

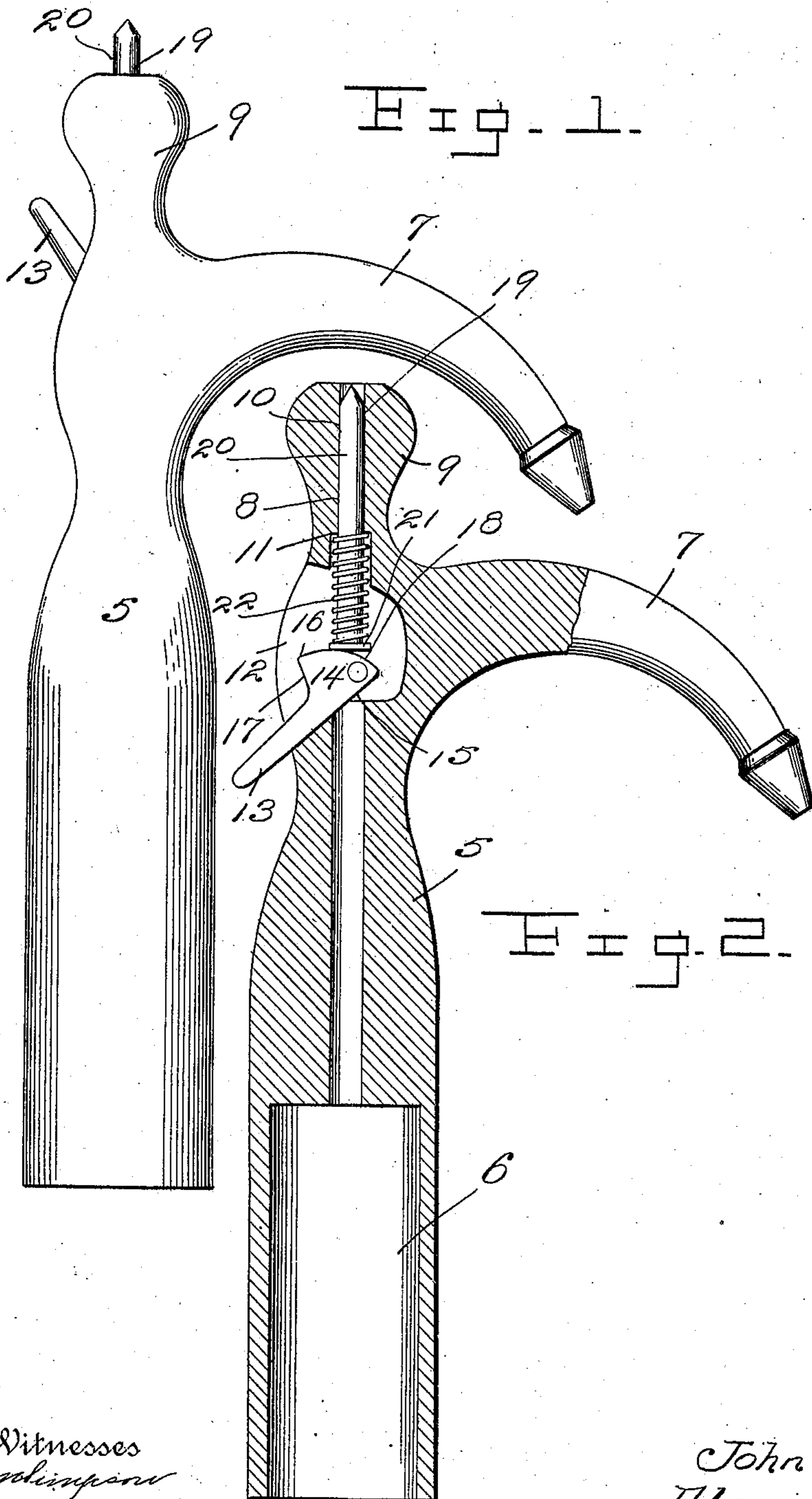
No. 806,019.

PATENTED NOV. 28, 1905.

J. SULLIVAN & A. MACK.

BOAT HOOK.

APPLICATION FILED JAN. 19, 1905.



Witnesses
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UNITED STATES PATENT OFFICE,

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BOAT-HOOK.

No. 806,019.

Specification of Letters Patent.

Patented Nov. 28, 1905.

Application filed January 19, 1905. Serial No. 241,856.

To all whom it may concern:

Be it known that we, JOHN SULLIVAN and ALEXANDER MACK, citizens of the United States, residing at New London, in the county of New London, State of Connecticut, have invented certain new and useful Improvements in Boat-Hooks; and we 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.

This invention relates to hooks, and more particularly to boat-hooks, and has for its object to provide a boat-hook which will be equipped with a retractable point as well as the usual lateral arm, so that the point may be withdrawn into the body of the hook when the latter is used with its lateral arm, the point being thus prevented from injuring a person or object with which it might otherwise come into engagement.

Other objects and advantages will be apparent from the following description, and it will be understood that modifications in the specific construction shown and described may be made and that any suitable materials may be used without departing from the spirit of the invention.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in both views, Figure 1 is a side elevation of the hook with the point projected. Fig. 2 is a longitudinal section with the point retracted.

Referring now to the drawings, the present hook comprises a stock 5, having a pole-receiving recess 6 in its upper end and having also the usual laterally-extending hooked arm 7 adjacent to its lower end. The portion 9 of the stock which extends beyond the arm 7 has a passage 8 opening through its free end, and this passage extends longitudinally through the stock and communicates with the recess 6. The outer end portion of the passage 8 is reduced, as shown at 10, resulting in a shoulder 11. Formed in the face of the stock at the side opposite to the arm 7 there is a recess 12, which communicates with the passage 8 adjacent to and above the shoulder 11, and extending outwardly through this recess and projecting beyond the face of the stock there is the stem 13 of a lever 14, the head 15 of which is pivoted in the larger

portion of the passage 8 and spaced from the shoulder 11. The head 15 of the lever consists of a portion 16, which extends laterally beyond the stem 13 in the direction of the portion 10 of the passage, and the face 17 of this portion 16, which is the face lying in the direction of the free end of the lever, extends at right angles to the stem 13, while the opposite face of the portion 16 is curved, as shown at 18, to present a cam-face. The lever is pivoted at a point at the extremity of the head and eccentrically to the curvature of the face 18.

Slidably engaged in the reduced portion 10 of the passage 8 there is a point 19, including a sharpened pin 20, having a laterally-extending flange 21 at the end opposite to the point, this flange being larger than the portion 10 of the passage and lying within the larger portion of the passage into which the end of the pin projects. Disposed between the flange 21 and the shoulder 11 there is a helical spring 22, which is engaged with the pin and which holds the point yieldably with its sharpened end within the passage.

The lever 14 is movable upon its pivot to bring either its straight face 17 or its curved face 18 into engagement with the rearward end of the point, and the arrangement is such that when the straight face is in engagement therewith the point is held with its sharpened end projected beyond the end of the stock. When the lever is moved to bring its curved face 18 into engagement with the point, the point is moved into the stock by the spring 22, the curved face being of less eccentricity than the straight face.

The use of the invention will be readily understood without further description.

It will of course be understood that the hook may have any desired number of arms.

What is claimed is—

1. A boat-hook comprising a stock, a point slidably engaged in the stock and retractable thereinto, means for holding the point normally within the stock and means for moving the point to project from the stock and for holding it projected therefrom.

2. A boat-hook comprising a stock a point slidably connected with the stock and movable into and out of operative position means for holding the point normally in inoperative position, and means for moving the point

against the action of said holding means and for holding it against such action and in operative position.

3. A boat-hook comprising a stock having
5 a recess therein, a pointed pin slidably engaged in the recess and arranged for movement to lie within the recess or to project at its pointed end therefrom, a spring arranged to hold the pin yieldably within the recess,

and a lever arranged for movement to move 10 the pin against the action of the spring.

In testimony whereof we affix our signatures in presence of two witnesses.

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