

became a Doctor of Divinity, and deserved his degree—which is no faint praise in the United States. He became the President of a University, and graced the chair he filled; he became a Bishop in the Church of God; and a truer, nobler man never trod the American continent than Henry Bidleman Bascom.

These men had the wilderness for a

college; their theological seminary was the circuit; and lessons enough in pastoral theology did they get. Their text-book was the Bible; for more than many others that I know of, they were men of one book. Their commentaries were their own hearts, and the hearts of their fellow men, which they prayerfully and devoutly studied.



THE MACKEREL FAMILY.

THE mackerel (*Scomber scombrus*) abounds in the seas of Europe, but at certain seasons approaches the shallow water near the shores, collected together in vast shoals, the great object being the deposition of the roe or eggs, in places suitable for the development of the young. As a general rule, fishes leave the deep water at the breeding season for shallower spots, where the influence of the sun and light extends to the bed of the water; and when the spawning season is over, they again retire to the deep. The mackerel visits our shores at different times, earlier or later in different parts of the coast. Shoals often appear on the shores of Hampshire and Sussex in March, or even the early part of February; but the great harvest is in May and June. At Hastings, it is observed that the shoals of mackerel follow in the train of clouds of small fish, called the mackerel mint, which Mr. Yarrell suspects to be the young of the sprat. On these, and on the fry of other fish, the mackerel subsists.

The arrival of the mackerel shoals produces no little bustle and excitement in the various fishing-towns of our coast—every boat's crew strives to be the foremost in exertion, for the first cargoes are of the highest value. All is animation—the arrivals and departures of

boats give life to the port, nor are the men on shore less occupied and active than the fishermen in the offing.

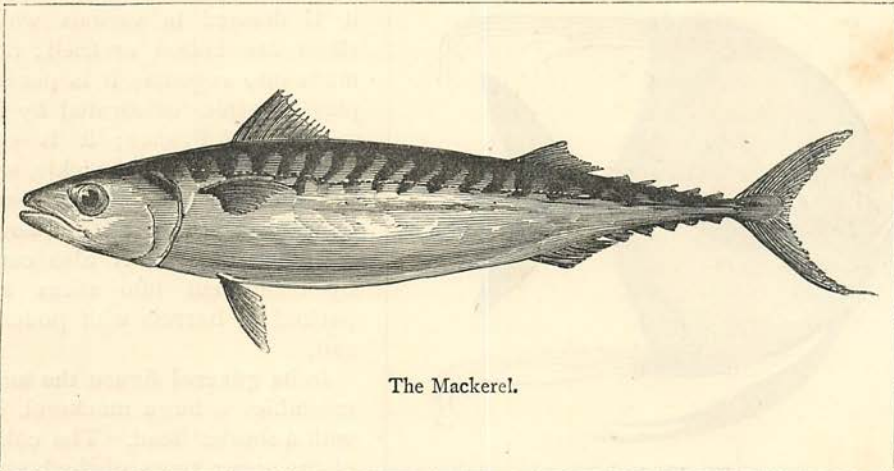
Different modes of fishing are employed in the capture of mackerel; one mode is by means of drift nets united together, which hang in the sea perpendicularly about twenty feet deep, stretching out like a curtain for a mile or a mile and a-half. The meshes of such nets are large enough to admit the entrance of head, gills, and pectoral fins, but too small to permit the rest of the body to pass. This long series of nets is let down in the evening, and usually not drawn up till the morning; the shoals roving in darkness through the water strike the meshes of fine twine, and as the fishes rush impetuously along, multitudes become firmly fixed, and are secured when the nets are hauled up by means of a capstan on deck. On the coast of Cornwall, a long deep net, with small meshes, managed by two boats, is brought round so as to inclose the shoal, or at least a large portion of it, and when the circle is made, the men draw it together at the top and bottom, and the fish thus confined are either hauled on deck, or, where the circumstances will admit, drawn up on the beach.

Mackerel bite freely at a bait, and numbers are taken by the hook; a slip of fish and a bit of red leather, or of red cloth, are among the baits commonly

used; the line is sunk by means of a plummet, with a portion free beyond the plummet, at the end of which is the hook; the boat is carried forwards by the breeze, the plummet hanging at a proper distance above the bottom of the water keeps the line steady, but trails after it the baited hook, which the fish dart at to seize; in this manner, if the breeze be smart, and the weather gloomy, two men will take from five or six hundred to a thousand in a single day. When taken out of the water, the mackerel dies almost instantly. Few of these fishes are salted in England, but in France great numbers thus prepared

namely, the far-famed tunny (*Thynnus vulgaris*), common in the Mediterranean, occasionally visits our coasts, and a few from time to time are captured, and sent into the market for sale.

The tunny attains to a considerable size, and though small specimens, of three or four feet in length only, are most usually taken in our seas, yet specimens of ten, fifteen, and eighteen feet in length are not uncommon in the Mediterranean. "This fish," says Cuvier, "may be regarded as constituting a portion of the wealth of Provence, Sardinia, and Sicily;" the tunny fishery, as in the days of antiquity, is most impor-



The Mackerel.

are made use of. The spring fishing-boats carry out salt with them for this purpose, and cure the fish on board. Young mackerel of the year are called shiners; excluded from the egg in May or June, they increase rapidly in size, and by the middle of autumn measure from four to six inches long; on the approach of winter they retire to the deep water.

There is a larger species, termed the Spanish mackerel (*Scomber colias*), which occasionally visits various portions of our coasts, especially that of Cornwall, but the fishermen take no notice of it, as it is in no estimation.

A large species of the mackerel family,

and its flesh maintains its pristine reputation.

In May and June, the tunny, in vast shoals, leaves the deep water, and approaches the shore, which it skirts along, seeking for convenient breeding places; and now along the coasts of Languedoc, Provence, and Sicily, begin the fishery, and all is animation and excitement. Two modes are employed. On the signal being given, by a sentinel stationed for the purpose, of the approach of a shoal of these valuable fishes, find who, at the same time, indicates its course, a number of boats, under the command of a leader, station themselves so as to

form part of a circle, and join their nets, adding more and more nets as may be required, till the terrified fish are hemmed up in an enclosure, which is gradually drawn towards the shallow water, near the edge of the shore. Here a large net, with a cone-shaped tunnel, is made use of to receive the fish, and so dragged upon the beach with its heavy burden. The young and small tunnies are, however, taken out in the arms of the fishermen, and the large ones are killed with poles.

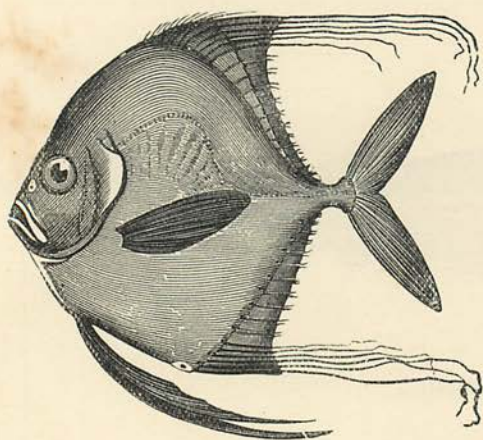
The other mode is called in Italian *tonnaro*, and in Provence *madrague*. Parallel with the shore, along which the

opening left for them; having entered, they are driven by the fishermen from chamber to chamber till they enter the last, which is floored with a strong net, so fixed as to be capable of being raised or lowered. About this chamber of death, the fishermen, armed with long poles, collect in boats, and the unequal conflict begins. The net flooring is raised; the floundering of the devoted tunnies, the shouts of the men, the splashing of the long poles, as they rain blows on the crowded fish, constitute a scene which forms one of the greatest amusements of the people of Sicily and the southern

coast of France. The flesh of the tunny is red, and as firm as veal; it is dressed in various ways; slices are boiled or fried; it is made into ragouts; it is put into pies or pâtés, celebrated by the epicures of France; it is converted into a sort of pickle, with salt and oil, and this preparation, under the term of *thon mariné*, is eaten cold. It is also cured by being cut into slices and packed in barrels with pounded salt.

In its general figure the tunny resembles a huge mackerel, but with a shorter head. The colour of the upper parts of the body is dark blue; numerous large scales of a paler colour form a corslet

around the thorax or chest; the sides of the head are white; the underparts are grey, variegated with silvery white markings. The first dorsal fin, the pectoral and ventral fins, are black; the rest pale pink, with a silvery tinge; tail-fin dusky; the sides of the tail are carinated, crooked, or bent like the keel of a ship. Several allied species, as the alicosti and the tonine, are found in the Mediterranean. The bonito of the tropics, and the very curious fish—the blepharis (shown above), also belong to the same genus.



The Blepharis.

shoals take their course, a net, extending for a mile, is fixed vertically by means of corks along its upper margin, and corks along its lower edge, and kept in its position by anchors; it thus forms a sort of netted wall; from this wall to the coast are drawn numerous cross nets, dividing the space into many chambers, having narrow openings of communication on the land side. Proceeding along, between the long net wall and the shore, the fishes are soon stopped by one of the cross nets; instead of turning back, they enter into the chamber by the narrow