147 .- AMEBICAN HALIBUT-FISHEBIES NEAR ICEEAND.*

By A. THORSTEINSON.

In a recent article by A. Feddersen it was stated that the Americans had, in 1884, sent some vessels from Gloucester to Iceland to catch halibut, but nothing was said as to their success. It is well-known that the American halibut fishermen first came to the west coast of Greenland in 1866, since whalers had informed them that halibut were found there in great abundance. The first expedition left Gloucester on June 29, 1866, and returned on October 14 of the same year, with halibut to the value of \$5,500. The American fishing vessel reached the fishing station a little too late in the season, otherwise the yield would have been greater. This expedition, therefore, did not attract special attention; nevertheless similar expeditions continued to be made from time to time, until public attention was again called to the matter in 1870, when a vessel was reported to have returned from Greenland with fish to the value of \$19,000. The following two or three years 5 or 6 vessels were sent to Greenland every year; and gradually these fisheries developed to such an extent that in 1884 they were carried on by 20 wessels.

The first American vessel that engaged in the Iceland halibut-fishereries, off the western fiords, is said to have come there in 1873, but caught few fish, probably owing to the fact that the fishermen were not well acquainted with these waters, and because they had chosen the wrong season. Later the Americans are said to have fished every now and then on the west coast of Iceland, and seem to have been more fortunate. As Feddersen remarked, the Americans seem to have received a new impetus from information furnished by English fishermen. As far as I have been able to ascertain, the west coast of Iceland was, in 1884, visited by at least 3 American vessels, possibly by more; and as these fisheries, which are still in their infancy, are but little known, I will endeavor to give a short description of them.

The matter is of considerable importance, especially because there is every prospect that the halibut fisheries will pay well, and because they have this advantage over the cod fisheries, that they can be carried on during the most favorable season of the year and by vessels which cannot be better employed during their long stay near Iceland, as they come here early and leave late in the season. It is unfortunate that the Iceland cod-fisheries, in order to be carried on successfully by large vessels, must, as is done by the French fishermen, be commenced as early as March, when the cod must be sought close to the coast,

* "Amerikanske Fiskere under Island," from Fiskeritidende, No. 18. Copenhagen, May 6, 1885. Translated from the Danish by HERMAN JACOBSON.

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with considerable danger both to vessels and crews, and be continued till near August. The shark fisheries are not very remunerative, either, during the light summer nights from the beginning of June till the middle of August, unless the fish are sought at a depth of from 150 to 300 fathoms, which is connected with great difficulties. These drawbacks would not be found as far as the halibut fisheries are concerned, which, properly speaking, can be carried on only from the middle of May till some time in August, always at a considerable distance from the coast, and therefore with less danger. The halibut, moreover, is a much better and more delicate fish than the cod, and will always bring a high price in places which are not easily supplied with fresh fish, especially when they are smoked, as is done in America, or when properly salted.

The information relating to the American halibut-fisheries near Iceland I obtained in the following way: On June 10, 1884, an American vessel from Gloucester arrived at Revkjavik, and engaged a wellknown Icelander to accompany it on the trip, and my information is based on the report of this person. About the middle of June he went on board the schooner Concord, of Gloucester, 934 tons, a beautifully built vessel, which, as to construction, rigging, and sails, could not be distinguished from an English pleasure boat. The captain, John Daye, was a part owner of this schooner. It was specially equipped for the halibut fisheries, and well furnished with provisions of every kind (the men, for example, receiving fresh bread every day); the crew numbered 16, besides the Icelander referred to, and of this number 14 took part in the fisheries, while 2 always remained on board. The cargo was evenly distributed over 12 compartments without any passage between them. These compartments were separated by boards, but were not water-tight. With the exception of 2 compartments, one fore and the other aft, they were all filled with salt. The 2 empty compartments were intended for the first fish that were caught, and as the salt was gradually used up the compartments were one after the other filled with fish.

Long-lines alone were used in fishing; there were on board 7 dories, each for 2 men; these dories were placed one inside the other in two holds on the deck; each boat had four oars, one mast, and one sail, and was steered with an oar. While the long-line was cast or hauled in, only 1 man rowed. These dories proved to be excellently adapted to the purpose for which they were intended. Each dory had one longline, and the number of hooks on each was from 600 to 800. The distance between 2 hooks was scarcely 2 fathoms; the line was a 5-pound line; the hook-lines being $2\frac{1}{2}$ yards long and composed of 2-pound lines. The hooks were rather short and small, of blue color, with the barb at the top, and of such a size as to take more than two fingers to span the bend. They were very strong and bent but rarely.

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The fisheries began off the western fiords in the middle of June, at first about 6 miles [probably Danish; 1 Danish mile equals about 4.7 English miles] from the coast off the promontory of Rytur (Isa Fiord), at a depth of fully 60 fathoms, on a white sandy and clayey bottom, and were continued along the coast in a northerly direction, until the northeastern cape had been passed. The vessel was rarely more than 7 miles from the coast, generally between 6 and 7 miles [from 28 to 33 English miles ?].

As bait, the Americans used in the beginning a kind of salt herring [menhaden ?] unknown to the Icelander; but they soon ceased using this bait, because fresh bait proved more advantageous, and small flounders and other fish were used for this purpose. The bait was cut in long, narrow strips with the skin on, about an inch broad, and 6 or 7 inches long. One end of the hook was passed through the flesh and the skin. The baiting was invariably done on board the vessel.

When the weather was favorable, and after the vessel had reached suitable fishing-grounds, where good hauls might be expected, the anchor was cast. the long-lines were laid ready in the boats, and these were then The 7 boats left the vessel, and set the long lines immediately lowered. at different distances from the vessel, the distances between the lines, however, being the same, each line forming a semicircle, whose center was the vessel. Each end of the line had a buoy; and a small anchor was used of about the same size as those used in large fishing boats. The long-line was left in the water six or eight hours, never longer, but a shorter time when the weather was bad. It did not take long to set the lines, but somewhat longer to haul them in, especially when there were so many fish on them that the boats had to make several trips to the The largest catch made in one day was 800 fish, often it was 300 vessel. or 400 or 500, rarely less than 300; and when the weather was fine. some fish were caught every day. These long-lines were so excellently constructed that they always gave way, so that the halibut but rarely slipped from the hooks; but when the lines were in the water for a long time, it would happen that some of the hook lines tore. When the weather prevented the hauling in of the lines the vessel lay at anchor. Thus during a strong wind from the north the vessel lay for a whole week before the lines could be hauled in, and on this occasion 3 or 4 Sharks had torn them and bit off the greater nart long-lines were lost. of the halibut, leaving the heads.

The halibut which were caught were generally of medium size, rarely weighing more than 300 pounds; and there were but few small fish among them. A few rays were also caught, but thrown overboard, and some lumpfish, ling, and cod, which were cut up for bait. The largest catch was made off the Dyra Fiord; but in every place some fish were caught. The fisheries were therefore successful, much more so than those carried on the year before near the coast of Greenland. The American fishermen, therefore, did not deem it necessary to go out any farther than the distance stated above, more especially because fishing at a greater depth is slower, and requires more exertion on the part of the fishermen. In many places two or three hauls were made in succession, the vessel often making no more than from 3 to 5 miles (English) between the hauls.

As soon as the fish had been brought on board, they were put in boxes which had been placed on deck for that purpose; but fishing was going on without interruption as long as the weather permitted. As quickly as could be done under the circumstances, a beginning was made in preparing the fish. A large board was placed with the upper end against the rail, and the lower end on the deck. A rope was then fastened to the tail of the fish, and it was drawn up on the board, the tail upward and the head downward. First a cut was made near the tail, and the sides were cut from the bones. The fins went with the sides, but were, together with the entrails, removed later. After all that could be used as bait had been cut off from the head, the rest was thrown overboard, because the catches were so large that it was not needed. The fish was then · washed clean, and the sides were, without cutting the skin, salted down in boxes in the hold of the vessel, the skin side upward and the flesh side downward, and well covered with salt. The fish were salted again after about three weeks. The salt was shaken off well, and the fish were again laid in the boxes with somewhat less salt. The fins and pieces of the stomach were put in barrels and exposed to considerable pressure, whereby they absorbed sufficient brine, the barrels having been left open for some time. The salt used was coarse-grained salt, resembling the Spanish salt.

The Icelander from whom I obtained this information was on board vsix or seven weeks; but he was not able to tell exactly how many fish were caught, as he was not informed as to the number. He supposes, lhowever, that it amounted to from 7,000 to 8,000 fish. At the same time two other American vessels were engaged in these fisheries near the western fiords. One of these vessels had on board a well-known man ifrom the western fiords, who states that about as many fish were caught as by the Concord; but the third vessel had no Icelander on board and did not catch near as many fish. That the quantity of fish caught by the Concord was very considerable might also be judged from the circumstance that of the twelve boxes or compartments nine were comipletely filled with salt halibut.

As wages the crew received half the quantity of fish caught, and board and everything else was free on the vessel. The captain engaged the Icelander who furnished me the above information to hold himself ready next summer to accompany another American vessel during the Indibut fisheries.

Nore.—See article in F. C. Report, 1884, by Capt. J. W. Collins, entitled "The Icelandic Halibut-Fishery—An account of the voyages of three Gloucester schooners to the fishing grounds near the north coast of Iceland."—EDITOR.