

Hill & Burnham, Boat Detaching.

N^o 61,336.

Patented Jan. 22, 1867.

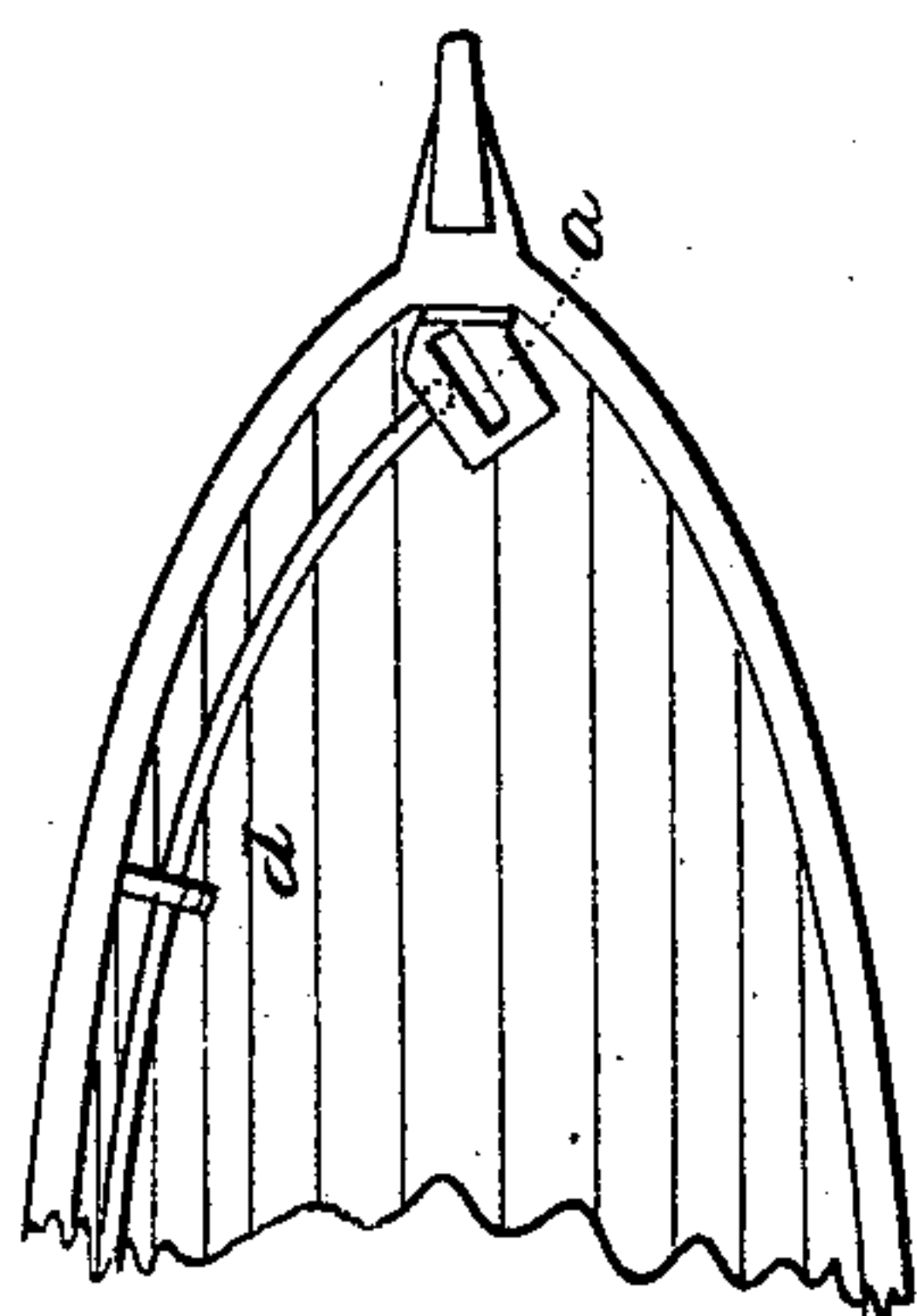


Fig. 2.

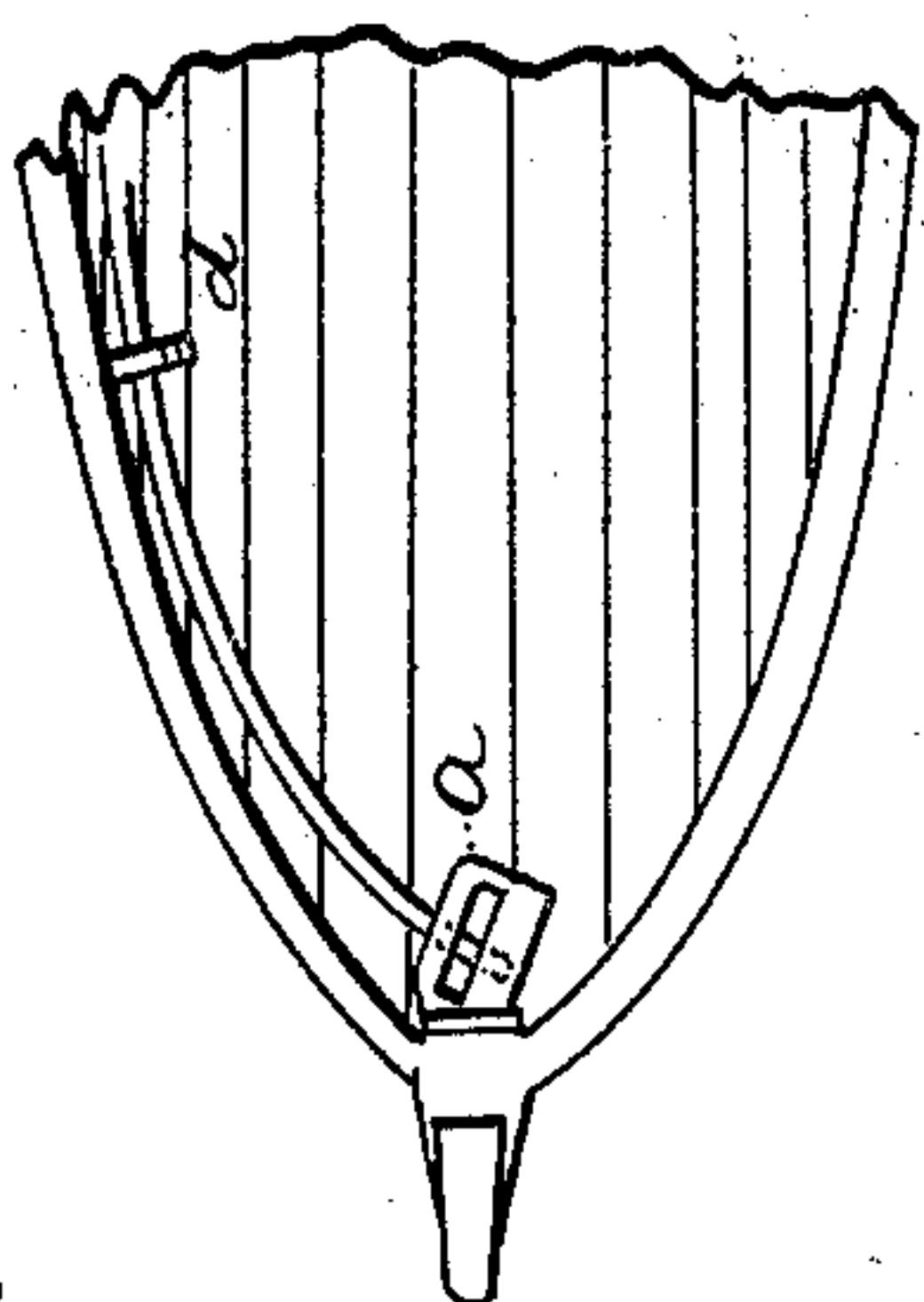


Fig. 3.

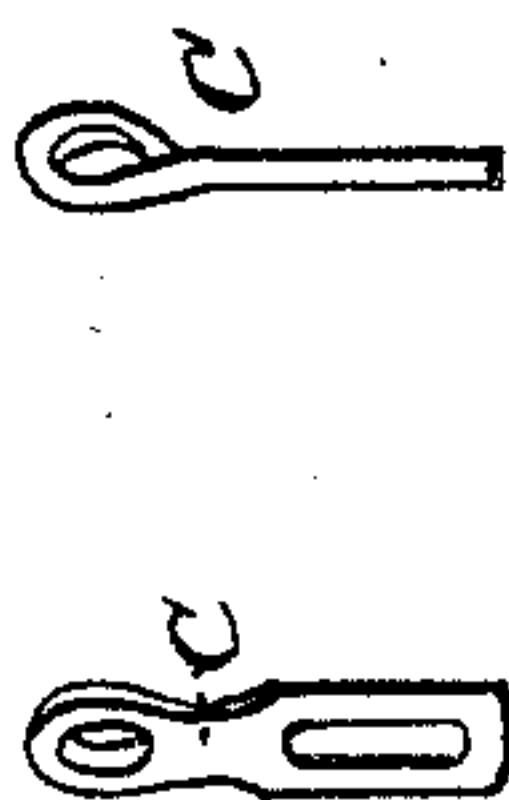
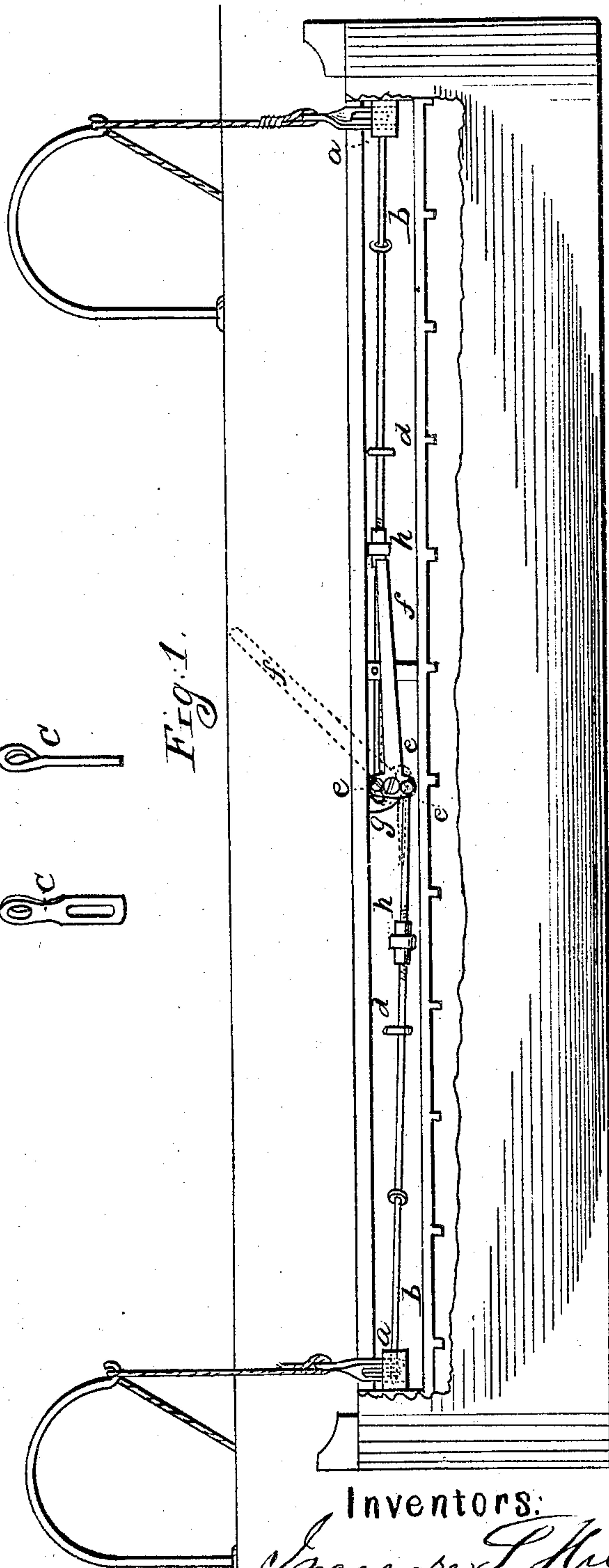


Fig. 1.



Witnesses:

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INCREASE S. HILL, OF BOSTON, AND ANDREW BURNHAM, OF CHELSEA,
MASSACHUSETTS.

Letters Patent No. 61,336, dated January 22, 1867.

IMPROVED APPARATUS FOR DETACHING BOATS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that we, INCREASE S. HILL, of Boston, and ANDREW BURNHAM, of Chelsea, both in the county of Suffolk, and State of Massachusetts, have invented an improved instantaneous, simultaneous Disengaging Apparatus for Boats; and we do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of our invention sufficient to enable those skilled in the art to practise it.

This invention relates to the means herein described for instantly and simultaneously disengaging both ends of a boat from its sustaining tackle, so as to cause it to fall squarely upon the water.

It is well known that in the hurry of emergencies, or in stress of weather, boats are often detached from their tackles at one end before they are at the other; and if, under such circumstances, they have far to fall, or if a detached end is considerably loaded, the first detached end goes under water and the boat is swamped, frequently with the most disastrous results.

Many simultaneous disengaging devices for the above purpose have been invented, which, under certain circumstances, may be made to operate as designed; but, so far as we know, none of them are of such construction as will work perfectly under all conditions of weather, position of the boat, and position and mental condition of the operator. Especially are those apparatuses deficient in certainty of equal and simultaneous action at each end of a boat, which depend upon an equal strain being brought on both ends of a rope or chain, on which the operator pulls or lifts at its bight, as it is almost impossible thus for him not to exert more strain on one end of the rope or chain than on the other end, especially under the circumstances under which it becomes practically necessary to bring the disengaging apparatus into action.

Our invention consists primarily in the combination with links, attached to the fore and aft tackles, of sockets, made fast to the stem and stern of the boat and adapted to receive said links, locking and unlocking rods passing through said sockets and links, and lever connections, by which said rods are operated; secondly, in the arrangement of said devices at the upper part of the boat, out of the way of collections of snow and ice, along under and partly protected by the gunwale; thirdly, in the combination with the links, sockets, rods, and lever arrangement, of right and left-hand screw-couplings, by which the rods may be easily and accurately adjusted with reference to the links and sockets. Of the drawings—

Figure 1 represents a boat hanging on her tackles, the nearest side of the boat being shown as broken away in order to expose in elevation the disengaging mechanism, secured to the other side of the boat under its gunwale. In this figure the red lines show the position which the parts are made to assume in order to release the links from the rods, and the black lines show the parts in the position necessary for thrusting the ends of the rods into the links.

Figure 2 shows, in sectional plan, the stem and stern ends of a boat. At one end the rod is represented as thrust into the socket into position to confine its link thereon, though for the purpose of illustration the link is left out from said socket; at the other end of the boat the rod is shown as withdrawn from the socket, as when the links are disengaged.

The sockets are marked *a a*, and are firmly secured to the stem and stern of the boat, being made preferably, as shown, so that their sides and the sides of the mortise through each shall be substantially at right angles to those portions of the rods *b b* which enter said sockets, and pass across the mortises therein. The links, which are made fast to the tackles, are marked *c c*, and are preferably made with elongated slots, as shown in the detail, Figure 3. The rods *b b* are sustained and guided in eye-bolts, *d d*, made fast in the ribs of the boat, preferably above the thwarts and under the gunwale, the ends of said rods being pivoted near the centre of the boat's length to the two short arms *e e* of lever *f*, which lever is pivoted by bolt *g* to the side of the boat. Each of the rods *b b* is made in two pieces, coupled together where convenient by right and left-hand screw-couplings, *h h*, by means of which either of said rods *b b* can be accurately adjusted as to length, so that they will both release their links at the same instant. The links are released from the rods, which are drawn back by raising lever *f*, and when the boat is thus dropped clear of her tackles, the lever *f* may then be depressed so as to be

out of the way. The lever *f* should be locked or confined in position by means of a pin placed over it, or by other suitable means, to prevent accidental raising of the lever while the boat is hanging from its davits or cranes.

We do not broadly claim as our invention rods running fore and aft in a boat to the points of suspension at the stem and stern, and connected with a lever in the centre, to bring the disengaging apparatus under control of one person.

What we claim is—

1. The arrangement of curved disengaging rods in guides along by the gunwale of a boat, substantially as herein described, when the same are connected with a pivoted lever; through the operation of which the disengaging rods are simultaneously retracted, liberating the links by which the boat is suspended.

2. A graduating coupling in the disengaging rods, by means of which the lengths thereof may be so adjusted as to secure simultaneous disengagement of the suspending links, as and for the purpose described.

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Witnesses:

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