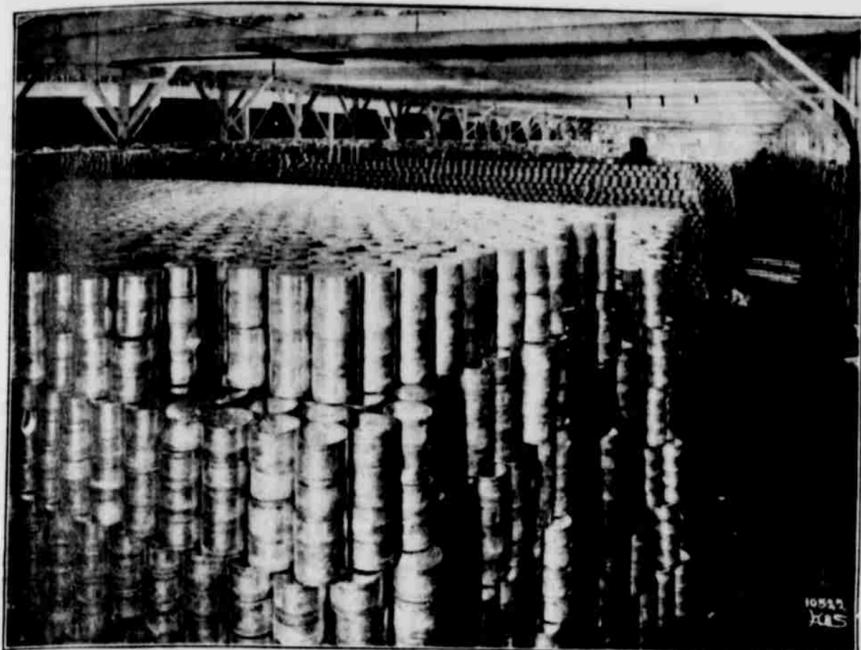


Catching a Half Billion Pounds of Salmon



10,000,000 cans of salmon, ready for labeling.



Unloading salmon from scow into chute of cannery.

FACT pushes a mammoth surprise before us when the estimated total of the salmon pack of the Pacific Coast for 1919 is viewed—five hundred million pounds. The final figures may be a little higher, because there is some salmon fishing in December, and there are occasional canneries that keep going as long as there is anything to can. Besides, this is the season, 1919, for the maximum rub of the humpback salmon, which runs in huge volume every other year, differing from the king salmon, which selects the year following leap year for its greatest gatherings.

Salmon runs occur from Monterey, California, to and including Alaska, and 150 miles up the Columbia River. Not at all points, to be sure, but at certain sections of the Pacific Coast and the rivers tributary thereto. Runs are the only salmon events in which the canners take genuine interest, so the spots where they are few in number are not taken into consideration in the making of totals of achievement.

While in point of commercial value the salmon fisheries of the United States are exceeded only by the oyster and herring fisheries, the leading two of the five varieties of salmon canned are held the most valuable fish in the world. These are the chinook, or king salmon, and the blueback, or sockeye. The flesh of both is red, or that is the way they appear to us when we dig them from the can. In the water they present a different color scheme.

The salmon spends much of its time along shore in the ocean or in the brackish waters that feed the Pacific, but just before the time to spawn in great schools or runs it seeks pure cold fresh water, this being the only character of water in which the salmon will spawn.

It is an unfortunate necessity that the catches of salmon are made while the fish are on their way to the spawning grounds. But for this fact the number of salmon each year would be much larger. But it cannot be helped, as if the fishermen waited until after spawning there would practically be no catch at all, as the up runs are practically the salmon's last journey.

Now comes the fisherman. He operates with gill nets, haul seines, diver nets, dip nets, set or squaw seines, purse seines, traps or pound nets, and fish wheels. The gill net varies from 100 to 300 fathoms in length, chiefly used at the mouths of rivers and near channels. Haul seines, from 100 to 400 fathoms long, play a prominent part in the Columbia River fisheries. Diver nets are used almost exclusively for the king salmon. The dip net is a feature of cascade fishing. The squaw net is about 12 feet long and eight feet deep, taking its name from the fact that this type of net is largely used today by Indian squaws who fish

for salmon. Purse seines are in general use in Puget Sound and southeast Alaska. They are some 200 fathoms long and usually operated from power boats. The Puget Sound purse seiners meet the salmon runs off the entrance to the Straits of San Juan de Fuca and follow the fish until they pass out of American waters.

A trap or pound net is held in position by five piles. The net itself consists either of webbing, or of webbing and wire netting. It is so constructed that once in the net the fish are forced along until they reach a square compartment called the spiller. The spiller filled, the ropes holding the front are loosened and the net wall drops until almost level with the water. A scow is then pushed alongside the spiller, the seine boat taking a position on the outside of the scow.

From the deck of the seine boat, or perhaps a tug that is helping out, a derrick is rigged with a running line from the steam capstan through a block at the top of the derrick. This line is attached to the far end of a net apron called a "brailer," heavily weighted by chains along each side and loaded crosswise in several places. Next a small boat is run inside the spiller and the men in this draw the brailer across the scow, and let it sink in the spiller. The fish gather over this, and the steam capstan reels it in, the net folding over as drawn in from its far side, spilling the fish into the scow. This is the way a great share of the salmon catch is taken.

There are two kinds of fish wheels. One is a shore or stationary wheel, while the other can be moved as desired. These wheels in operation are not unlike the device called a Ferris wheel, so familiar to those who cultivate metropolitan amusement parks, except that nets take the place of the passenger compartments. These are so manipulated that when they bring the salmon out of the water they almost immediately drop them into chutes, through which the fish slide into bins.

Once caught, the salmon are speedily on their way to the cannery. Not that the fisherman has to take them there. Always near the fishing grounds are lighters or scows from the canning factories, which take aboard the various catches as they are offered, tallying the fish at the same time. The scows or lighters are taken to the canneries as soon as they are full up, but there is usually no greater haste, as the canners prefer not to handle the fish until they are twenty-four hours old, thus avoiding a shrinkage that makes for light cans. At the canneries the fish are handled by means of elevators, which take them on directly from the scows or lighters and drop them at the right

points for further action in their journey toward the consumer.

Salmon are dressed, salted and packed by machinery, so far as the greater portion of the season's output is concerned, although some of the smaller factories still utilize human skill in preference to purely mechanical means, although the latter practice lessens annually.

After the cans are packed they are washed and then capped. Safely soldered, and the solder set by several jets of water spurting upon it, the cans are placed in coolers or crates for transfer to the testing room. The principal object of testing is to find air holes in the cans, indicated by air bubbles appearing at the top. Such cans are set aside to be properly soldered, and after a second experience in the testing tank are O. K'd and ready for the next step. This consists of subjecting the can and its contents to a heat of 250 degrees F., called the first cooking. Next the can goes to the venting table, where tiny holes are pricked in its top to enable steam and superfluous water to escape. The tiny holes are soldered, and the can is given a second sixty minute heat bath.

Next comes the lye bath, and then a thorough washing with hot fresh water. The final test is accomplished by tapping on the top of the shining can with a piece of steel or nail, and, if all is well, the cans pass to the lacquering and labeling machinery, which fits them for the case to which they find their way as desired.

So the can stands ready to begin its journey to the consumer, with long odds against the consumer having the slightest idea of the labor necessary to place before him the can around which he runs the opener so easily.

The expense of the salmon pack of 1919 exceeded thirty millions of dollars. In round numbers, thirty thousand persons are directly employed in the industry, while allied industries furnish occupation for as many more. Three million pounds of pig lead and an equal amount of pig tin were utilized in packing the catch for market. The bill for lumber used in preparing for packing and shipping is placed at one million dollars.

It is just fifty-five years since William Hume went from his little salmon fishery on the Kennebec River, in Maine, to California, and built the first salmon canning factory of the Pacific Coast at Washington, in Yolo County. No one dreamed it was the first step in the establishment of what would become the second great industry of the Coast, any more than John Jacob Astor had the idea when he founded Astoria, Oregon, that he had located the site of what would one day be the greatest salmon canning center of the world. Other giants beside great oaks grow from tiny beginnings.

The Sick Man of the East

By CAROL C. CRAIN,

IT WAS Sir Thomas Roe, an English ambassador to the court at Constantinople in the last years of the seventeenth century, who first pointed out the similarity between the Turkish nation and a decrepit man. In an official dispatch to London he asserted:

"Turkey is like the body of an old man, crazed with vices, which puts on the appearance of health though near its end."

A few years later the learned Frenchman, Baron Montesquieu, condemned the decaying Eastern power. He cogently suggested: "It is a sick body not supported by a mild and regular diet but by an extreme treatment which continually exhausts or enfeebles it."

An historic meeting was held at the Russian capital at St. Petersburg, now Petrograd, in 1853. Czar Nicholas proposed to Sir George Hamilton, who represented England, that an understanding should be reached with regard to Turkey, which was disintegrating.

"We have on our hands a sick man," the Czar said, "a very sick man. It would be a great misfortune if one of these days he should happen to die before the necessary arrangements are made. The man is certainly dying, and we must not let such an event take us by surprise." At that time Greece and Serbia had

regained their independence from Turkey. Furthermore, the provinces of Wallachia and Moldavia had divorced themselves from the wavering Ottoman power which offered little resistance.

The Crimean War, in which Turkey was a bone of contention between England and France arrayed against Russia alone, resulted disastrously for the Czar's kingdom. Then the Ottoman Empire, with its territorial integrity guaranteed by treaty, proceeded to levy immense taxes upon its subjects. Here is what happened to those unfortunates who failed to pay in cash:

"In the heat of summer men are stripped and tied to a tree smeared over with honey or other sweet stuff, and left to the tender mercies of the insect world. For winter extortion it is found convenient

to bind people to stakes and leave them barefooted to be frostbitten. Instances are recorded of peasants buried up to their heads in earth and left to rot in leisure."

This régime of cruelty by the "unspeakable Turk" brought on revolutions and the intervention of Russia. By the treaty of San Stefano and the succeeding one of the European Congress the Oriental tyrant was severely shorn. The states of Serbia, Montenegro, Roumania, and Bulgaria were recognized.

In the recent Great War the decadent nation of the East, "The Sick Man," continued his cruelties. The Armenians were driven like dogs, turned over to the savage Kurds, tortured, and massacred in thousands. The women and girls were drafted for the harems, impressed into service as camp-followers, and enslaved like oxen or other beasts.

The Turk has ever been a fiendish monstrosity, but he may live to learn that men and nations alike are overcome by their sins. The dwindling Ottoman power is a conspicuous example of vice consistently punished. When all the settlements of the Great War are made, you'll scarcely be able to locate Turkey on the map.