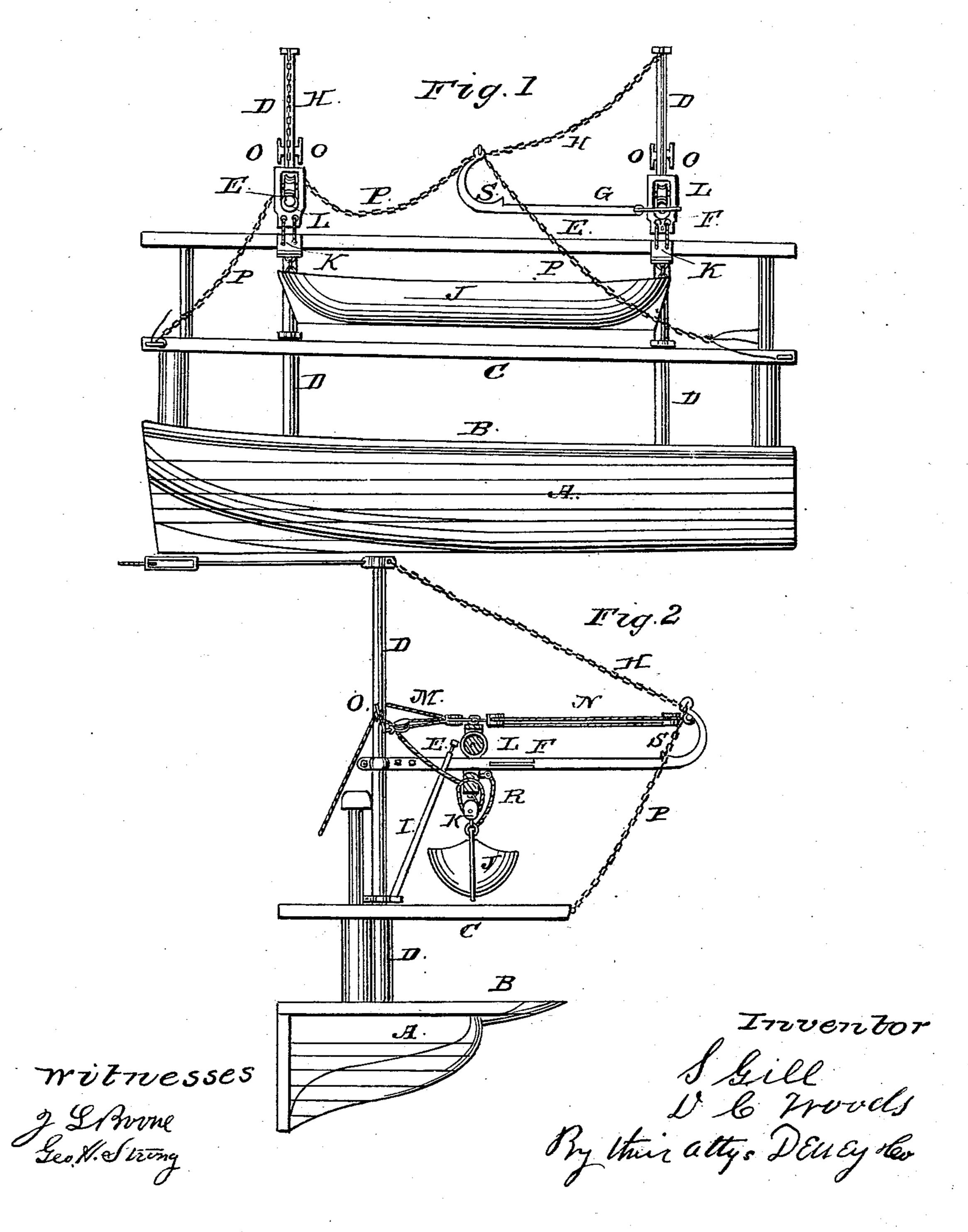
## GILL & WOODS.

Detaching Boats.

No. 84,742.

Patented Dec. 8, 1868.





## SETH GILL, OF SAN PABLO, AND DAVID C. WOODS, OF SAN FRAN-CISCO, CALIFORNIA.

Letters Patent No. 84,742, dated December 8, 1868.

## IMPROVEMENT IN SHIPS' DAVITS.

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, SETH GILL, of San Pablo, Contra Costa county, and DAVID C. Woods, of the city and county of San Francisco, State of California, have invented Improved Davits for Ships' Boats; and we do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains, to make and use our said invention or improvement without further invention or experiment.

The object of our invention is to provide an improved device for handling the small boats connected with a vessel, so that they can be launched at the shortest notice in an emergency, while they are se-

curely placed when not in use.

This is accomplished by a peculiar construction of the davits, so that the suspended boat moves by means of travellers, operated by the necessary tackle, from its position, when not needed, to a sufficient distance from the ship's side to insure its safety in lowering.

The davits are also so constructed that when coming into port, or whenever desired, they can be instantly turned, so as to leave the ship's side perfectly clear

and smooth, with no projections.

They are also attached to davit-uprights or standards, which pass through the decks, and into the main plank-shear of the ship. The uprights on the opposite sides of the vessel are connected at the top by stay-rods, with a turn-buckle between, so that the strain is rendered much less than in the ordinary construction.

To more fully explain our invention, reference is had to the accompanying drawings, forming a part of this specification, of which—

Figure 1 is a side elevation of a portion of a vessel, showing the device.

Figure 2 is an end view.

Similar letters of reference, in each of the figures, indicate like parts.

A is a section of the hull of a vessel, with the main

deck, B, and hurricane-deck, C.

The davit-uprights D D are placed outside the rails on the upper deck, passing down through both decks, and stepping in the main plank-shear. These uprights may be made square, where they pass through the decks, to prevent them from turning, and hold them firmly.

The davit-arms E E may be clamped to the uprights, or fastened in any suitable manner, and they extend so far over the ship's side, that the boat may be low-

ered in safety from their extremities.

At the point F these arms are jointed, so that they may be turned at right angles, as shown at G, fig. 1, and thus lie parallel with and within the line of the ship's side.

Lifts, H H, extend from the top of the uprights to the end of the davit-arms, to support them, and, with the brace or stanchion I, serve to take off the strain caused by the weight of the boat.

The boat J is suspended by the tackle K from the travellers L, which move in and out on the davit-arm, being operated by the in-haul tackle M and the out-haul tackle N, which may be belayed to cleats O O, as shown, or placed at any convenient point.

When in port, the arms E may be turned so as to stand in the position shown at G, fig. 1; but when at sea, they stand as shown in fig. 2, being kept in posi-

tion by the stays P P.

When the boat is run in, and not in use, she hangs to chain or rope-stoppers, R, the boat-tackle fall cast off and coiled clear, ready for running the boat out.

When the order is given to run the boat out, the in-haul tackles are cast loose, and the out-haul tackles hauled on until the traveller reaches the shoulder S, at the end of the davit-arm, when they are belayed, the boat-tackle falls taken to, stoppers cast off, and the boat is then ready for lowering.

Four men, with this device, can handle a heavy boat, taking her from her bed and putting her in the water inside of five minutes, where, with the davits now in

use, it occupies nearly an hour.

The boats now carried by steamers are as large as they can carry and possibly get out with the ordinary davits, when, with our davit, we claim that they can carry as large a boat as they want, so long as the gear is in proportion.

Our davit-uprights, stepping, as they do, through the hurricane-deck and in the main plank-shear of the ship, with a rod from the davit on one side, to the corresponding davit on the opposite side, with a turnbuckle in the centre, for setting it up, are a great support to the ship's upper works, and a great relief to the guards. The davit-uprights are square from the hurricane-deck down, so as to fit firmly.

Having thus described our invention,

What we claim as new, and desire to secure by Letters Patent, is—

1. The jointed davit-arms E E, with their tackle, or an equivalent device, the whole constructed and operated substantially as and for the purpose herein described.

2. In combination with the jointed arms E, the traveller L, with its in-haul and out-haul tackles M

and N, substantially as described.

3. In combination with the davit-arms E, the uprights D, with the lifts H, and stanchion I, the whole connected by rods with the davits on the opposite side, substantially as and for the purpose herein described.

In witness whereof, we have hereunto set our hands and seals.

Witnesses:

SETH GILL. [L. s.] D. C. WOODS. [L. s.]

J. L. BOONE, C. W. M. SMITH.