

allowed to drift after the liver has been cut out. The liver is cut to pieces in the water; and the pieces are taken up with a dipper and placed in a barrel with a perforated bottom, so that the water and blood can flow off. The livers are then packed in boxes or placed loose in a compartment of the hold.

On the west coast of Iceland a shark vessel has generally a crew of 8 men, beside the captain. The crew of the Ofjord vessels generally numbers 10 or 12 men. Three or four hooks are used at the same time, but when the fish bite well fewer hooks are used.

On the coast of Nordland the fishermen share the profits, while in Vestland the fishermen hire themselves out to owners of vessels. The captain of the vessel then gets \$4.28 per week, the mate \$3.21, and the sailors (or fishermen) from \$2.14 to \$2.68 each. A premium, moreover, is paid for every barrel of liver, namely, 53 cents to the captain, 26 cents to the mate, and about 13 or 14 cents to each fisherman. When the fisheries are conducted on the share system the liver is (for 9 men) divided into eighteen parts. The owner of the vessel gets one-half, but he pays extra for one part for the captain, who therefore gets two parts. Frequently, however, different arrangements are made among the persons engaged and having a share in the fisheries.

The crew receive the following rations per week for each man: Six pounds bread, 2 pounds butter, 3 pounds meat, $\frac{1}{2}$ pound coffee, and $\frac{1}{2}$ pound rock candy. For each trip (lasting about one month) each vessel is furnished with 20 quarts of brandy, a half-barrel of peas or rice, a proportionate quantity of sugar or molasses, and 2 barrels of coal.

After the close of the shark fisheries the vessels are either laid up or employed in other fisheries. In the Ofjord there is an insurance company for these vessels, which has done a great deal of good.

92.—ABUNDANCE OF FISH IN THE GULF OF MEXICO.

By L. H. SELLARS.

[Letter to Prof. S. F. Baird.]

In 1881 the fish came on this coast in such numbers that the Pensacola Ice Company bought a steamer with intent to purse-seine them. From that time till now there have but few fish come north of Cape San Blas. This year there is a glut, and it seems that the Atlantic markets are full also. Lake fish are shipped to points contiguous to here. Even the deep-sea fish, such as snappers and groupers, are more abundant, and bite at the hook more freely.

Now, is there any meteorological phenomenon upon which to base this superabundance of fish? We have been noticing the catching of fish many years, but can see no reasons for this irregular periodical rush of fish from their hiding-places to the coast.

PENSACOLA, FLA., *May 4*, 1885,