the grasping arrangement. Figs. 35 and 36 show this on a larger scale.

At the end of the iron bars, are four 8 inch sheaves, which are attached by means of eight 1½ inch iron wire ropes to the four-grooved small sheave of a pair of blocks $B$ and $A$. One of these is illustrated in Figs. 37 and 38.

Block $A$ is the standing block, fastened stationary to a heavy log in the rear of the anchorage, by means of four 1½ in. wire ropes. It contains six iron sheaves of 23 in. diameter, connected to the sheaves of the running block $B$ by means of a twelve folded 1½ in. steel rope, the fall of which after passing around several rollers $C$, $D$ and $E$, is attached to a four sheaved wooden block $G$ at the other end of the anchorage. This wooden block is worked by a 1½ in. manila rope, which connects with the drum of a steam engine. This arrangement of course, may be changed to suit different local requirements. In the present case, its advantages are: first, that the wooden block $G$ moves only in the middle line