No. 653,021. Patented July 3, 1900.

# C. S. HAMILTON.

## MOORING LINE ATTACHMENT.

(Application filed Apr. 25, 1900.)

(No Model.)

Fig. 1

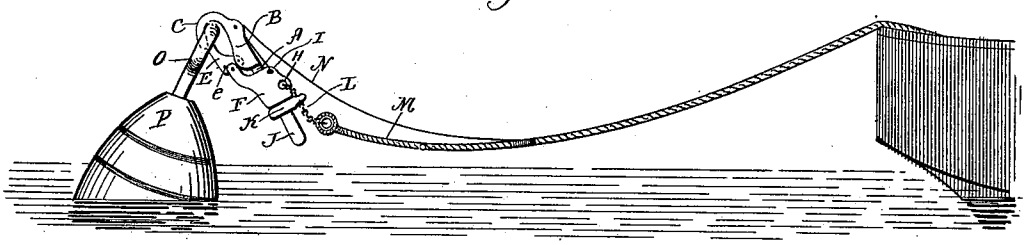



Fig. 2

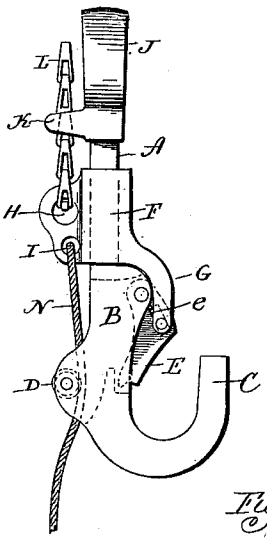



Fig. 3

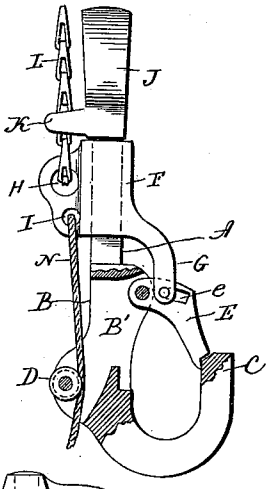



Fig. 4

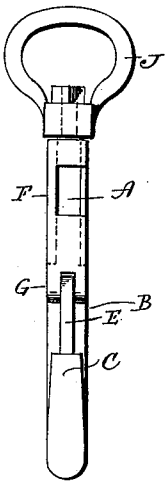
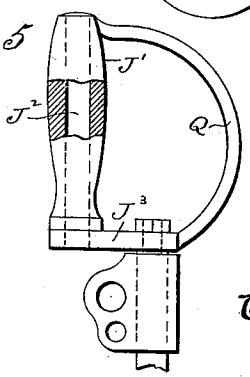



Fig. 5




Witnesses.
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# UNITED STATES PATENT OFFICE.

CHARLES S. HAMILTON, OF NEW HAVEN, CONNECTICUT.

## MOORING-LINE ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 653,021, dated July 3, 1900.

Application filed April 25, 1900. Serial No. 14,306. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES S. HAMILTON, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Mooring-Line Attachments; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a view illustrating the engagement of my improved mooring-line attachment with a buoy; Fig. 2, a side view of the attachment detached; Fig. 3, a similar view, partially in section, more clearly illustrating the operation of the device; Fig. 4, an edge view of the same; Fig. 5, a modification.

This invention relates to an improvement in mooring-line attachments and is adapted to be connected with the end of a mooring-line for securing the line to an eye or loop on the anchor-buoy, post, or point where it is desired to secure a boat.

It is customary with boat-owners having a regular anchorage-ground to anchor a buoy and provide that buoy with an eye or loop, to which the mooring-line is tied to anchor the boat. In coming to anchor it is first necessary to catch the buoy and then pass the end of the line through the eye or loop and tie or otherwise secure the end.

The object of this invention is to provide an attachment adapted to be connected with the end of the mooring-line, which may be readily engaged or disengaged with the eye or loop on the buoy or other place where it is desired to moor the boat; and it consists in the construction as hereinafter described, and particularly recited in the claims.

As herein shown, the device consists of an angular shank A and a rounded body B, which terminates in a nose C after the manner of snap-hooks. The body is recessed to form a clearance-chamber B′, between the sides of which a bar, roller D, or other bearing is mounted or formed for the purpose as will hereinafter appear. Within the chamber a tongue or latch E is pivoted and adapted to bear against the outer end of the nose C, so as to close the attachment. In this tongue is a slot *e*. On the angular shank A and adapted to slide thereon is a slide or sleeve F, and this sleeve is formed with an upwardly-extending arm G, which is pivoted to the tongue E through the slot *e* and so that the movement of the sleeve will operate the tongue to open or close the attachment. In the rear edge of the sleeve are holes H and I. To the end of the shank a loop-handle J is secured, and preferably from the lower end of the handle an arm K extends, in which there is an opening. Extending through the hole H in the sleeve and through the opening in the arm K a cord, wire, or chain L is passed and the ends of this chain secured to the end of the mooring-line M in any desired manner. To the sleeve and through the hole I therein a lanyard N is secured, and this lanyard extends over the bar or roller D and is made fast to the mooring-line M at a point somewhat above its outer end.

The operation of the device is as follows: As the boat approaches the anchorage the mooring-line attachment is grasped by the handle J, and the mooring-line being slackened allows the sleeve F to drop by gravity, which forces and holds back the tongue E of the attachment, and the nose of the attachment is inserted through an eye or loop O, secured to a buoy P or other place where it is desired to secure the boat. As soon as the nose engages with the loop or eye the handle is dropped, and by force of gravity the sleeve slides toward the handle and throws the tongue against the nose. Then when the mooring-line is hauled taut it holds the sleeve against the handle, and thereby firmly holds the end of the tongue against the nose of the attachment. In casting off the mooring-line is drawn in until the lanyard N is reached, when by pulling upon the lanyard the sleeve is drawn outward to force the tongue away from the nose of the attachment and at the same time turns the attachment into a position to freely slip out of the eye or loop of the buoy, and thus without difficulty the boat is cast off.

Instead of forming the loop-handle J and the extension K therefrom the handle may be formed as shown in Fig. 5, in which the handle J is formed with a longitudinal opening $J^2$ and an offset $J^3$ for attachment to the shank

A and so that the chain-loop L may pass through the handle, the operation being the same in both cases. In the latter case it may be desirable to provide a guard Q, so as to form a loop-handle, which will make the grasp upon the handle more secure.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A mooring-line attachment, comprising a shank, recessed body and nose, a tongue pivoted to the body and adapted to engage with the outer end of the nose, a bar or bearing between the sides of the body at the back, a sleeve on said shank and formed with an arm extending into engagement with the tongue, a handle secured to the outer end of the shank, a loop connecting the handle and sleeve and coupled with a mooring-line, and a lanyard also secured to the said sleeve and extending over the bearing in the body of the hook and into connection with the said mooring-line, substantially as described.

2. A mooring-line attachment, comprising an angular shank, recessed body and nose, a tongue pivoted to said body and extending into engagement with the outer end of the nose, said tongue being formed with a slot, a bar or roller bearing between the sides of the body at the back, a sleeve on said shank and having an arm extending upward into engagement with the slot in the tongue said sleeve formed at its rear edge with two holes, a handle secured to the outer end of the shank, and provided with a passage, a loop connecting the handle and sleeve and connected to a mooring-line, and a lanyard also secured to the said sleeve and extending over the bearing in the body of the hook and into connection with the said mooring-line, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

CHARLES S. HAMILTON.

Witnesses:

FRED. C. EARLE,

LILLIAN D. KELSEY.