

102.—THE TREPANG FISHERY.

By JAMES G. SWAN.

[Abstract.]

An important fishery for a food product, although one scarcely known in Europe or the United States, is that carried on for trepangs in the South Pacific and Indian Oceans, where it is found chiefly on coral reefs, from which it is gathered and imported in large quantities into China, where it is considered a great culinary delicacy. The trepang is found in all latitudes, but hitherto the supply has come mainly from the islands of Oceania, particularly New Caledonia. In Malaysia, the Ladrones, and the China Sea, thousands of junks are equipped annually for these fisheries. The island of Erromanga, in the New Hebrides, has long been an important shipping point for this product.

The trepang, or beche-de-mer, as it is often called—another of its names being the sea-cucumber—is a rather repulsive looking animal, being a kind of sea-slug belonging to the genus *Holothuria*. There are several varieties: The ordinary kind which is used for food (*Holothuria edulis*) resembles somewhat a prickly cucumber in size and appearance, except that the color is a light brown with a yellow belly. Another kind is black. Sometimes they are found nearly 2 feet in length; but they are generally much smaller, and about 8 or 10 inches may be taken as the average length.

The trepang, when prepared for market, is an ugly looking, brown-colored substance, very hard and rigid, and can be eaten only after being softened by water and a lengthened process of cooking, when it is reduced to a sort of thick soup by the Chinese, who are very fond of it; and when cooked by a Chinaman who understands the art, it makes an excellent dish which the Europeans at Manila regard very highly.

The preparation of the trepang for market is simple. They are to be boiled in water, either salt or fresh, for about twenty minutes, and then slit open, cleaned, and dried. Those dried in the open air or sunshine bring a higher price than those dried over a wood fire, which latter is the usual process adopted by the Malays. Some varieties require boiling for only a few minutes, or till they become firm to the touch. They must be dried thoroughly, as they absorb moisture readily, and are then liable to become moldy and spoil.

No one has yet attempted this fishing in the North Pacific, although trepangs abound in the waters along the northwestern coast of America, particularly in the region of the Queen Charlotte Islands and the Alexander Islands of Alaska, as well as on the west coast of Vancouver Island. Some time ago an Indian brought me two good specimens,

which he had caught at low tide near the end of the mill wharf at Point Hudson. I showed them to several Chinamen, who at once pronounced them to be the best quality of "whetong," one of the Chinese names for the trepang.

When properly cured they are a valuable food product, and will sell in Canton for about \$45 per ton. This indicates that there may be a deal of money in the business, if rightly conducted, as a cargo of a hundred tons could easily be cured at some places in a few months with a sufficient force of Indians to collect them. The cost is simply to gather the trepangs at low tide, or have the Indians do so, and then have them properly dried, which is an easy process, though one requiring some care and skill. A few inexpensive experiments will enable one to ascertain the correct way of preparing these slugs, which will be likely to find a ready and lucrative sale to the Chinese merchants.

PORT TOWNSEND, WASH., *March 19, 1884.*

103.—SALMON IN THE McCLOUD RIVER DURING THE SEASON OF 1886.

By LOREN W. GREEN.

The first run of salmon for this season appeared at the mouth of the McCloud River on May 15. The run was comparatively small in number, and the fish were unusually bright and healthy. This was owing to the uncommonly high water, which continued till late in the spring, and gave the fish a much better chance to ascend the steep and rocky riffles, thus making their journey from the ocean a much quicker one than is usual at low water. It is well known that salmon take no food after leaving salt water, and the state of the water during their upward journey has much to do with their appearance on arriving at the headwaters. Nearly all of this run, which was about five days in passing, went up to the extreme limit of their spawning-grounds, where they deposited their ova.

About the last of May another small run arrived, and for some time salmon were abundant and much above the average in size. By the middle of June the water was muddy and the Indians were catching no fish. On June 20 a small run was passing up the McCloud, and another was just starting in from the ocean. On the 25th they were still coming in small numbers; and on July 5 a small run arrived, the fish being larger than any before known here. By the last of July there were no salmon, and the water was clear and low.

On August 21 a good run was reported at the mouth of Sacramento River, and on the 28th they arrived at the McCloud River Station in great numbers and excellent condition, some weighing as much as 45 pounds. By September 10 a considerable number of dead salmon were floating down the river; while by the middle of the month many salmon