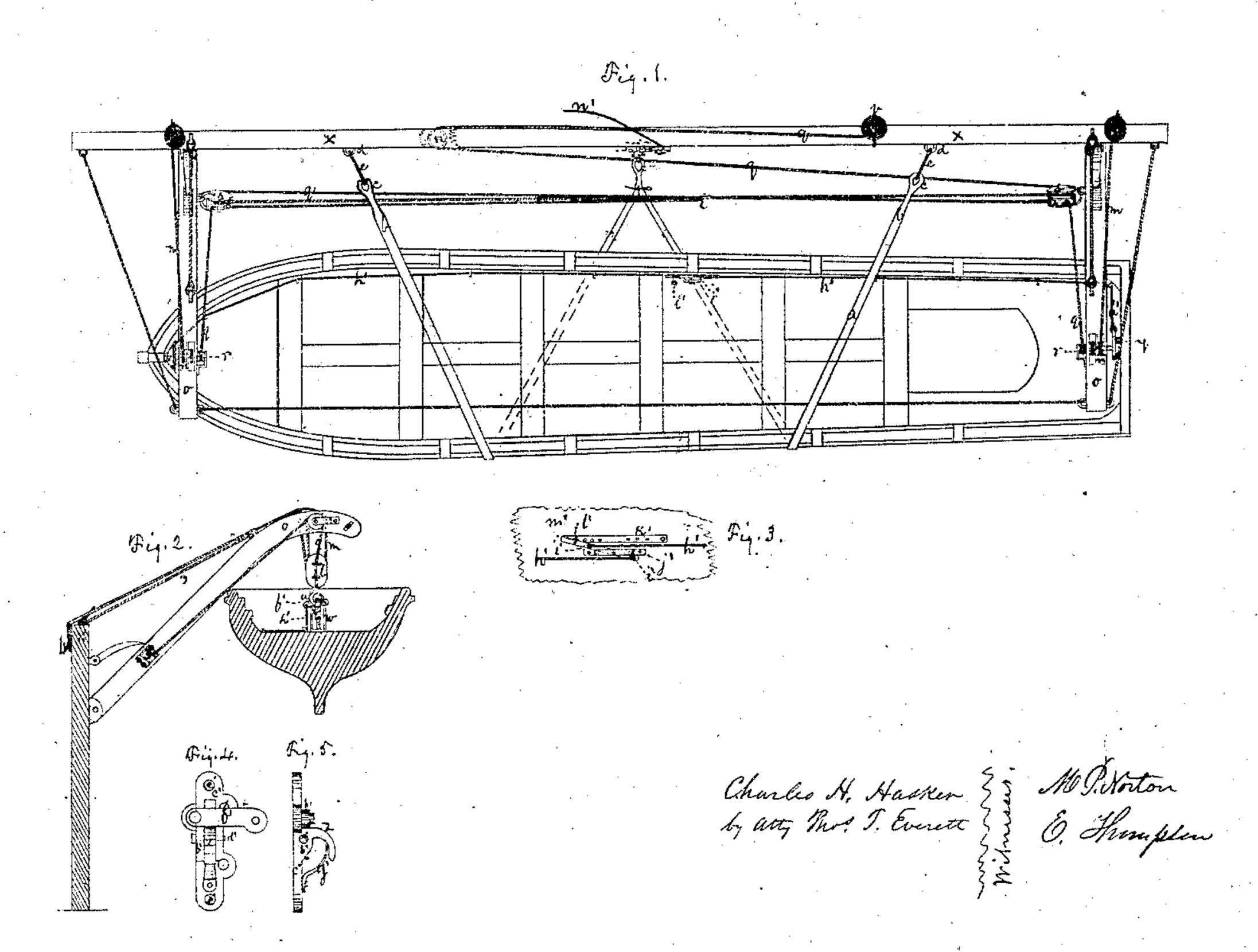
128.478. Charles Ho Hasker. Improvements for suspending lowering theoreting Ships bouts. Patented May. 29.1860.



## UNITED STATES PATENT OFFICE.

CHARLES H. HASKER, OF PORTSMOUTH, VIRGINIA.

## SUSPENDING BOATS.

Specification of Letters Patent No. 28,478, dated May 29, 1860.

To all whom it may concern:

Be it known that I, CHARLES H. HASKER, of Portsmouth, in the State of Virginia, have invented certain new and useful Im-5 provements for Suspending, Lowering, and Liberating Ships' Boats; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to 10 the marks and letters thereon.

Figure 1 of the drawings is a top view of a boat suspended on the davits and secured with the gripes around her; Fig. 2, a vertical section of the same; Fig. 3, a view 15 of the means used for detaching the fallblocks from the hooks; and Figs. 4 and 5 views of the hook used for attaching the bow and stern of the boat to the fall-blocks.

In each of these figures like marks and let-

20 ters are used to indicate like parts.

When the boat is suspended and properly secured, as shown by Fig. 1, the gripes (a)are at each end (b) attached to the bulwarks (x) by thimbles (c) and eye-bolts (d), the 25 lashings (e) being roved through the eyebolts and thimbles; and the two ends (f) of the gripes being affixed to one thimble (g), constituting the bite. This bite-thimble (g)has attached to it a ring (h) through which 30 passes a bolt (i) also passing through eyes (i) of bolts fixed in the bulwarks. The bolt (i) has connected to one end of it a lever (k), having a fulcrum, by which it can be moved in or out and thus hold or liberate 35 this end of the gripe. From the fall-blocks (1) the falls (m) pass over pulleys (n) in the davits (o) to belaying pins (p) in the bulwarks.

Secured to the fall-blocks (l) are the low-40 ering and stopping falls (q), which reeve through pulleys (r) on the davits and thence over pulleys in blocks (s), the end of one fall being spliced into the bite (t) of the other fall and that fall passing through or 45 over a pulley (u) in the bulwarks to the be-

laying pin (v).

The stem post (w) and the stern post (y) have attached to them a hook (z), which is fully represented by Figs. 4 and 5. 50 By Fig. 2 this hook (z) is shown passed through the eye (a') of the block (l). The base of the hook (z) is connected to the projections (b') of the plate (c') by a pin (d')upon which the hook turns. One plate (c') is 55 secured to the stern post and another to the

stem post, the holes (e') of the plates being for the attaching bolts. A clamp (f'), working upon a pin which connects it to the plate, holds the hook (z) in the eye of the full-block. A plate or flat spring (g') under- 60 neath the hook serves both to mouse the hook, or prevent the eye of the block from being displaced, and to tilt the beak of the hook when the clamp is released. Attached to the outer end of this clamp (f') is the 65 end of a check or clamping cord (h') passing from bow and from stern to a lever (i')secured to the side of the boat near the middle. Fig. 3 shows this lever and its attaching bar (j') with the ends of the check lines 70 or cords affixed thereto, and also another bar (k'), in which are holes for a pin (l'), that secures the outer end (m') of the lever. In order to lower and liberate the boat from the suspended and secured position shown 75 by Fig. 1, a description of the means for doing which has here been given, a few hands and few motions only are necessary. One hand seizes the cord (n') which is attached to the lever (k) and by an easy pull readily 80 withdraws the bolt (i) from the eyes (j)and ring (h) and thus liberates the gripes (a); other hands loosen the falls (m) from the belaying pins (p), which leaves the boat held up only by lowering and stopping 85 falls (q). The loosening of the fall (q)from the belaying pin (v), and the lowering of the boat by this fall is then quickly and safely accomplished either in rough or easy sea. Upon the boat's striking the water the 90 pin (l') is withdrawn from the bar (k'), which lets play the check lines (h') and the clamp (f'), when the motion or weight of the boat frees the boat from the falls, the hook (z) playing up and the eye of the 95 block (1) moving off from it.

It will be perceived that through the means and the arrangement thereof herein set forth a ship's boat can be safely and securely suspended on the davits and at a 100 moment's notice, under any and all circumstances, be lowered and liberated and served with perfect safety and success.

What I claim as my invention and desire to secure by Letters Patent is—

1. The bolt (i) eyes (j, j), ring (h), as connected and arranged with the thimble (g)and the gripes (a, a,) operated as and for the purpose set forth.

2. The roving of the one lowering and 110

stopping fall (q) into the bite (t) of the other fall, whereby the lowering of the boat is done by one fall as described.

3. The hook (z) clamp (f') check-lines (h'), lever (i') with its bars and pin as arranged for holding and liberating the falls block as set forth.

This specification signed this 3' day of May 1860.

CHAS. H. HASKER.

Witnesses:

T. T. EVERETT,
MARCUS P. NORTON.