

wood, are about $2\frac{1}{2}$ inches thick, and gradually diminish in thickness towards the top, the upper plank being only $1\frac{1}{4}$ inches thick.

Of the sails, which are manufactured here, sprit-sails are the best in wind; the two small foresails also render better service than a large stay-sail, and are therefore preferred by the fishermen. In reefing the mainsail, the small foremast is taken down entirely, and the sprit-sail remains spread. The mainsail is reefed from the top. It is somewhat narrower at the top than at the bottom, and by reefing it from the top there is no danger of rolling the sail too tight and of tearing it. The reef-line is simply tied at the top of the sprit, and in reefing it is made loose and tied lower down.

The great advantage of these vessels is their strength, as they can withstand almost any storm. I own a cutter built in the United States. In moderate wind I can always outsail our vessels, and even in a tolerably stiff breeze I can cruise as well as they; but if a strong wind springs up I can no longer cruise, but must think of my own safety, while our vessels keep on in their course.

RUSS, EAST PRUSSIA, *July 1, 1880.*

83.—WOODEN TANK FOR THE TRANSPORTATION OF LIVING FISH.

By MAX VON DEM BORNE.

The tank has a double bottom, in order that dirt may be separated from the fish. If water is poured into the tank, it will flow out by the pipe from below the upper bottom, and take the dirt out of the tank.

There should be three inches of air below the cover. On warm days some ice may be placed on the cover.

BERNEUCHEN, *February 29, 1884.*

