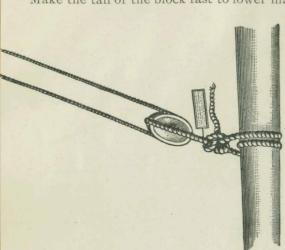
their vessel as speedily as possible. Attached to the tail-block is a tally board with the following directions in English and French printed on it: -

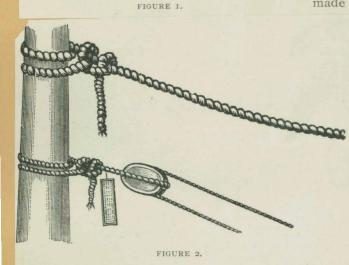
"Make the tail of the block fast to lower mast well up. If the masts



are gone, then to the best place you can find. Cast off shot-line, see that rope in the block runs free, and show signal to shore."

The foregoing instructions having been complied with, the result will be as shown in Figure 1.

As soon as the life savers get a signal from the vessel that the tail-block has been made fast, they "tie"



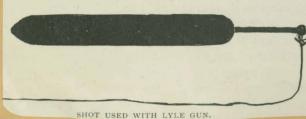
bend on a threeinch hawser to the whip, the endless line, and by it haul the hawser off to the vessel. Occasionally circumstances permit wrecked crews to assist in this part of the work, but usually the life savers are compelled to do it alone. To the

end of the hawser, which has been bent on to the whip, the endless line, is also attached a tally board with the following directions in English and French: -

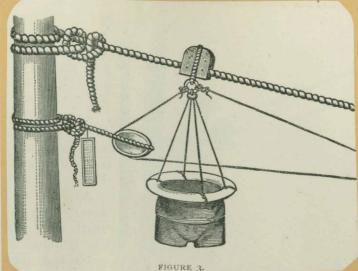
"Make the hawser fast about two feet above the tail-block; see all clear, and that the rope in the block runs free; show signal to the shore."

These instructions being obeyed, the result will be shown as in Figure 2.

Particular care must be taken that there are no turns of the whip, the endless line, around the hawser; to prevent this the end of the hawser is taken up between the parts of the whip, the endless line, before making it fast. When the hawser is made fast to the wrecked vessel, the whip, the endless line, is cast off from the hawser, and the life savers, having been signaled to this effect, make the shore end of the hawser fast to the strap of the sand anchor. The crotch is then



placed under the hawser and raised, and the latter drawn as taut as possible, thus making a slender bridge of rope between the vessel



and shore. The traveler block, from which is suspended the breeches-buoy, is then put on the hawser, the whip, the endless line, made fast to breeches-

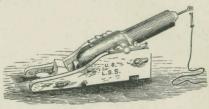
buoy, and thus hauled to and from the vessel, as shown in Figure 3, which represent the apparatus rigged with the breeches-buoy hauled out to the vessel.

The life savers always carry a good supply of shot and lines with them, and if the first shot fails to carry the line to the vessel, which seldom occurs, owing to the skill of those who have charge of this important branch of the work, a second one is promptly fired. The work of hauling the breeches-buoy to and from a wrecked vessel is an arduous task. The whip, the endless line, after passing through the seas, becomes coated with ice and sand, which cuts the mittens and lacerates the hands of the surfmen in a fearful manner at times.

The captain and one of the life savers rush into the surf and take the rescued persons out of the breeches-buoy as soon as it reaches the beach, while the other members of the crew stand ready to again send the breeches-buoy off to the wreck as soon as one rescue has been

accomplished. In this way one after another of shipwrecked crews are brought ashore.

Women and children and helpless persons are landed first from wrecked vessels. Children when brought ashore in this way are held in the arms of some elder person or securely lashed to the breeches-



LYLE GUN, SHOWING SHOT PROTRUDING FROM THE MUZZLE

buoy. The instructions to mariners are to remain by the wreck until assistance arrives, unless the vessel shows signs of immediately breaking up. If not discovered immediately by the patrol, the crews of wrecked vessels are instructed to burn rockets, flare up, or other lights, and if the weather is foggy to fire guns.

Under no circumstances should the crew of wrecked vessels attempt o land through the surf in their own boats, until the last hope of assistance from shore has vanished. Often when comparatively smooth at sea, a dangerous surf is running alongshore, which is not perceptible three or four hundred yards offshore, and the surf when viewed from a vessel never appears so dangerous as it is. Many lives have been unnecessarily lost by crews of stranded vessels being thus deceived and attempting to land in the ship's boats.

After a crew has been rescued the work of recovering the apparatus is quickly accomplished, and every part of it except the shot is invariably recovered, and often even the shot is also saved. This is done by a hawser cutter, which is pulled off to the wreck on the hawser the same as the breeches-buoy, cutting the hawser off close to where it is attached to the wrecked vessel. The life savers then haul the apparatus through the sea to the shore.

The first gun used for throwing a line to stranded ships was of cast iron, and weighed two hundred and eighty-eight pounds, and threw a shot weighing twenty-four pounds, with an extreme range of four hundred and twenty-one yards. This soon gave place to an improved gun, which was of cast iron, with steel lining, mounted on a wooden carriage. This gun weighed two hundred and sixty-six pounds, and carried a twenty-four pound shot four hundred and seventy-three yards. The Lyle gun, which is now used by the life savers of Cape Cod, is a