

3. As to the quantities, prices, &c., so far as the coastal fishery by boats is concerned, a few fishermen joining together can put up by their own labour and at small cost a small building for use as a freezer and cold store, and could, by saving their own surplusage of spring herring, ensure themselves a supply of bait whenever other seasonal baits were short; and for the supply of the deep-sea fishermen larger buildings can be erected and a large supply of herring put up at certain places, where they are known to be plentiful in the spring, and where they could be readily put into the freezer at a cost of from fifty to seventy-five cents per barrel. And as these herring would readily command from three to four dollars per barrel when bait was scarce, the margin for cost of handling and freezing and for profit is a fair one, and should attract capital.

For many years past this system of freezing and cold storage has been in successful use on the great lakes, and at the present time nearly the whole catch of these waters, amounting in the aggregate to five or six thousand tons, is handled in this way, and the dealers are thus enabled to regulate the supply according to the demand.

Plans and specifications for the construction of a combined ice-house and freezer accompany this bulletin. These plans may be modified in regard to size to suit the requirements of any station, but they give the design in general of the most approved form for handling bulk fish.

It will be noticed that the freezing chambers, as set out in plan, show no chilling cylinders. The reason is, that it has been decided by men who use this system that less ice and salt are required for freezing bulk fish if trays are used; thus, metallic trays 4 inches deep and of a convenient size, 3 feet by 2 feet, and fitted with metallic covers, are recommended for rapid freezing; these trays filled with fish are packed between layers of ice and salt, and it is calculated that the freezers, as shown in the plan, can freeze ten tons of bulk fish in forty-eight hours; these fish are then removed to the cold stores and kept there till required for sale.

In storing the ice-house, the blocks of ice can be put in through a door high up in the gable and not shown in the plan.

The salt is stored on the first floor and the ice is taken from the ice-house direct to the ice mill on this floor, and a man with a wheelbarrow can fill up all the chilling cylinders in a short time each day, as once the temperature is lowered there is very little waste, so long as the drainage is kept perfect.

If preferred, cylinders can be put in the freezing chambers and the fish frozen by being placed on close slat shelves, between the cylinders; the only difference between the freezing chamber and the cold store in this case would be that the former would have a larger area of chilling surface in proportion to the size of the chamber than the latter.

In issuing this bulletin the enormous loss to both the fishermen and the country, arising from the enforced idleness which sometimes extends in the case of vessels to weeks at a time, is fully recognized, and whilst it would seem to be beyond the province of the department to enter on any special experiments on an extended scale, it is hoped that this bulletin meeting the eye of practical men, something may be evolved which will tend to minimize the loss, which is at present an admitted fact.

The following are the specifications for the construction of the building as per annexed plans:—

SPECIFICATION of materials required and work to be done in the erection of Fish Freezers and Cold Stores for the Dominion Government according to the accompanying drawings and specifications, prepared by Denison & King, Architects, Toronto.

Materials, Workmanship, &c.—The building is to be a balloon frame and built according to the sizes, forms and dimensions marked on the drawings, with spruce lumber, free from waney pieces, shakes or any imperfections injuring its strength. Sawn die square to the sizes hereafter specified and put together in a good, workmanlike manner.

All to be nailed to each bearing.

Posts and Sills.—Excavate for and set the posts (where marked by circle on foundation plan), well pounded down to a sound bearing and the earth filled in and well rammed around, when they are to be sawn off perfectly level to receive the 6 inches x 8