

(No Model.)

2 Sheets—Sheet 1.

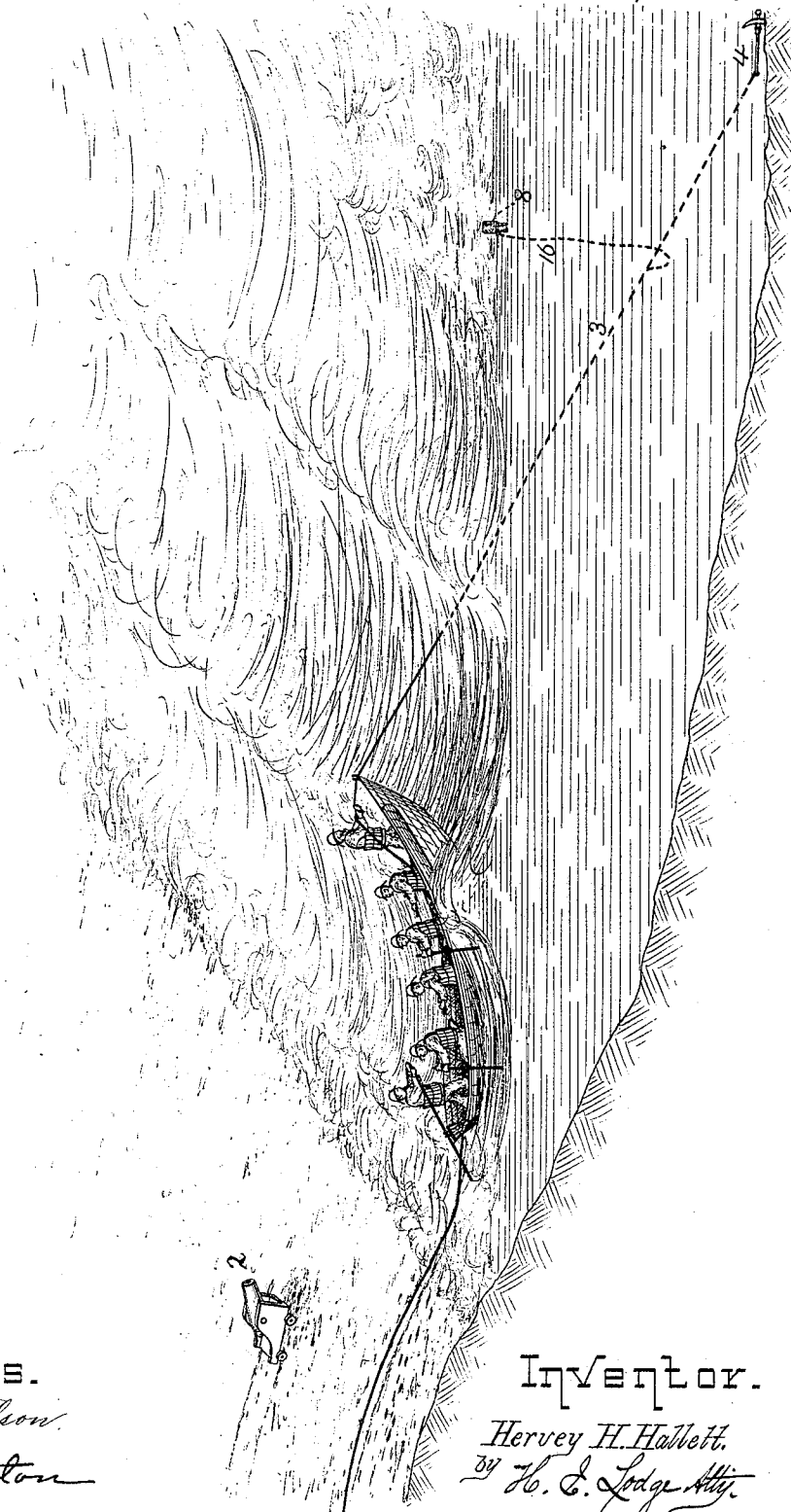
H. H. HALLETT.

APPARATUS FOR FACILITATING LAUNCHING LIFE BOATS.

No. 529,379.

Patented Nov. 20, 1894.

Fig. 1.



Witnesses.

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By H. C. Lodge Atty.

(No Model.)

2 Sheets—Sheet 2.

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Fig. 2.

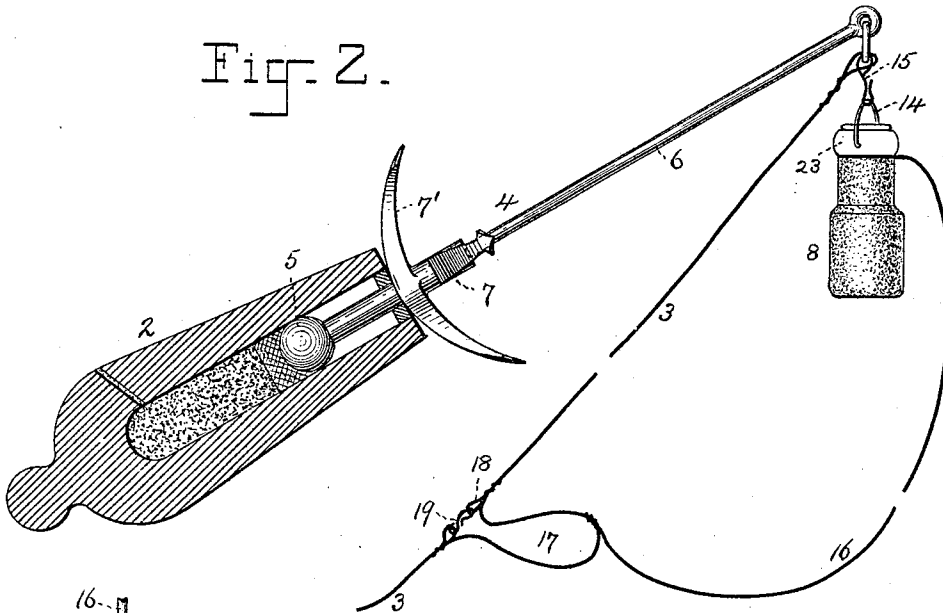


Fig. 3.

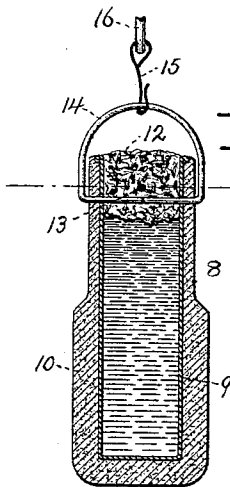


Fig. 4.

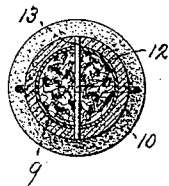
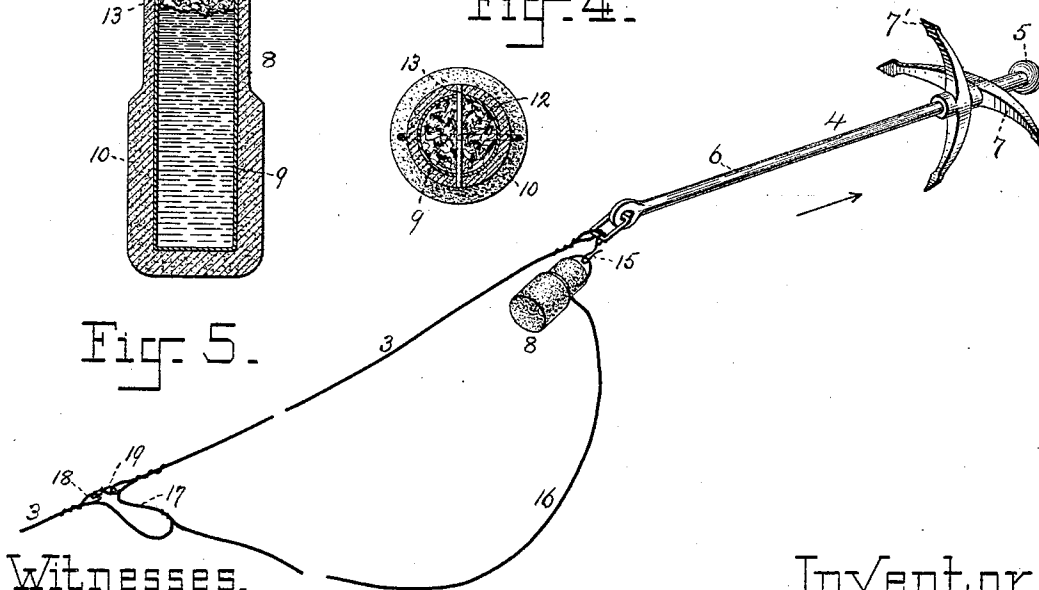


Fig. 5.



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UNITED STATES PATENT OFFICE.

HERVEY H. HALLETT, OF ROCKLAND, MASSACHUSETTS.

APPARATUS FOR FACILITATING LAUNCHING LIFE-BOATS.

SPECIFICATION forming part of Letters Patent No. 529,379, dated November 20, 1894.

Application filed January 20, 1894. Serial No. 497,490. (No model.)

To all whom it may concern:

Be it known that I, HERVEY H. HALLETT, a citizen of the United States, residing at Rockland, in the county of Plymouth and State of Massachusetts, have invented certain new and useful Improvements in Apparatus for Facilitating Launching Life-Boats; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to figures of reference marked thereon, which form a part of this specification.

This invention relates to improvements in apparatus designed to assist and render less hazardous the launching of life-boats employed in saving life or property during storms, either along the sea-coast or on lake fronts.

My improved apparatus comprises essentially an anchor, kedge or grapnel provided with a line which is to connect it with the shore, and to which line, near the end thereof which is attached to the anchor, is connected an oil reservoir which is to be thrown outward off-shore with the anchor, this oil reservoir being of such construction that, when thrown out with the anchor to a point beyond the breakers, it will discharge its contents. I also provide means for projecting the anchor and the oil reservoir connected therewith off-shore, and when the anchor has thus been thrown out the line held thereby, and extending to the shore, may be utilized to enable the life boat to be warped out and held bow on toward the breakers when in the act of launching.

The drawings represent in Figure 1, a perspective view of the entire apparatus in operation during the act of launching a boat. Fig. 2 represents the anchor and oil-reservoir positioned in a mortar in readiness to be thrown off-shore. Fig. 3 is a vertical section of the oil-reservoir. Fig. 4 is a plan of the same. Fig. 5 represents the anchor with the oil reservoir in the act of flight.

The act of launching life-boats, more particularly from a lee shore is attended with considerable difficulty, and ordinarily with great danger, since not only are the breakers

or combers to be successfully encountered and surmounted, but the risk occurs that the boat may be swung off and thereby be struck, and, if not upset, be swamped in the breakers.

As before premised the purpose of my invention is to provide a line or rope having one end anchored off-shore by means of which the boat can be held bow onto the breakers, while the crew can be materially assisted in rowing by straining or warping on the line. In addition to this means of assisting mechanically the launching of a life-boat, I provide an oil discharge directly in the course of the boat, or toward the point of anchorage of the warp line.

In carrying out my invention, a mortar, gun, or any approved apparatus for projecting a line off shore is provided, as shown at Fig. 2. At one end of a stout line 3 is attached a kedge, grapnel or anchor 4 furnished with a weight 5, the latter adapted to enter the bore of the gun. This anchor is composed as usual of the shank 6 and the arms 7, 7', while an eye fitted with a link or swivel is formed at the other extremity of said shank. To this end of the anchor is attached an oil reservoir 8. This device is preferably made as shown in Fig. 3, of a metallic cylinder 9 inclosed within a covering of cork 10, while the upper end or mouth is open and contains a sponge 12 or other porous substance which shall allow filtration of the oil therethrough. Transverse pins 13 13' at the mouth of the reservoir and through the sponge serve to retain the latter in place. The lower portion of the cork covering is made somewhat thicker than the upper part in order to give this portion greater buoyancy. Hence the reservoir floats bottom up or in an oblique position and its contents escape by gravity. In lieu of the thick cork at the bottom, a weight 23 may be attached about the neck as shown in Fig. 2 of the drawings. Furthermore the upper end of this reservoir is fitted with a bail 14, which engages a detachable hook or fastening 15 adapted for release after the anchor has been projected, but sufficiently strong to resist the pull necessary to convey it with said anchor to the spot desired. From the neck of this reservoir extends a line 16, which is made fast to the main line at any desired point, and is to be of such length as will enable the

reservoir to float upon the surface not far distant from a point vertically above where the anchor rests. A loop or bight 17 is formed in the main line at the point where the reservoir 5 rope is made fast. This loop forms a cut-out, so that no strain is brought upon said rope 16, when the anchor is projected, and said loop is formed from the main line by an eye 18, which engages a detachable hook 19 or other 10 device. Thus, as shown in Fig. 2, the anchor is placed in the mortar with the shank projecting outwardly. The bight 17 is then formed by engagement of the hook 19 with the eye 18, while the oil reservoir is removably secured 15 to the anchor shank.

After the anchor has been fired the position is changed, it turning end for end and during its flight assumes the position shown in Fig. 5, the arrow indicating the direction 20 of its path of travel. After the anchor has been positioned off shore, a strain is brought upon the line by the relief party on the shore, the hook 19 is detached from the eye 18 and the pull is now transferred to the reservoir 25 rope. When this takes place the reservoir is separated from the anchor shank and said reservoir rises to the surface, where the oil is dispersed over the water. Generally this oily surface will trend toward or along the 30 shore or in the direction with the wind, and in this way cut down or subdue to a great degree the wave action. At the same time the main rope is now in position to be employed by the crew in warping the life-boat out from 35 the shore in the smoother water created by the oil dispersion.

Preferably in launching a boat under my method, a man in the bow handles the line which passes in over a chock, and in this way 40 the bow cannot swerve very much. Under the above conditions the launching of a life-boat is accomplished with less risk and dan-

ger, in fact can be effected where, under ordinary conditions, putting off would be impossible, since with my apparatus the joint 45 action of rowing and warping is able to overcome wind and wave resistance, not possible by rowing alone.

I do not desire to be limited to any precise form of attaching the oil reservoir to the an- 50 chor, nor to the special means here shown for releasing the same, since it is obvious other mechanical expedients may be adopted.

What I claim is—

1. In apparatus for facilitating the launch- 55 ing of boats, the combination with an anchor and a line connecting said anchor to the shore, of an oil reservoir connected to said line, between the in-shore end of the latter and said anchor, and means for projecting the anchor, 60 the oil reservoir, and one end of said line off shore to a point outside the breakers, substantially as specified.

2. In combination, with an anchor, of a rope secured thereto, means for creating a bight 65 thereon, an oil dispensing reservoir temporarily secured to the anchor, and a fastening line from said reservoir to the bight in the rope, all operating substantially as set forth.

3. The combination, with an anchor, of a 70 rope secured thereto, devices upon said rope to create a temporary bight, an oil reservoir, means for detachably securing said reservoir to the anchor, a fastening line from the reservoir to the bight, and mechanism for pro- 75 jecting the anchor, reservoir, and rope off shore, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

HERVEY H. HALLETT.

Witnesses:

H. E. LODGE,

FRANCIS C. STANWOOD.