July 15, 1947. F. E. LONG 2,424,040

RELEASING GRAPPLING HOOK OR ANCHOR

Original Filed July 27, 1944

Fig. 1.

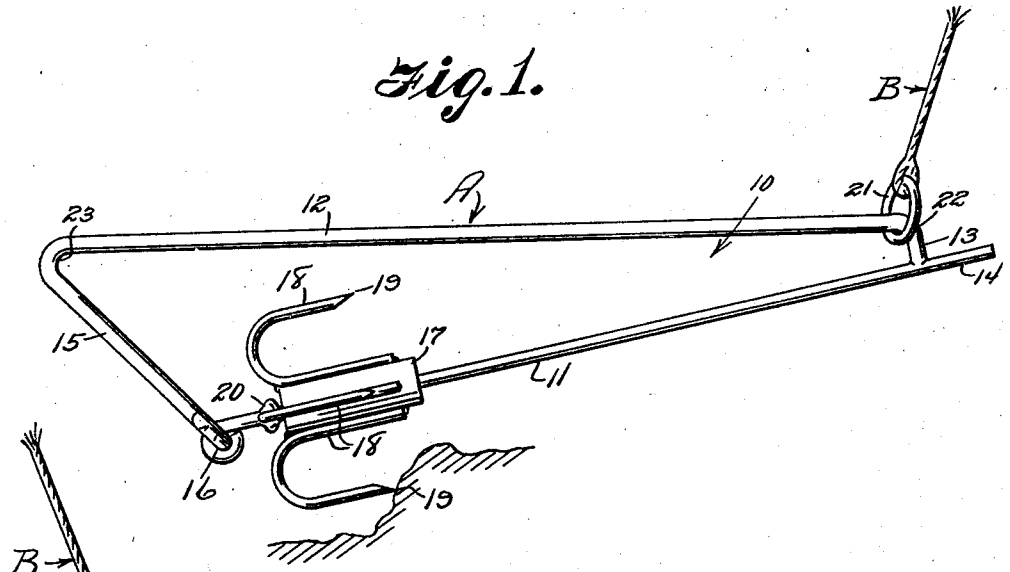
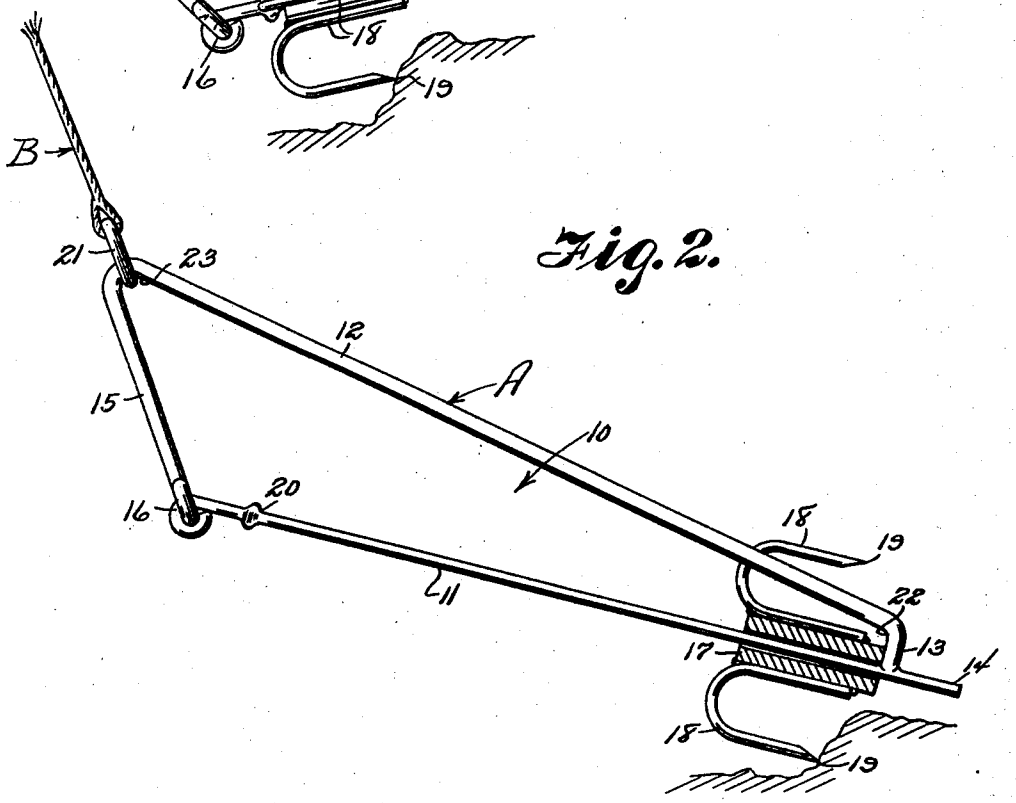


Fig. 2.



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RELEASING GRAPPLING HOOK OR ANCHOR

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Substituted for application Serial No. 546,836, July 27, 1944. This application May 7, 1947, Serial No. 746,518

3 Claims. (Cl. 114—207)

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This is a substitute for prior application Serial No. 546,836, filed July 27, 1944.

The invention relates to a grappling hook or anchor, and more especially to a positive release grappling hook or anchor.

The primary object of the invention is the provision of a device of this character, wherein it can be readily and easily released from engagement with rock, coral, or other entanglement, and thereby avoiding excessive strain or damage to the hook or anchor and the haul line.

Another object of the invention is the provision of a device of this character, wherein the hook or anchor proper is slidably supported for floating action, so that a pull on the frame carrying the same will cause it to engage firmly for anchorage purposes, then on a reverse pull, the device will be released with dispatch, and without excessive strain or any damage thereto.

A further object of the invention is the provision of a device of this character, wherein the same will prevent premature release thereof with attending hazards to ships, boats or other like crafts, and at the same time eliminating the loss of the anchor line therefor, the device being of novel construction, and is unique in the working thereof.

A still further object of the invention is the provision of a device of this character, which is simple in construction, thoroughly reliable and efficient in operation, strong, durable, conveniently operated, anchored and released with dispatch, and inexpensive to manufacture and install.

With these and other objects in view the invention consists in the features of construction, combination and arrangement of parts as will be hereinafter more fully described, illustrated in the accompanying drawing, which shows the preferred embodiment of the invention, and pointed out in the claims hereunto appended.

In the accompanying drawing:

Figure 1 is a perspective view of the device constructed in accordance with the invention, and shown in anchoring position.

Figure 2 is a similar view, partly in section, showing the device in position for release.

Similar reference characters indicate corresponding parts throughout the several views in the drawing.

Referring to the drawing in detail A designates generally the device in its entirety constructed in accordance with the invention, while B denotes a portion of its hauling line.

The device A comprises a substantially triangular shaped frame 10 having the forwardly convergent elongated arms 11 and 12, respectively,

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the latter arm 12 being formed with an offset union 13 with the arm 11, slightly removed from the forward end 14 of the same, while this arm 12 is provided with a rear elbow 15, disposed at an acute angle to the arm 11, with an eye linkage 16 therebetween.

Slidably fitted on the arm 11 is the runner hub 17 of a grappling hook or anchor, having a plurality of hooking tines or members 18, which are radially set to the hub and have their free pointed ends 19 directed forwardly of the latter. The arm 11 spaced from the linkage 16 is provided with a stop 20 for the hub to limit the movement thereof rearwardly on the said arm 11.

Loosely embracing the arm 12 is a coupling ring 21, to which is fastened the line B, and this ring travels between abutment points 22 and 23, respectively, on the arm 12 in the working of the device A for the anchoring thereof and its release, accordingly to the direction of pull upon the said line B. This operation can be best seen in both Figures 1 and 2, as for example, when the line B is pulled forwardly the ring reaches the point 22, so that the device can be conveniently anchored, then when the said line B is pulled rearwardly the ring 21 reaches the point 23, so that the device is released from anchorage.

From the foregoing it is thought that the construction and manner of operation of the device will be clearly understood, and therefore, a more extended explanation has been omitted, for the sake of brevity.

What is claimed is:

1. A device of the kind described, comprising a carrier having forwardly convergent arms fixed to each other at distant points relative to each other, a runner on one of the arms, hooks carried by said runner and having free ends directed forwardly thereof, and a hauling line loosely connected to the other arm.

2. A device of the kind described, comprising a carrier having forwardly convergent arms fixed to each other at distant points relative to each other, a runner on one of the arms, hooks carried by said runner and having free ends directed forwardly thereof, a hauling line and a ring loosely connecting the line with the other arm.

3. A device of the kind described, comprising a carrier having forwardly convergent arms fixed to each other at distant points relative to each other, a runner on one of the arms, hooks carried by said runner and having free ends directed forwardly thereof, a hauling line, a ring loosely connecting the line with the other arm, and a stop on the arm carrying the runner and remote from the forward portion thereof.

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