and sold readily at from twelve shillings to fourteen shillings a box. It is unusual to realise close upon a hundred pounds for a four days' catch of this class of fish.

falling overboard as I did so. Its ungainly and repellent form almost filled the boat. Round its ugly mouth were many hooks, which it had fouled when it had interrupted the shoal of whiting and appropriated their bait.

Another time we caught mullet with very fine lines, and off Caldy Island many fine red and grey specimens; and gurnard, those brilliant butterflies of the deep, with wing-like pectoral fins, excellent eating, however, when properly baked with veal stuffing.

On my last outing we pulled up our lobster-pots, many of the combative crustacea being of large size¹ that necessitated careful handling.

Reluctantly I left Tenby, and returned to prosaic London.

¹ A record lobster, $2\frac{1}{4}$ feet long and weighing over 7 lbs., was caught off Deal pier, in October, 1904, by Mr. Waddel, a local angler.

CHAPTER XV

FISH-EATING MANKIND

THOSE mysteriously civilised prehistoric lake-dwellers of Switzerland were ichthyophagi as well as grain-eaters, for amongst the implements of bone, flint, and bronze, discovered around their pile-supported houses, were barbed fish-hooks identical with our own, and trident-like fish-grains, fish-spears, and boat-hooks which might have come from some Wapping ship-chandler's shop ; also—though it is not *à propos* of my subject—fibulæ, or dress-fasteners, beautifully made on the principle of modern safety-pins.

In equally mysterious ancient Egypt there was a perennial source of fish supply almost at the door of every town and city, and the children of Israel, wandering in the desert, thought with regretful longing of the succulent flesh-pots of their house of bondage—the fish they “did eat

in Egypt." Yet in the Promised Land they were cut off from the Mediterranean shore by the Phœnician and the Philistine territories, and had only a few lakes to depend on for bony fresh-water fish—perch, bream, and carp.

The old Romans were pronounced lovers of what Pope calls the "scaly breed," epicures in the days of the Empire giving extravagant prices for turbot, mullet, lampreys, and eels, the rich having "stews" in which to fatten the latter. They also highly appreciated sea-urchins, whelks, cockles, and oysters, far-away Britain being requisitioned for "natives," though how they were preserved alive and fresh during the long journey to Rome is somewhat of a mystery.

The food of dwellers in the tropics is naturally composed largely of fish, rice and vegetables. But in the temperate latitudes of the Far East, China and Japan, we find that fish from time immemorial has been systematically cultivated, every river, pool, and suitable bit of water holding a supply, while sea-fishing is pursued with the utmost patience and dexterity to provide wholesome food for the people.

It is the same in India, whose ancient tanks still contain quantities of fine roho (a kind of carp), and whose rapid streams hold lordly mahaseer running

to 100 lbs. in weight), while the seas swarm with all kinds of semi-tropical fish, including the hilsa and the delicious mango-fish, which ascend the rivers.

The natives of Polynesia are born fishermen, almost living in the water, and excel in the art of cooking their daily catches.

South Africa has splendid fish of great size all round its coasts, and the big lakes and rivers of Central Africa abound in fish.

In parts of Australia, whose rivers and coasts are very prolific, and in New Guinea, the Aborigines live almost exclusively on fish. Tasmania and New Zealand are equal to the great island continent in respect of native fish, and superior in the matter of acclimatised salmon and trout, perch, &c.

Many tribes of Indians along the Amazon and Orinoco rivers, their tributaries and lakes, are dependent upon fish for sustenance, and all around the littorals of Brazil and the West Indian Islands, innumerable fish—the chief food of the negroes—can be obtained with a minimum of trouble.

Turning to colder regions, we find that in Greenland and Iceland, a dietary of walrus and seal is considerably supplemented by fish. The Alaskans harpoon the monster halibut of 600 lbs. weight (equal to that of ten ordinary sheep), so plentiful

in their seas. Inland, the Red River Indians at certain seasons live entirely on the salmon that choke their streams, and the equally abundant white fish.

All down the coasts of North-west America fish abound, and north of Columbia immense shoals of eulachan (or candle-fish) ascend every river. They are a species of smelt, a foot long, and so fat that with a wick passed through them they can be burnt like rush-lights, and are used as food and as a bait for larger fish.

Off California, amongst many useful food-fishes, tunas, black bass, yellow-tails, and great tarpons, afford capital sport, though the flesh of the first and the last is not, as a rule, "hankered after."

From the steaming isthmuses of Panama down to chilly Patagonia, there is a superabundance of excellent cheap fish, while the poor Fuegian women keep their families by gathering mussels and clams, and by catching the mullets that swarm amongst the giant kelp.

In the Argentine and Uruguayan rivers there are plenty of fish, which would be more appreciated if beef and mutton were not so cheap there.

The eastern shores of the United States are famous for extensive fishing industries, both salt and fresh ; while Canada, Newfoundland, and New

Brunswick are names synonymous with cod, millions of which lie in tiers on the fog-haunted "Banks." The bait for them is caplin, or capellan, a tasty little fish found in enormous quantities, which, when dried and tied up in bundles, are sent from Nova Scotia in myriads.

Around lonely Rockall Island, the peak of a submerged mountain in the North Atlantic, three hundred miles from Scotland, where not long ago there was a distressing shipwreck, fish gather together in such prodigious quantities that British fishermen find it worth while to sail there, and always bring back overflowing cargoes.

The Mediterranean and the Bay of Biscay retain their ancient fame for tunny, anchovies, sardines, and mackerel. The Bay of Biscay has of late yielded excellent soles for the London market.

To British fisheries in the Channel, off the Irish coasts, and on the Dogger Bank, it is hardly necessary to refer in this chapter. The people of the Shetlands and the Orkney Island subsist greatly upon the fish caught in their stormy waters, but prefer them in too "high" a condition for our tastes.

Lastly, in European Russia, the production and consumption of fish are very great. The delicate

starlets fill the lakes and streams, and sturgeons the larger rivers, which annually yield a valuable harvest, other and cheaper edible fish being caught everywhere throughout the Empire.

To sum up. The pasturage hidden beneath the sea-waves and the quiet waters of lake and river, supply food for mankind greatly in excess of that produced by the pasturage on land.

This wonderful harvest of our British seas was practically ungathered for many centuries, and, except near the coast, sea fish was an unobtainable article of food.

We read of a banquet in the days of King Harold, given by one of the Cornish knights, at which roasted porpoise, fried hake, and pilchards were conspicuous, having been caught close by the host's castle.¹ But when the Bishop of Durham entertained Richard II. in London, in 1386, amongst the abundance of flesh—oxen, sheep, boars, and game—the only fish were twelve dozen of bream (sea-bream, presumably), a fish held in poor estimation even when cooked in the right

¹ When William of Wykeham, founder of Winchester College, gave a dinner to the King and Queen on September 16, 1394, many kinds of fish were served, and no less than seven gallons of minnows, costing 11s. 8d., presumably in lieu of whitebait.

way, *i.e.*, stuffed, well basted with butter, and baked.

In marked contrast was the coronation feast of Henry V., in 1414, held during Lent, when the only meat was brawn, served with mustard, the other courses consisting of various fresh-water fish, besides royal sturgeon, porpoise, salmon, turbot, halibut, conger, gurnard, codlings, plaice, sea-bream, lobsters, prawns, shrimps, and the plebeian whelk! But when the Mayor of Norwich feasted the Duke of Norfolk, in 1561, there was no fish of any kind.

Samuel Pepys, a lover of good eating and drinking, seldom refers to fish, but he describes a grand dinner he once gave when there figured in the menu "three carps in a dish; a dish of lobsters; a lamprey pie (a most rare pie!) and a dish of anchovies." Evidently, in the Merry Monarch's days, fish was not fashionable. Possibly after the Reformation it became associated with Popery, with the enforced dietary of insipid fresh-water fish on Fridays and other fast days, and the highly salted stock-fish or dried herrings of Lent, and thus popular taste was set against it.

England, however, abounded with moats and "stews," reminiscences of the Roman Catholic faith and abstinence from meat. Every monastery was

built near a salmon-river or trout-stream, numberless castles and mansions were surrounded by moats utilised as fish-preserves, many of which still remain, as at Ightam in Kent, the Bishop's Palace at Wells, and at Helmingham Hall, Suffolk.

In a very interesting account that exists of the coronation banquet of King James II., we read that in addition to the ninety-nine dishes of choice meats, called an *ambigue*, served up at the King's table, there were oyster-pies, sturgeon, carp, soused tench, razor-fish (solen), whelks, and periwinkles (!) the fishy list ending with samphire, which grows only in a sea-atmosphere. Salmon and trout, mullet and soles, are not mentioned in the *menu*, nor even the homely mackerel, herring, haddock, flounder, skate, or sprat.

In Hanoverian times fish appears to have been out of favour even with the rich.

Thackeray describes a dinner given in Addison's and Steele's days by a lady of fashion, the repast beginning at 3 p.m., not with soup (that came later on), but with a sirloin of beef, a shoulder of veal, a tongue, and fish, which last is casually mentioned, as of no account.

In the early part of the nineteenth century there was a difficulty in getting supplies of fish,

as the war prevented fishermen going far out to sea, and their numbers were constantly being depleted by impressment. Thus inland folk never tasted salt-water fish unless some friend in town sent some down by the mail-coach.

This recalls the scene when Pickwick and his friends paid a Christmas visit to Dingley Dell, and the philanthropist personally superintended the stowing away in the boot of a huge codfish several sizes too large for it, and half a dozen barrels of real native oysters—all the property of Mr. Pickwick.

Even in the early Victorian days, when railways had brought London within easy touch of the sea, fish was not in constant use. The poor did not care for it, declared there was no nourishment in it, and classed it with foreign kickshaws and soup. The well-to-do tolerated it, but relegated it to grand occasions, when it was represented chiefly by cod and turbot. I seldom remember, as a boy, having fish for dinner. We had salt ling on Ash Wednesday, I know, and I loathed it. Occasionally, in summer, as a great treat, we had salmon. For invalids during convalescence boiled sole was generally prescribed, and plaice with oysters; in fact, I always associated oysters with convalescence. They were brought ready for use

in little wooden buckets such as children use at the seaside.

Now things are different. The working classes have learnt to appreciate fish ; they recognise it as wholesome and nourishing, and, in fact, regard it as a necessity. In fashionable circles what entertainment would be complete without fish disguised in various forms—*Filets de Triutes à la Russe*, *Filets de saumon à la Cardinal*, *Cendrillons de soles à la Norvegienne*, and so on? Every one consumes fish in one form or another, although as a nation we are not, like the Eastern races, naturally fish-eaters.

As to fish *au naturel*, one could years ago obtain it in perfection at the famous Billingsgate "Three Tuns"—now gone the way of all ancient hostelryes—where twice a day dinner was served in a long, low room overlooking the Thames. All the fish in season was provided, followed by the best joints at a ridiculously low inclusive charge of one-and-sixpence a head, I think. The problem of how it could be made to pay at the price was solved by the large consumption of a very insidious rum-punch, which it was *de rigueur* to drink, the cost being one shilling per rummer.

Simpson's, up Bird-in-Hand Court, Cheapside, still retains a "fish ordinary," and at Pymm's in

HARVEST OF THE SEA. FISH PACKING AT NEWLYN, CORNWALL.
(From Photo by Gibson & Sons, Penzance).

the Poultry, at Sweeting's next to the General Post Office, and at Greenwich (sacred to white-bait), the finest fish in the world can be enjoyed for a consideration.

I dread going near Sweeting's when accompanied by a certain gentle relation of mine, who, once having there partaken of salmon and lobster-sauce, always manages to inveigle me into the establishment, whence I seldom emerge without a considerable depletion of half a sovereign. The fact is that fish is unreasonably dear in London, and attempts to cheapen it seem doomed to failure. Commission after commission has sat to inquire into the cause and to suggest a remedy, but without success. The Baroness Burdett-Coutts built the costly Columbia Market at Bethnal Green expressly for the purpose of cheapening fish for the poor East Enders, but the scheme collapsed.

The big inland cities and towns take a great proportion of the sea-fish that at one time came exclusively to the Metropolis. In other words, the market for fish has considerably widened, and the use of ice enables it to be as readily stored as most other produce.

The existence of the middleman is said to be one cause of the dearness of fish, and doubtless he has much to do with it. *If* consumers and

producers could be brought together the price would naturally come down. But how can this be effected?

The toiling fisherman has to sell his catch at once, getting, say, for a turbot of ten pounds weight about one-and-sixpence, which fish is re-tailed for from ten-and-sixpence to fifteen shillings. It is the middleman, or dealer on the spot, who buys this catch from the fisherman for *cash*, the fishmonger declaring *he* makes hardly any profit out of his sales!

Oysters—once so cheap that lovers of them consumed only “natives,” plus brown bread and butter and stout—are now doled out as luxuries. Soles, formerly indulged in by people of very moderate means to eke out a cold dinner, and costing only about a shilling a pair, are now worth their weight in silver; while the price of salmon, except for a few weeks in the summer, is prohibitive.

When an exceptional catch of herrings or mackerel is made, Londoners reap little benefit thereby, the price in the West End remaining the same.

At Ravenna, in some parts of Holland, and at Port Logan, Wigtonshire, there are large salt-water “stews,” where fish are fed regularly and looked

after like cattle, and thus available at any time for food. At Port Logan when a cod, say, is required for dinner the keeper proceeds to the preserve—a rocky cove with a narrow, grated entrance to the sea—nets one and knocks it on the head, and in the prime condition it is served up the same evening.

Why should not something of this kind on a gigantic scale be attempted all round our shores? Then would fish—even that of the finer variety—become reasonably cheap.

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