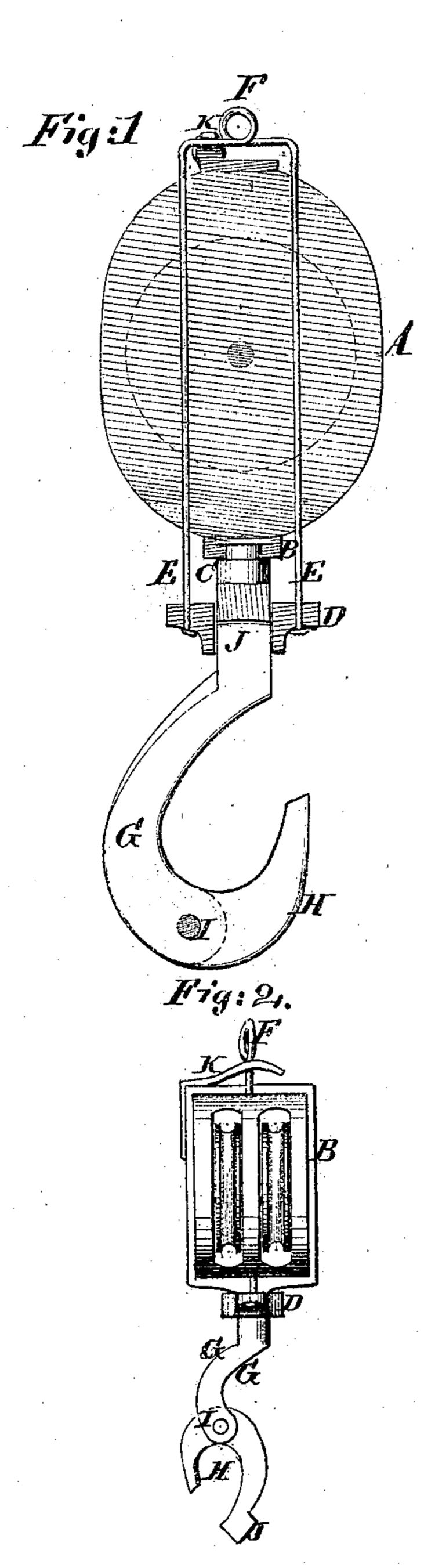
M.T.M.

Istaching Boats.

10.100.619.

Faterned Aug. 23.1870.



Mitnengen:

M. Balande St. S. Malelis Anventor:

PER

mung g

Attorneys

## Anited States Patent Office.

## NATHANIEL M. RAY, OF SURREY, MAINE.

Letters Patent No. 106,619, dated August 23, 1870.

## IMPROVEMENT IN BOAT-DETACHING APPARATUS.

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

To all whom it may concern:

Be it known that I, NATHANIEL M. RAY, of Surrey, in the county of Hancock and State of Maine, have invented a new and useful Improvement in Boat-detaching Tackle-Block; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to a new and useful improvement in mode of detaching boats from vessels; and consists in a tackle-block, provided with a pivot-hook and tripping device, by means of which the ends of a boat may be simultaneously detached from the davits by those on board the vessel, as will be hereinafter more fully described.

In the accompanying drawing—

Figure 1 represents a vertical side section of a block, provided with the tripping device and pivot-hooks.

Figure 2 is an edge view of the same.

Similar letters of reference indicate corresponding parts.

A is a tackle-block of two sheaves, surrounded and strengthened by the band B in the usual manner.

Cis the shank, which is rivefed to the band B, so that it will turn as a swivel.

D is a collar, which is made to slide on the shank C, up and down, by means of the rods E E, which rods extend down through the block, and are attached to the collar, as seen in fig. 1.

These rods are connected together at their top ends, with an eye, F, formed thereon, so that they are drawn up or depressed simultaneously, or as one piece. The tripping cord is attached to this eye.

G is an extension of the hook-shank C, to which the pivot-hook H is attached at the point I.

The shank C is recessed out, or a cavity is formed

therein, which receives the small shank J of the pivot-hook H.

The collar D is forced down over this small shank J, as seen in fig. 1, by a spring, K, which bears upon the top ends of the rods E with a constant pressure. This collar holds the hook H in the position for sustaining the weight of the boat. With a block of this kind, and hook in this position suspended from each davit, the boat is lowered from the vessel.

A tripping cord, as before stated, is attached to the eye F. These tripping cords may be attached to a lever, or arranged in any other manner, so that they

can be operated simultaneously.

When the boat has been lowered to near the water the tripping cords are pulled, which raises the collars D. This releases the shanks of the pivot-hooks, and the boat drops, throwing the hooks into the position seen in fig. 2.

By this arrangement any boat may be lowered from the deck with safety while the vessel is in motion.

The boat itself is not at all obstructed or encumbered with detaching rods and levers, as is usual with the ordinary boat-detaching apparatus.

It will be seen that the tripping cords may be passed over pulleys and dropped into the boat, so that the boat may be detached by those in the boat, if desired, but that is not what I intend my safety detaching block especially for.

Having thus described my invention,

I claim as new and desire to secure by Letters Pat-

A safety detaching tackle-block, constructed substantially as described, that is to say, with the pivot-hook H, collar D, rods E, shanks C and J, and spring K, arranged to operate substantially as shown and described, for the purposes set forth.

Witnesses: NATHANIEL M. RAY.

F. W. WITHAM, N. HINCKLEY.