

ston. The factory is under the superintendence of an experienced fish-canner from Maine. It is a large two-story structure, with a salting house attached. The plant is worth about \$10,000.

The principal processes to which the sardines are subjected before emerging as the canned product are as follows: When the fish are unloaded from the vessel they are received into a large, airy room, where the cutting and washing are done, and then transferred to the second floor by means of an elevator. There they are next arranged on latticed trays (32 inches square) and dried. If the weather is fair and the atmosphere dry the drying is done in the open air, occupying, as a rule, about two and a half hours. On rainy days, or when the air is especially humid, drying is accomplished inside the building by means of steam, which requires about ten hours.

After drying the fish are placed in wire baskets (22 inches long, 18 inches wide, 3 inches deep) and immersed in boiling oil for two to six minutes, depending on their size. The oil is contained in a shallow sink, into which the wire baskets fit and are lowered and raised by means of long wire handles. The boiling of the oil is done by means of a steam pipe entering at the side and running under the sink. After draining and thoroughly cooling the fish go to the packers, thence to the sealers, thence to the bathmen, and, after cooling and testing for leaks, to the boxing room.

The cutting of the fish is done by men and girls, the average number of whom employed is 25. They are paid by the basket or the bucket of cut fish, and by working steadily earn about 25 cents an hour. The flakers number 12 to 14, and are the same girls who pack the fish in the cans. Ten men act as sealers and can-makers, and 10 others are employed in the remaining branches of the work.

The sizes and grades of canned sardines placed on the market from this cannery, and the wholesale prices received, are as follows: Quarter oils, 100 cans to a case, \$6.50 to \$8.50 per case, according to the quality of the oil; half oils, 50 cans in a case, \$5.60 per case; 2-pound oval cans, with mustard, spices, and tomato sauce, \$2.25 per dozen cans.

BARRACUDA.

One of the most useful and valuable food-fishes of the California coast is the barracuda (*Sphyrna argentea*). Not only is it a favorite article of food when eaten in a fresh condition, but it is one of the best fish for salting found on the west coast. The normal range of the fish on the coast of the United States is from San Francisco to the Mexican border. It is, however, not generally abundant north of Monterey, and it is a noteworthy feature in the fisheries of only Santa Barbara, Los Angeles, and San Diego counties, in which over nineteen-twentieths of the catch is taken.

There is an active demand for fresh barraenda in the markets of California, and in San Francisco it ranks as one of the choicest fishes.

The annual catch is between 600,000 and 700,000 pounds, of which over 100,000 pounds are salted. The fresh fish yield the fisherman 3 to 5 cents a pound and the salt fish bring 3 to 4 cents a pound. The average wholesale price of the fresh fish in San Francisco is 7 or 8 cents a pound, or two or three times that of chinook salmon.

When properly salted the barraenda presents a very inviting appearance, and is justly regarded as one of the most palatable of fishes that are preserved in this way. It should be, and generally is, split down the belly like codfish. The silvery color of the skin is more or less persistent in salt, and the flesh retains its attractive white character. The largest quantities are salted in San Diego County.

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