

dation of shipping, the Chief Engineer adopted this plan, and it was executed accordingly.

The floor of the footbridge (Fig. 18) is formed of oak slats $3" \times 1\frac{1}{2}$ inches, 4 ft. long, set two inches apart, and nailed to two longitudinal strips of equal size. It is made in sections of twelve feet length and rests on the main footbridge ropes, to which it is secured with small screw stirrups (see Fig. 19).

The main footbridge cables consist of $2\frac{5}{8}"$ steel ropes, each having an ultimate strength of 240 tons. They are assisted by two auxiliary ropes of $1\frac{3}{4}$ and $1\frac{1}{4}$ inches in diameter; the heavier rope being on the side which also supports the cradles. The connection of these ropes with the floor is shown in Fig. 20.

The anchorage of the footbridge ropes is illustrated by Figs. 21 and 22.

The socket for fastening the rope in, is made of the toughest wrought iron, contrary to the usual cast sockets of this kind. This precaution was taken to exclude any danger of bursting, which, in