51,-THE HERRING FISHERIES NEAR THE ISLE OF MAN."

By CARL SIMONSEN.

Near the Isle of Man, which lies in the Irish Sea, about 30 miles from the coasts of England and Ireland, considerable herring fisheries are carried on in July, August, and September. These fisheries are specially important on account of the quality of the herring which are caught in these waters, and the careful way in which they are cured. "Manx kippers" are, when smoked, an article much sought after in the English fish-markets.

Herring of the same kind are caught on the coast of Ireland as early as June; but later in the season they go into the Irish Sea and give rise to enormous fisheries, especially on the west coast of the Isle of Man. As regards quality, these herring exceed every kind of Scandinavian herring. In proportion to the size of the body, these herring have a small head, and are exceedingly fat and of a delicious flavor. Their length is about 10 or 11 inches. Some of them weigh three-quarters of a pound each.

The town of Peel, on the west coast of the island, may be said to have originated and been built up by the herring fisheries. When we take into consideration that the population of Peel is only 4,000, of which 2,000 serve on the fishing fleet, we see that the fisheries are very important to its population. Peel possesses about 250 large fishing smacks, with a total value of 2,000,000 crowns [\$536,000]. As a general rule the captain has a share in the vessel, while the crew (usually seven or eight men) receive fixed wages and a certain percentage of the fish caught. The other shares are held by the fish dealers in the Isle of Man or in England, and yield a good dividend. The town has two ship-yards, and two net-factories. The construction of the vessels differs somewhat from that of the Danish, principally by their sharp perpendicular bows, and by the circumstance that they draw 2 or 3 feet more water than the Danish vessels. Besides the fishing fleet belonging to Peel, there congregate here during the season, fishing vessels from Ireland, Scotland, and Cornwall, so that a fleet of more than 300 vessels is employed in these fisheries. I have several times gone out on one of these vessels, which usually leave the harbor some time in the afternoon and sail in a northwesterly direction to the fishing places, which are about from 7 to 10 miles out at sea; some vessels, however go still farther out. The nets are cast immediately after sundown, and in no case sooner.

The fishermen do not select any special point for casting their nets,

^{* &}quot;Sildefisket red Öen Man." From the Danish Fiskeritidende, Copenhagen, Septem ber 1, 1885. Translated from the Danish by HERMAN JACOBSON.

and no investigation is ever made to see whether there are herring in such a place or not. This will be seen in the morning. Each boat has from fifteen to twenty nets. Each net is 50 fathoms long, and the entire chain of nets extends for a considerable distance. The width of the meshes is 1 inch. The depth of the net is 45 feet; but its upper edge is, by the line leading to the floats, sunk 24 feet below the surface of the water. No sinkers are employed. Each net has five floats. As such the Manx fishermen generally use dog-skins or sheep-skins; and if these cannot be obtained in sufficient number, corks are used for alternate floats. A heavier line runs along the upper edge of the net, and the lines holding the floats are tied to it. After the net has been set, the vessel takes up a position near its end, having the top and the bottom line on board; and then the herring are at liberty to rush into the net as fast as they can. A watch is set on board, and the rest of the crew go to bed.

Each vessel has an engine for hauling in the net. At 2 a.m. the fire is started in this engine, and at the first break of dawn the fishermen begin to haul in the net with the fish. The heavy line running along the upper edge of the net, called "false back," is drawn in by the engine, and at the same time raises the net and drives the vessel forward along its side. It is a pretty sight when the herring, glittering in the rays of the morning sun, are drawn on board. If the catch is good, the net is hauled on board as fast as possible, and the herring are taken out later; but if only a few fish have been caught, the nets are immediately put in order for next morning's haul, the sails are set, and the homeward voyage is begun.

The quantity of fish caught, of course, varies greatly. Some vessels catch as much as 100 cubic feet in one night, while others, during the same time, catch only a few hundred fish. Fifty cubic feet is considered a good catch. When the fishing fleet returns to the harbor, about 6 or 7 a. m., everything is ready for the sale of the fish. The English firms which during the season do business on the island are all represented by their agents. The sale is by auction, the larger share-holders insisting on this mode of selling, which is the most satisfactory to all parties concerned.

A sample of the fish caught by one boat is shown, and the quantity is announced, whereupon the bidding commences. The fish are sold by the mease, a mease containing about five hundred fish. Each hundred has forty-two lots at three fish each, so that a hundred is in reality one hundred and twenty-six.

The price of the mease varies considerably, and depends of course on the catch made during the day, on the quality of the fish, and the condition of the market. The lowest price per mease during this season was 9 shillings, and the highest 30 shillings. The average price for a good article is about 20 shillings. Generally some salt is immediately sprinkled over the fish, especially during warm weather. In Peel itself

154 BULLETIN OF THE UNITED STATES FISH COMMISSION.

there is only one smoke-house, owned by the firm of Kelsall Brothers. The other smoke-houses are in Douglas, a town on the east coast of the island, whence there is daily communication with Liverpool by steamer. The herring are conveyed across the island by wagons. The Messrs. Kelsall employ in their smoke-house twenty-four girls and ten men. The girls all come from the eastern part of England, and generally find employment in the smoke-house all the year round. Their wages are 16 shillings per week.

After the herring have been cleaned, and have lain in brine for an hour, they are exposed to a strong smoke for about four hours, there being a constant current of air through the oven. After having undergone this treatment, they are prepared as "kippers," for those markets which the Isle of Man principally supplies, namely, Liverpool and Manchester. The reason why the exportation of fish is limited to the north of England is this, that only firms from that part are represented on the island, and that these markets buy up all that the smoke-houses can produce. It may be stated here that "kippers" intended for markets in the south of England, especially London, must be smoked more strongly and have a higher color than is liked in the middle counties. The north of England, especially Liverpool and Manchester, prefer "kippers" of a light color, such as four hours' smoking will produce.

"Kippers" are of course cooked before they are eaten, and are then very delicious. After the fish have undergone the smoking process and have cooled off, they are packed in small boxes, 5 dozen-in each, the belly downward. When the fish are of fine quality, such a box weighs about 17 pounds. The lid of the box is stamped with the coat of arms of the Isle of Man, and this stamp is a sufficient recommendation. If the buyer desires a good quality of fish, he buys Manx "kippers," although they are always higher priced than any other fish. He does not open the box, as is always done with Scotch "kippers." The stamp on the lid of the box is a sufficient guarantee for the good quality of the article. The price of Manx "kippers" varies between 5 and 6 shillings a box, while Scotch "kippers," only when there is a lack of Manx "kippers," will bring 44 or 5 shillings a box. The Kelsall Brothers during the last month cured on an average 80 mease per day, that is, about 800 boxes, or 42,000 herring per day. But this is by no means the largest number of fish which this firm can turn out, as they possess seven ovens; and to produce the above-mentioned quantity they employ only three. The cause of this small production is this, that they do not sell a single box on commission, but regulate their production entirely by what their wholesale houses can sell in the Liverpool and Manchester markets. "Kippers" all through the season (which begins in spring near the coast of Scotland, and ends in December near Yarmouth on the east coast of England) are the principal smoked fish in the English fish-markets. These fish, which form a favorite article of food

in nearly every English household, have an exceedingly fine flavor, and cause an agreeable break in the monotony of the English table with its many meats. In Denmark there are hardly any smoke-houses which treat herring as "kippers" on the English plan. But it is certain that this method will soon be introduced, and doubtless with good results.

52.-- CRAB FISHERIES PROPOSED IN DENMARK.*

Crabs are very common in the Cattegat, and still more so in the North Sea. One cannot pass a place on the shore where lobster fisheries are carried on without seeing the broken shells and claws of large crabs. But it is a rare occurrence for a fisherman to take any of these crabs home and cook and eat them. One very rarely sees crabs offered for sale in Denmark; and it is a very unusual occurrence to see any one eat such an "ugly" animal.

This is to be regretted, because erabs have a fine flavor, and contain, comparatively speaking, a good deal of food, if one only understands how to get at it, which is not very difficult. All that is needed is to remove the shell and take out all the soft parts and all the meat, all of which can be eaten, and which, in order to form a savory dish, needs only the same condiments as are used for lobsters. The claws also contain good meat; and on the whole it must be said that the crab is a better and more easily digested article of food than the lobster. It contains much more food-matter than is generally thought; and a good-sized crab almost fills a plate. It can therefore be imagined what a crab contains which, as is frequently the case, weighs several pounds. As a general rule it may be said that a crab which measures 4 inches across the back contains one-fourth of a pound of meat.

It is to be regretted that crabs do not yield any income to our fishermen, for the simple reason that they find no sale for them. There are plenty of crabs, a great many more than the fishermen care for; and as a general rule the lobster fishers eatch ten crabs to every lobster. When the lobster-ring or lobster-pot is taken out of the water, and the fishermen find that crabs, which are worthless to him, take up the room and have eaten up the bait, he gets angry, and frequently gives vent to his feelings by crushing the crabs against the side of the boat. This would be different if crabs were of profit to the fishermen; but it must be remembered that it is not the fishermen alone who cling to old customs and prejudices. The crab is never mentioned on any Danish bill-of-fare, and there is, therefore, no demand for them, and crab fisheries are consequently not carried on.

All this would be different, if crabs could be exported. We think that

^{* &}quot;Taskekrabben." From the Danish Fiskeritidende, Copenhagen, September 22, 1885. Translated from the Danish by HERMAN JACOBSON.