## 27.-DRYING CODFISH AT BORDEAUX.\*

## By H. GUNDERSEN.

The method of drying codfish at Bordeaux is the one most suitable to the locality. The process is rapid, occupying only from 2 to 6 days, the outlay of money is slight, and the result is a very good article. The French fish will never keep so well as the Norwegian; but considering the excellent means of communication, the price is much more important, and this is, on the whole, very reasonable. A great advantage of these drying frames is this, that they give fish which have begun to turn a little a better appearance and prevent them from decaying altogether, as they can be cleaned, soaked, and dried again with very little expense.

A sketch of these frames is given in Figs. 1, 2, and 3; where a are laths of pine wood; b b are poles of different kinds of wood, rammed into

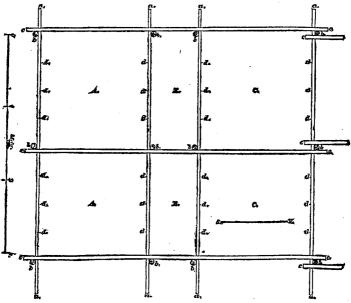


FIG. 1.-Codfish drying frame, top view.

the ground; and c c is a cover of strong mats. The fish hang on the laths in rows, exposed to the sun and wind. A temporary roof is generally put on when the rays of the sun become too powerful. There are, however, many drying frames which have no roof. When the rain and

\*" Törring af Klipfisk i Bordeaux." From the Norsk Fiskeritidende, Vol. V, No. 1, Bergen, January, 1886: Translated from the Danish by HERMAN JACOBSON. sun become too strong there is then no other way but to take the fish down and lay them in a shed. The fish are not pressed at all.

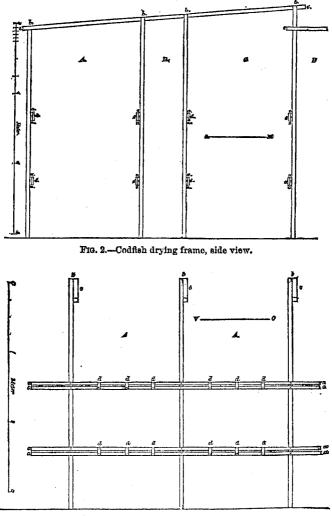


FIG. 3 .-- Codfish drying frame, end view.

All the drying frames extend from west to east. They vary somewhat in their arrangement, but two types seem to be prevailing: (1) The one given in the illustration, the laths being attached alternately to the north and the south end of the pole; (2) or with an interval of  $2\frac{1}{2}$ to 3 meters between all the rows, so that the shadow of one row never falls on another, all the laths being attached to the north side of the pole.

The thickness of the laths is from 1 to  $1\frac{1}{2}$  centimeters, and their breadth from 4 to 5. The fish are not specially fastened to the laths, but

simply stuck between them (Fig. 4) from the right and the left (north and south); but the fish are all stuck in with the back upward. By its own weight the fish bends, so that the lower side turns towards the sun.

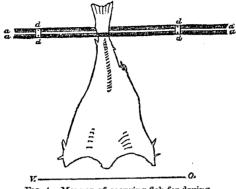


FIG. 4.-Manner of securing fish for drying.

To prevent the laths from giving way and the fish from falling down, blocks of wood  $(d \ d)$  are, at short intervals, stuck across every pair of laths. Thereby they are held together so firmly that it would require a pretty strong wind to blow down the fish, even if they have been hung only recently. After the fish have become somewhat dry they hang safely even in a stiff breeze. If the heat of the sun is very strong and there is no straw cover, all that has to be done is to turn the fish so that their edge turns towards the sun. This can be done easily and quickly.

It is not customary to have more than two rows of laths, and in a place like Bordeaux, where there is so much room, there is no necessity for it. The laths generally last from 5 to 7 years, and the poles somewhat longer.

I have made a calculation in order to see what space it would require to dry 30,000 fish, and have found that, counting two rows, and an interval of 2 meters between the rows, it would require an area of 5,624 square meters, or 75 cubic meters; while the same quantity of fish, when dried on rocks, would require an area of 7,344 square meters, or 86 cubic meters. If the interval between the laths is 3 meters, it would require an area of 8,437 square meters. The depth (from north to south) of the French drying frames is 8 meters. On a front of 3 meters 128 fish can be dried; 30,000 would, therefore, require a front of about 700 Owing to the climate, and in view of the fact that a more durmeters. able article is to be produced, the drying will take more time in Norway than in France. Hence a layer of earth at the bottom will not prove an advantage. The frames would, therefore, have to be placed on the rocks, which would make them much more expensive.

BERGEN, NORWAY.