

Herring.

Some of these perkins (Clupeidae harangus) are once more becoming plentiful as follows:-

The herring derives its name from the German word "herr", meaning an army. The mighty hosts forming a herring school are what gave rise to the resemblance. The food of herring when at sea consists of minute entomostraca; when near the shore they are said to feed on the young of their own species, the spawn and fry of various other kinds of fishes, small medusae, and crustacea. In fine weather when the food is on the surface herring, and other surface swimming fishes swim open-mouthed against the wind.

Herring abound in both the Atlantic and Pacific oceans. They are particularly plentiful around the British Isles, the North Sea, and off the coast of Norway, in Europe; off Nova Scotia and Newfoundland on the Atlantic coast of America; and off the coast of British Columbia, Alaska, Siberia, and Japan, in the Pacific. The common length of the British herring is from ten to twelve inches, although some have been taken $21\frac{1}{2}$ inches length. The herring found on many parts of the west coast of Great Britain, particularly in Loch Fyne and other lochs in Argyleshire, are greatly superior to those taken on the eastern shores. They are smaller, more fleshy, and better flavored. The difference is generally accounted for by the superior excellence of the food obtained, but while this might explain the greater plumpness and better flavor, it is scarcely compatible with inferiority in size.

Most of the Holland, or Dutch, herring are caught off the east coast of Scotland. Their operations have been so extensive that it used to be a proverbial saying that "Amsterdam is founded on herring bones" owing to the value of its Dutch herring fisheries. Jardines in 1843 said; "The Dutch have always been acknowledged as superior in the art of curing herring to any other nation, and their herrings, not many years ago, brought double or even treble the price of the British article in every European market." Even to-day in a great many communities they are given a decided preference, and secure a higher price.

In the early part of the 19th century the English Government gave bounties to those engaged in the herring fisheries. For 11 years the bounty on barrelled fish amounted to 4/- per barrel, or half the value of the fish as sold by the fishermen, and there was an additional bounty paid on the vessels as well. Later on the bounty was gradually diminished, and in 1820 entirely done away with. The quantity of herring taken in Great Britain in 1819 was 340,660 barrels, of which England furnished $1/22$ and Scotland the remainder.

Iceland also is a splendid herring district. In 1880 the fishing there paid 125% per annum on the investment. The total take there that year was about 100,000 tons.

A common method of distinguishing between a herring and a pilchard is by the following test; when herring are held up by the anterior ray of the first dorsal, the head dips considerably, as the fin is placed behind the centre of gravity; if the pilchard be suspended in the same manner, the body preserves its equilibrium, as the dorsal fin occupies exactly the centre of gravity. The herring also is the larger of the two fishes.

On the Atlantic coast of America, and probably in all other localities, herring spawn in every month of the spring and fall when the bottom waters have acquired a certain temperature. Contrary to general belief it is now known that it is not absolutely necessary for the herring to come near the coast for the purpose of spawning. The spring herring however, as a rule, do seek the coast when they want to spawn.

Herring on the west coast of Sweden disappear after having been regular visitors there for years. During their absence from the Swedish coast they abound on the west coast of Norway in the neighborhood of Bergen. After remaining absent for years they again abandon Norway and

