

XX.—THE ICELANDIC HALIBUT FISHERY—AN ACCOUNT OF THE VOYAGES OF THREE GLOUCESTER SCHOONERS TO THE FISHING GROUNDS NEAR THE NORTH COAST OF ICELAND.

BY CAPT. J. W. COLLINS.

In the spring of this year (1884) several of the Gloucester fishing schooners ventured on a new enterprise, by making trips to the grounds near the coast of Iceland for the purpose of obtaining fares of flitched halibut and halibut fins. These were to be brought home in a salted condition, the former to be cured as "smoked halibut," and the latter packed in barrels, with brine, and sold as pickled fish. Three vessels went to Iceland—the *Alice M. Williams*, Capt. George W. Pendleton; the *Concord*, Capt. John Dago; and the *David A. Story*, Capt. Joseph Ryan. All have recently arrived home, and the last to discharge has finished taking out her cargo. The results that have been obtained will be submitted, as well as a brief account of the trips, based upon information that has been furnished by the captains of the respective vessels, and upon notes kept by them while on their voyages.

Before entering on a description of these cruises it may, perhaps, be well to note that the fishing grounds about Iceland have heretofore been practically unknown to American fishermen. The only American fishing vessel that has previously visited Iceland was the schooner *Membrino Chief*, Capt. John S. McQuin. He went there in 1873 on a salt halibut trip, but set his trawl lines only once. Therefore, little or nothing was learned of the abundance of halibut, while his failure to secure a fare has heretofore influenced others so much as to prevent them from making a trip to the same region.

Though the vessels that went there this year have met with very flattering success, it is by no means improbable that greater familiarity with the region may result in the discovery by our fishermen of large areas of sea bottom where halibut occur in great abundance, and which, on an experimental cruise like this first one, they would be unlikely to find.

Halibut also occur in great abundance, according to Mr. F. M. Wallem, on certain parts of the Norwegian coast. And this gentleman, while at the International Fisheries Exhibition at London, in the summer of 1883, told me that he would give any desired information relative to

the localities where halibut are plenty on the Norwegian coast, should American vessels care to visit that region. I have called the attention of our fishermen to the kind and courteous offer made by Mr. Wallem, and it is probable that some of the more enterprising skippers may, in the future, venture even so far as Norway in pursuit of halibut.

The schooner *Alice M. Williams*, which was the first to start for Iceland and was also the first to arrive home, sailed from Gloucester May 1, and reached that port on her return September 13, her voyage occupying four months and 12 days. The outward passage was made without any noteworthy incident. The vessel ran across the southern part of the Grand Bank, and on the southeast part of the bank fell in with numerous icebergs, the only ice that was seen on the passage. On May 21, land was sighted at Skaga, where a boat was sent on shore on the following day.* On the 25th the *Williams* ran into Ise Fiord.

When the schooner arrived at Ise Fiord, Captain Pendleton was informed by the local magistrate, and also by a Norwegian named J. Eglehus, a naturalized citizen of the island, that American vessels could not be permitted to fill water, land empty barrels, salt, &c., unless a special arrangement was made, whereby Eglehus chartered the *Alice M. Williams*, thereby insuring to her the right to land such material as that mentioned above, to fill water, to have free access to the harbors of Iceland, and to fish within 3 miles of the land. It was not, however, permissible to land any fish of any kind whatever, even if they were to be taken on board of the vessel again. For the privileges above enumerated 400 crowns were charged, and, besides this, a duty had to be paid on all salt that was landed; though in every instance the salt was again taken on board of the schooner and used on fish.

The captains of all the schooners that went to Iceland were told that halibut were most numerous inside of the 3-mile limit, and this information was doubtless given in good faith, as it is probable that the Icelanders seldom go more than 3 miles distant from the land in their open boats. The natives could therefore have little knowledge of the abundance of fish farther out, except as they learned of it from the British or French fishermen, who catch halibut only in small numbers on hand-lines. As a matter of fact, however, the American schooners caught nearly all of their fish from 5 to 25 miles distant from the land, none or almost none inside of 3 miles, while the majority of the halibut were taken outside of 12 to 15 miles from the coast. The privilege which was granted to fish inside the limit was, therefore, practically of no value to our vessels.

It may be stated as explanatory of the above, that vessels going for fares of flitched halibut are compelled to carry a large amount of salt to cure their fish—often amounting to nearly enough to fill the hold—and a considerable number of barrels, to hold the halibut fins, fresh water,

* Captain Pendleton had as one of his crew a man who spoke Danish and acted in the capacity of an interpreter.

&c., besides more or less spare gear, to supply any loss that may occur. As a result, a vessel is very much lumbered up, especially if fish are found abundant, and good catches of halibut for two or three days in succession generally fill all available space, making a "block"; and unless barrels, salt, and spare gear can be landed temporarily, much valuable time must be lost while the crews are waiting for the newly-caught fish to "settle."

If arrangements could be made by the United States with the government of Denmark, whereby salt, barrels, gear, and even halibut fins (in barrels), could be landed by our fishermen, temporarily, under bond, great benefit would accrue to the salt halibut fishery, and New England vessels would be able to pursue their voyages under far more favorable conditions than they otherwise might be permitted to enjoy.

In this connection, it is proper to remark that the captains of the three schooners that have been to Iceland agree in saying that they were treated by the officials on the island with the utmost courtesy and consideration. So far as possible, consistent with a conscientious discharge of their duty, these gentlemen did all that might be expected to relieve our fishermen from any unnecessary annoyance or embarrassment that otherwise might have attended a fishing voyage to a strange country.

The day after the arrival of the *Alice M. Williams* at Ise Fiord, May 26, her crew was occupied in landing barrels (which were afterward taken on board and filled with halibut fins), filling water, &c., and on the 27th she got under way and stood off to the fishing ground, which was not far from the harbor.

On the 18th, the trawls were set, and 48 halibut were taken. This did not prove satisfactory, and the vessel worked along shore, and the following day, acting in accordance with information gained from the natives, the lines were shot in "Hague" Fiord. Poor results were obtained, and on the 30th the *Williams* stood off until she reached a depth of 50 fathoms. Thick weather came on, and, working inshore, the schooner anchored under the land on the 1st of June. The following day she got under way, with a southerly wind, and ran to the northward about 50 miles, where the trawls were set and a catch of 28 halibut was made. The weather was more or less foggy most of the time until the 24th, but moderate enough to set and haul the gear. From the latter date until June 28 the weather was rough, with frequent heavy squalls, so that the schooner ran in and remained in harbor.* On the last-mentioned date she got under way and ran off on the bank, and fishing operations were carried on during the last two days of the month. During June, the trawl-lines were shot 27 times; in July, 20 times; and only a few sets were made in August. At first two sets were made each day, if the weather permitted, but later it was found to be more profitable to make but one set in twenty-four hours, and to shift the position every

* By consulting the log kept by Captain Ryan, it will be seen that the weather was fairly moderate June 25, and fishing was carried on June 28.

time the gear was hauled. In the appended table the dates when fishing was carried on, during June, July, and August, are given, and the number of halibut taken each day which were large enough to be flitched and salted down.

The heaviest catch was made on June 5, when 420 halibut were taken, and Captain Pendleton estimates that they weighed upwards of 50,000 pounds in a fresh condition. On several occasions he thinks as many as 30,000 pounds or more of halibut were taken in a single day; this estimate being, of course, given for the fish as they came from the water.

Speaking in general terms, the Williams fished between the parallels of $66^{\circ} 10'$ and $66^{\circ} 37'$ north latitude, and $21^{\circ} 40'$ to $23^{\circ} 10'$ west longitude, trials being made in depths varying from 25 to 125 fathoms. The character of the bottom where the halibut were mostly taken was rather rough and broken, with an abundance of quahogs (probably *Cyp-rina Islandica*), whelks (*Buccinum*), and crabs, while sponges, moss, and other invertebrates were hauled up on the lines.

From the 7th to the 14th of July the Williams fished in the vicinity of North Cape, in 35 to 40 fathoms of water, 7 to 14 miles from the land, the cape bearing from W. $\frac{1}{2}$ N. to W.S.W.

During the latter part of June, and as late as July 5, large masses of floe-ice were seen stretching along from northeast to southwest as far as the eye could extend, while no water could be seen to the northwest. For several days fishing was carried on near the edge of the ice, and at one time the floe came within one-half mile of the schooner, but did not, however, interfere with fishing.

Captain Pendleton states that the weather, as a rule, was foggy, but reasonably moderate for so high a latitude—not so good on an average as the weather is on the Grand Bank in summer. From the 12th to the 18th of July the weather was stormy and rough, and most of this time the vessel lay in harbor. These spells of rough weather were not wholly lost time, for the days spent in harbor gave the fish an opportunity to settle, and the crew took advantage of the chance thus offered to “pack up” their flitches, and secure room for salting more halibut when the weather proved suitable for fishing operations. July 30 and 31 the Williams was in Ise Fiord, where she lay until August 6, when she started again for the fishing ground off Cape North. The last day's fishing was on August 14, from which time until the 20th the vessel lay in harbor, the crew engaged getting material on board, which had been landed, and in making all necessary preparation for the home passage.

The Alice M. Williams sailed from Ise Fiord for home August 20, reached Belle Isle, Labrador, September 4, Cape Sable a week later, and at midnight of the 12th Thatcher's Island lights were seen, the vessel reaching Gloucester Harbor early on the morning of September 13. The passage home was uneventful, and only one incident connected with it seems worthy of special mention; this, however, being of unusual in-

terest in view of the discussion that has been going on in this country relative to the comparative merits, so far as seaworthiness is concerned, of the English smacks and the American fishing schooners. Considerable numbers of welled ketch-rigged smacks—locally termed "cod-men"—visit Iceland each summer in pursuit of cod. These vessels, for the most part, belong at Grimsby, England. Captain Pendleton tells me that on the day he left Iceland for home the wind came on to blow heavy when he was some 30 to 40 miles off shore, and a bad sea got up. His vessel was pretty deep in the water, and the seas tumbled aboard her so much that it became extremely uncomfortable, not to say dangerous, to attempt to carry sail longer and continue on his course. He therefore hove to under a double-reefed foresail. Soon after he hove to he was passed by an English smack that was carrying a single-reefed mainsail and a whole (stay) foresail. Captain Pendleton speaks in the highest terms and in the most emphatic manner of the behavior of this vessel, which he says was going along so dry and comfortable that many of her crew did not even have on oil clothes, and he judged she was making a speed of 11 knots, at the least. Considering that the *Alice M. Williams* is one of the finest of the clipper fleet sailing from Gloucester, comment is unnecessary.

Captain Pendleton states that the currents on the Icelandic fishing grounds are very irregular and uncertain, both as to direction and strength. It is impossible to tell how the tides are going to run, or how strong they will be. Generally speaking, the current does not run swifter than from one-half to one mile an hour—occasionally two knots—and the general trend is back and forth along the coast, excepting off Cape North, where the tide sweeps around the compass.

The halibut taken at Iceland are very much larger than those caught at Greenland, and, what is peculiar, the former are chiefly white fish, while the latter are nearly all gray. In the early part of his trip Captain Pendleton caught considerable quantities of codfish, part of which he used for halibut bait, but he estimates that he threw overboard codfish to the value of \$400 or \$500. He was obliged to do this because he had no room to keep them on board, and as he could not land any fish, they had to be thrown away. The traders at Iceland would have been glad to buy the fish if they had been permitted to do so, as they could have got them at very reasonable rates; but trade of this kind was strictly forbidden.*

The *Alice M. Williams* is 77.96 tons register. She carried a crew of 16 men all told,† and 7 dories; set about 800 hooks to a dory. She weighed off (including 2,000 pounds of thin or "loggy" fish) 162,000 pounds of flitches, besides which she had 65 barrels of fins; her gross stock was \$8,317.30, and the crew shared \$268.90 each. The prices

* Herring were seen in extraordinary abundance about the 1st of August, in the vicinity of North Cape.

† An Icelandic was hired for about 40 days in July and August.

obtained this year are very much lower than they were last year. For the large flitches 5 cents per pound was paid, the small flitches brought only half price, while 1 cent per pound was paid for loggy fish. Halibut fins, which are considered quite a delicacy, are worth \$9 per barrel.

Table showing the daily catch of the schooner Alice M. Williams during June, July, and August.

| Date. | Number of halibut salted. | Date. | Number of halibut salted. | Date. | Number of halibut salted. |
|-------------|---------------------------|--------------|---------------------------|--------------|---------------------------|
| June 1..... | 25 | June 18..... | 307 | July 21..... | 50 |
| 2..... | 28 | 19..... | 104 | 22..... | 100 |
| 3..... | 87 | 20..... | 113 | 23..... | 160 |
| 4..... | 150 | 21..... | 244 | 24..... | 100 |
| 5..... | 429 | 22..... | 173 | 25..... | 240 |
| 6..... | 290 | 23..... | 150 | 26..... | 274 |
| 7..... | 151 | July 1..... | 125 | 27..... | 11 |
| 8..... | 106 | 2..... | 166 | 28..... | 87 |
| 9..... | 120 | 3..... | 100 | 29..... | 140 |
| 10..... | 136 | 4..... | 245 | Aug. 0..... | 129 |
| 11..... | None. | 5..... | 90 | 10..... | 113 |
| 12..... | None. | 6..... | 172 | 11..... | 90 |
| 13..... | 36 | 7..... | 126 | 12..... | 124 |
| 14..... | 256 | 8..... | 283 | 13..... | 289 |
| 15..... | 109 | 9..... | 117 | 14..... | 14 |
| 16..... | 178 | 10..... | 53 | Total..... | 6, 890 |
| 17..... | 102 | 11..... | 57 | | |

Total catch for the trip about 8,000 fish. This would probably include the small halibut, some of which were used for bait, and others that were too small to be taken into the daily account.

The Concord left home May 12, but on her passage down the Nova Scotia coast she sprung a leak, and put into Arichat, Cape Breton, for repairs. May 27 she left Arichat, and June 10 made Iceland; the following day she went into Reykjavik, where a pilot was obtained. After making the necessary preparations for fishing, namely, landing barrels, filling water, &c., for which privileges 400 crowns were paid, the Concord proceeded to the fishing ground and commenced operations.

Captain Dago says that at first he generally set the trawls twice a day, but he soon found that a single set, and a change in the position each day, resulted far more satisfactorily, a larger quantity of fish being taken with far less fatigue to the men. He estimates that he took about 25,000 pounds of fresh halibut as his largest day's catch. The trawls were set 62 times, fishing being carried on in depths varying from 30 to 80 fathoms, 5 to 25 miles from the land, but generally outside of 15 miles. For about a week the Concord fished alongside of the ice floe, which was distant from the vessel from 2 to 4 miles. Trials were made along the coast for a distance of about 180 miles, but most of the halibut were caught in the vicinity of Cape North. The fishing ground is so extensive, however, that Captain Dago says he seldom saw the other two American schooners. This was due, in a measure, to the prevalence of thick weather for a considerable portion of the time. He reports seeing a fleet of about 40 French topsail schooners, of the old-style type, ranging from 80 to 130 tons, a few ketch-rigged French vessels, 50 to 70 tons, and a small fleet, say 15 to 20, of English ketch-

rigged smacks, fishing for cod at Iceland. The captains and crews of these vessels, although they had been familiar with the Iceland fisheries for many years, were very much astonished at the large catches of halibut that were made by the Americans. They predicted our men would get no fish because they believed the hooks used by our fishermen are too small. The Americans were also told, very emphatically, that they could not possibly use trawl-lines on the Icelandic fishing grounds, because the tide would be sure to sink their buoys. But men who had fished on all the grounds from George's Bank to Greenland, and in the "deep water," in winter, were not to be easily discouraged, and the result proved that, though they had never previously been to Iceland, they had a better conception of what it was possible to do than the foreign fishermen had, notwithstanding the latter were familiar with the locality.*

After having had good fishing for several days, it became necessary for the Concord to land salt, spare gear, &c. A duty of 10 crowns was paid on the salt, though in this as in other cases the salt was again taken on board and used on fish.

Captain Dago states that the Icelanders wished very much to purchase the halibut heads, which, strangely enough, are thrown away by American fishermen as of no value, while they are prized more highly in Iceland than any other portion of the fish; indeed, being the only part that is considered specially desirable for food. Had it been permissible to sell the fish, the Icelanders might have procured large numbers of heads for almost nothing.

Captain Dago describes the bottom on the fishing bank as "catchy," and mentions having taken, besides the varieties of invertebrates already mentioned, two or three other kinds, among which were sea lemons. He also mentions, as also do the other captains, that large numbers of small and medium-sized halibut were caught, upon which were marked the initials of French fishermen, who, seldom making any use of these fish, are accustomed to thus mutilate many which they catch. If they had the good sense to mark on a fish the date of its capture and its approximate weight, much interesting data could be obtained relative to the yearly growth of the halibut.

The French salt their catch of cod, which are taken on hand-lines. The English also fish with hand-lines ("at a drift") for cod, which they salt until a fare—enough fish to fill the available space—is obtained, after which the catch is put in the well to be taken alive to England, the salted part of the cargo generally being landed at the Faroe or the Shetland Islands. Halibut are also saved alive in the well, but instead of allowing them to settle down on the bottom of the vessel, the Eng-

* It is, perhaps, not to be wondered at that the European fishermen should think that extraordinarily large hooks are required to catch halibut, for they use for the capture of cod extravagantly big hooks—more than double the size of the hooks employed by Americans.

lish fishermen suspend the halibut by their tails, believing that the fish will keep alive much longer in this condition than in any other manner.

The Concord was the last to leave Iceland, starting on her homeward passage August 31. She had a fine run as far as the Grand Bank, which she reached in nine days, having passed within sight of Cape Farewell on the way. From the Grand Bank home she encountered strong westerly winds and a rough sea, but arrived at Gloucester on the morning of September 18, having made the passage in a little over seventeen days.

The Concord is 93.63 tons register, carried the same number of men and boats that the Alice M. Williams had, and set from 450 to 600 hooks to a dory. No account was kept of the number of halibut taken, but Captain Dago estimates that he had about 6,000. The total weight of fitches was 152,425 pounds, divided as follows: 142,150 pounds of large, 8,975 pounds of small, and 1,300 pounds of "loggy" fish. Besides, there were 60 barrels of fins. Gross stock, \$7,884.87.

The David A. Story sailed for Iceland May 12, ran a straight course, after passing Cape Spear, Newfoundland (saw no ice); June 6 made the land on the southern coast of Iceland, and three days later reached Ise Fiord, where the vessel lay in harbor until June 12, the weather, in the mean time, being stormy. Nothing was landed, however, and no pilot was taken, but a general idea was obtained of the localities where halibut might be found. Captain Ryan fished chiefly in the vicinity of North Cape, practically on the same ground where the other schooners got their fares. No halibut were taken inside of the 3-mile limit, fishing being carried on from 5 to 20 miles from the land, in depths varying from 35 to 55 fathoms; the bottom rough, clean, and very "catchy." This kind of bottom, which is most generally frequented by halibut, is very hard on fishing gear, since the lines catch on the rocks and are parted and sometimes lost. After fishing a week and taking about 1,500 halibut, he ran into Ise Fiord, where an arrangement was made, as with the Alice M. Williams, for a permit to land spare material, fill water, &c., for which 400 crowns were paid. The spare gear, empty barrels, and 20 hogsheads of salt were put on shore, a duty of 16 crowns* being paid on the salt, which at a later date was taken on board of the vessel and used on fish.

Captain Ryan also reports having seen the floe ice for 48 hours, bearing about northwest from his vessel, and distant about $1\frac{1}{2}$ miles. He saw several steamers in the floe engaged in catching seals. These were probably a portion of the Dundee (Scotland) or the Newfoundland fleets. He also mentions the French topsail schooners, which he says are full, old-fashioned crafts, ranging from 80 to 125 tons; while the English smacks were from 60 to 100 tons.

The following extracts from Captain Ryan's log-book will give a good

* A Danish crown equals about 27½ cents.

idea of the daily fishing, the weather, &c., during his stay at Iceland, and on his passage home. He kept no notes of his outward passage.

| Date. | Entries. | No. of hauls of trawls made daily. | No. of halibut caught each day. |
|--------|---|------------------------------------|---------------------------------|
| June 9 | Arrival at Ise Fiord, Iceland. | | |
| 10 | [No note] | | |
| 11 | Stormy. Laying in harbor. | | |
| 12 | Fine (weather). Got under way. | | |
| 13 | Fine and clear. Came to anchor and made first set. | 1 | |
| 14 | Moderate wind [in the morning]. Made two berths. 11 p. m., stormy. | 2 | 191 |
| 15 | Clear and windy. | 2 | 244 |
| 16 | Windy [probably a fresh breeze]. | 2 | 210 |
| 17 | Very fine; wind changeable. | 2 | 162 |
| 18 | Blustery, with rain. | 2 | 283 |
| 19 | Strong westerly wind. | 2 | 178 |
| 20 | Fine in a. m.; stormy at 6 p. m. Got under way. | 2 | 221 |
| 21 | Went into Ise Fiord. Got water. | | |
| 22 | Got under way [and left the harbor]. At 8 p. m. anchored and set trawls. | | |
| 23 | Windy from the east. Remained at anchor. | 1 | 107 |
| 24 | Easterly gale, with snow. At anchor. | 2 | 1240 |
| 25 | A. m. fine; p. m. stormy. Shifted a berth. | 1 | 184 |
| 26 | At 5 a. m., strong westerly gale. At anchor. | | |
| 27 | Strong westerly gale with rain. At anchor. | | |
| 28 | Strong westerly wind. Moderated in p. m. Got trawls and got under way. | 1 | 132 |
| 29 | Moderate in p. m. Set [trawls]. | 1 | |
| 30 | Got under way in the morning [after landing gear] and set under sail. Blustery at midnight. | 2 | 53 |
| July 1 | A. m. very fine; p. m. windy. Got under way at North Cape. | 2 | 202 |
| 2 | A. m. very moderate. Anchored and set trawls; up anchor [in p. m.], shifted berth, and set again. | 1 | 119 |
| 3 | [Weather] fine, moderate, and clear. Shifted a berth. | 2 | 243 |
| 4 | Very fine and moderate. Shifted berths. | 2 | 283 |
| 5 | Very fine, moderate, and clear. Up anchor and shifted berths. | 2 | 208 |
| 6 | Very moderate, with easterly wind and fog. | 2 | 263 |
| 7 | Moderate, with fog. | [2] | 220 |
| 8 | Windy from eastward. Got under way and ran into Ise Fiord. | | |
| 9 | Laying at anchor in Ise Fiord. | | |
| 10 | In Ise Fiord (during a. m.). Got under way and went to sea. | | |
| 11 | Strong easterly wind. Did not fish. | | |
| 12 | Strong easterly wind. Went into Doyor (?) Fiord and anchored. | | |
| 13 | Strong wind. Laying at anchor. Filled water. | | |
| 14 | Got under way, with strong easterly wind. Anchored. | | |
| 15 | Laying at anchor in Adevig (?). Strong wind. | | |
| 16 | Laying in Adevig. | | |
| 17 | At 6 a. m. got under way. Worked northerly, and set trawls. Fine weather. | 1 | |
| 18 | Very moderate and clear. Weighed anchor and set under sail. | ? | ? |
| 19 | Fine [weather]. Left North Cape and stood to the westward. Set under sail. | 2 | 54 |
| 20 | Foggy in a. m.; clear in p. m. Set under sail. Spoke the Concord. | 2 | 151 |
| 21 | Foggy in a. m. Anchored and set gear. Clear p. m. Up anchor and stood to the westward. | 1 | 50 |
| 22 | Very fine. Sailed to the westward of Patrick's Fiord and set gear. | 1 | |
| 23 | Under way and ran to the eastward. Very moderate off Ise Fiord. | 1 | |
| 24 | Very moderate. Ran by Cape North, bound easterly. Spoke the Alice M. Williams. | | |
| 25 | Very moderate. Anchored off Skaga (b) Point and set trawls. Wind easterly. | 1 | 56 |
| 26 | Very moderate westerly wind. Under way all day. | 1 | 56 |
| 27 | Anchored at Grimsey. Set under sail. Wind west. | 1 | 103 |

* Captain Ryan tells me that he got under way and shifted a berth every day, though this is not always noted in the log-book.

† The storm was probably at its height before it was time to begin fishing in the morning, but Captain Ryan says it blew fresh, and was very nasty and disagreeable weather all day. It could not, however, have blown a gale or anything like it during the greater part of the day, for it is evident, from the fact that two sets were made and 240 halibut taken, that fishing operations were not interfered with. The prevalence of a gale, in the ordinary acceptation of the term, particularly among fishermen, would have prevented all fishing.

‡ The "Grimsey" alluded to above by Captain Ryan, he tells me, is a small rocky island that is frequented by large numbers of sea birds, chiefly gulls, eider ducks, sea pigeons, murres, and a few other species. In this connection it may be stated, on the authority of Captain Ryan, that haggons (*Puffinus*) are very scarce about Iceland, only two birds of this kind having been seen during the entire summer. Mother Carey's chickens do not occur there at all, not a single one having been seen. Sea geese (*Pharopae*) are abundant, and also porpoises. During the month of July the murres hatch out their young (one to a pair of birds), and until the nestlings are able to go out to seek their own food the old birds may be seen in the morning leaving the land by the hundreds and flying off to the fishing ground,

| Date. | Entries. | No. of hauls of trawls made daily. | No. of halibut salted each day. |
|---------|--|------------------------------------|---------------------------------|
| July 28 | Very moderate. Anchored and set trawls. Up anchor and set at Grimsey Island. | 2 | 126 |
| 29 | Windy from southeast. Anchored at Grimsey Island. | 1 | 65 |
| 30 | Very moderate. Got under way, stood on the fishing ground, anchored and set. | 2 | 176 |
| 31 | Fine, clear, and moderate. | 2 | 206 |
| Aug. 1 | Very fine and moderate. Shifted berths. Spoke the Concord. | 2 | 234 |
| 2 | Foggy in a. m., windy in p. m. Anchored at Grimsey Island and filled water. | 1 | 81 |
| 3 | Very stormy; easterly wind. Laying at anchor at Grimsey Island. | | |
| 4 | Easterly storm continues. Still anchored at Grimsey Island. Got under way, but anchored again. | | |
| 5 | Northeast wind and foggy. Up anchor and set under sail. Anchored in p. m. and set. | 2 | 30 |
| 6 | Foggy in a. m., with northerly wind. Up anchor and shifted a berth. | 2 | 170 |
| 7 | Windy from southeast. Got under way, and anchored again at Flatty Island. | 1 | 53 |
| 8 | Very fine, moderate, and clear. Anchored on fishing ground and set gear. | 2 | 197 |
| 9 | Very fine and moderate. Off Flatty Island. Filled water. | 2 | 125 |
| 10 | Windy from the southeast. Made two sets under sail. | 2 | 100 |
| 11 | Very fine. Under way all day; sailing westerly. | | |
| 12 | Very fine. Anchored and set. Up anchor and got under way on Skaga Bank. | 1 | 19 |
| 13 | Disagreeable weather; foggy, with easterly wind. | 2 | 253 |
| 14 | Fine weather, with variable winds. Up anchor and shifted a berth. | 2 | 139 |
| 15 | Moderate, with rain. At 4 p. m. weather fine. Up anchor and shifted a berth. | 1 | 115 |
| 16 | Southerly wind and fine weather. Shifted a berth. Got under way at 7 p. m. | 2 | 168 |
| 17 | Under way standing to the westward. At 10 p. m. came to anchor in Iso Fjord. | | |
| 18 | Took on board all barrels previously landed, and filled water. | | |
| 19 | Took salt on board that had been landed. | | |
| 20 | Wind northerly. Got under way and came out of Iso Fjord. | | |
| 21 | Very windy from southwest. At 8 p. m. anchored on Skaga Bank. | | |
| 22 | Strong southerly wind. Barometer 28.80. | 1 | 148 |
| 23 | Moderate easterly wind. Strong tide on Skaga Bank. | 2 | 171 |
| 24 | Fine weather and moderate. Old (ground) swell on Skaga Bank. | 1 | 45 |
| 25 | Fine and moderate. Got under way and stood to the westward. Off North Cape in p. m. | | |
| 26 | Homeward bound. Heading to the westward with a strong SSW. wind. At 4 p. m. reefed sails. | | |
| 27 | Very moderate in a. m., with heavy swell. At 4 p. m. made sail. Wind northeasterly. | | |
| 28 | Very moderate; variable winds. | | |
| 29 | Moderate southerly wind, with rain showers. | | |
| 30 | Moderate in a. m. Strong east wind and rain showers in p. m. | | |
| 31 | Fine and clear, with northwesterly wind. Moderate in p. m. | | |
| Sept. 1 | Easterly wind, with showers. | | |
| 2 | Strong southerly wind, with rain. Reefed sails in p. m. | | |
| 3 | Westerly gale. Hove to at 6 a. m. | | |
| 4 | Made sail at 3 a. m. Strong northerly wind. | | |
| 5 | Southerly wind, with rain, in a. m. Changed to westerly in p. m. | | |
| 6 | Strong easterly wind, with fog and rain. | | |
| 7 | Strong easterly wind in a. m. Moderating at 4 p. m. Sighted the Newfoundland coast. | | |
| 8 | Wind NW, with clear weather. At noon passed Baccaline Newfoundland. Saw numerous icebergs. | | |
| 9 | Wind WNW. At 4 p. m. passed Cape Race, N. F. | | |
| 10 | Wind moderate and changeable in a. m.; northerly in p. m. At 5 p. m. off Cape Pine, N. F. | | |
| 11 | Moderate in a. m. Wind breezing up from SSW in p. m. Moderate gale at 6 p. m. | | |
| 12 | Wind westerly. Heavy swell. At 1 p. m. made Cape Canso. | | |
| 13 | Wind NNW; fine and clear. Passed Cape Sambro at 7 p. m. | | |
| 14 | Wind NNW. Passed Cape Sable at 10 a. m. | | |

from which they return soon after, carrying lunt in their beaks to feed their young. About the beginning of August the young murrens take to the water. At first they cannot dive, and are cared for with the utmost solicitude by their parents. Captain Rynn tells me that the old birds, when they find a vessel is approaching them and their offspring, make the most desperate efforts to protect the yet feeble fledgling, and show their anxiety and concern by keeping up a continuous screaming. He tells how, on one occasion, his vessel was approaching a pair of old birds, which had between them their little one. The frantic efforts of the parents having failed to get the young one far from the path of the vessel, one of the old birds rose to fly and made a desperate dash almost into the face of a man who was looking over the schooner's bow, and which the unhappy bird appeared to think was the enemy against which it must protect its young.

This closes the log. The vessel, however, arrived in Gloucester September 15, and soon after her arrival her fish were sold and her cargo was discharged.

The *David A. Story* is 86.90 tons, and carried the same complement of men and dories as the other vessels that went on the same voyage. According to Captain Ryan, she weighed off 139,300 pounds of fitches, and had 56 barrels of fins; her gross stock was \$7,600, crew shared, to each man, \$220.

Captain Dago tells me that the French and English fishermen he met with at Iceland stated that the weather is exceedingly rough some summers on the fishing grounds of that region, so much so that they believed it would be entirely impracticable to carry on fishing in boats. He was also informed that fishing operations are sometimes interrupted by the floe-ice that is driven on the coast. Such an instance occurred a few years ago, it is said, when the entire fleet at Iceland was kept confined in port for several weeks, by a large mass of floe ice that drove on the coast, completely blockading the harbors and preventing the vessels imprisoned therein from moving in any direction. Such occurrences are, I believe, somewhat rare. And it is altogether possible that future investigations may result in the discovery of halibut grounds on parts of the Icelandic coast where fishing may be prosecuted even when the northern part of the island is beset with ice-floes.

For the purposes of comparison it seems desirable that a statement should be given of the halibut catch at Greenland this year, in order that we may arrive at correct conclusions regarding the value of the fisheries at Iceland, and estimate intelligently their importance.

The figures given below of the Greenland catch are approximations only—or rather round numbers—but are sufficiently accurate for the present purpose. The statements concerning the localities fished in, the time employed in Davis Strait, &c., are based on information gathered from Captain Byron Hines and others who were engaged this summer in the halibut fishery at Greenland.

The schooner *M. H. Perkins*, of Gloucester, had a fare of 83,000 pounds of fitches caught off Gothaab; and the schooner *Herbert M. Rodgers*, of Gloucester, caught 73,000 pounds of fitches off Gothaab. These were the two earliest arrivals from Greenland. The schooner *Byron*, of Pubnico, Nova Scotia, had a fare of 74,000 pounds of fitches taken off Gothaab. Captain Hines, her skipper, says he fished at Greenland from June 28 to September 4. The vessels, he tells me, were prevented from fishing south of Gothaab, owing to the presence of large quantities of drifting floe-ice. He states that all of the Greenland fleet reached the fishing grounds in Davis Strait about the same time that he did, namely, near the last of June. The vessels were allowed to land material this summer without interference from the authorities, but the fishermen were informed that hereafter they would not be permitted this privilege which they have heretofore always enjoyed. The

Danish authorities also object to the employment, on board of American or British vessels, of the Eskimo; and natives that were on board of the Byron and Herman Babson, the latter of Gloucester, were taken out of those vessels by a Danish war steamer.

The schooner Herman Babson brought home about 60,000 pounds of hitches. The schooner Mary E., of Gloucester, took 50,000 pounds of hitches off Cape Amalia, and the schooner Mist, of the same port, brought in about 70,000 pounds of hitches from the Cape Amalia ground.

It will be seen from the foregoing that the vessels that went to Iceland averaged more than double the catch of those which resorted to Davis Strait, and it is reasonable to assume that the Iceland fleet may be much larger next year than it was during the past season.

GLOUCESTER, MASS., *September 24, 1884.*