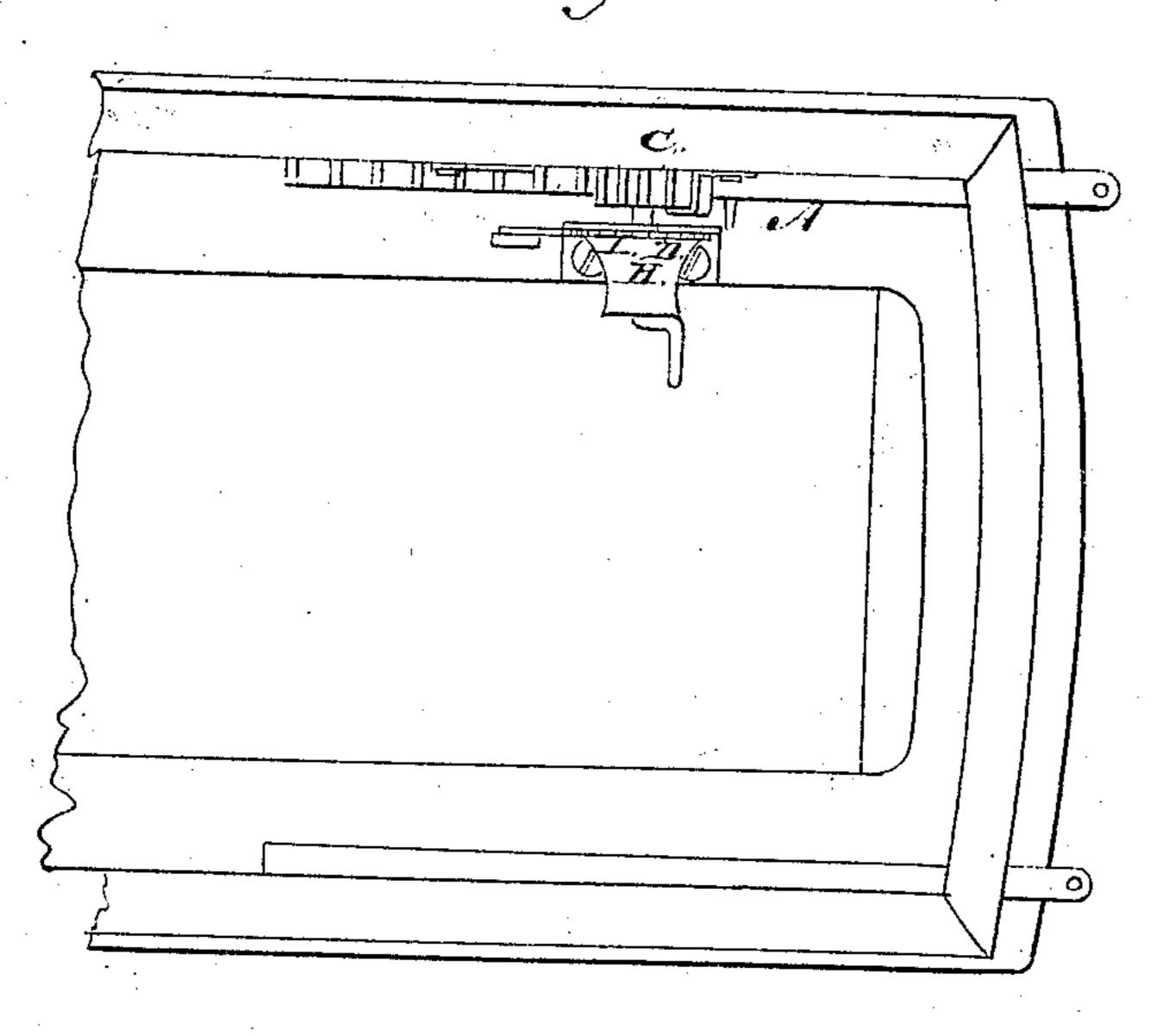
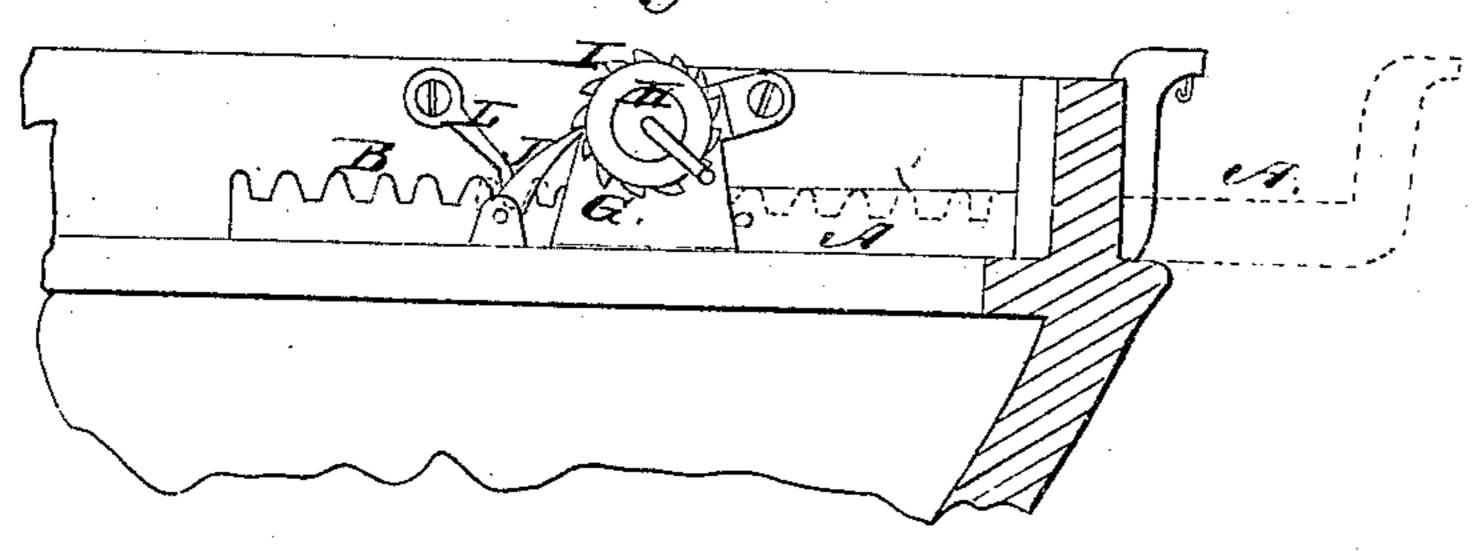
# D. P. Nicherson. Boat Detacizing. Patessted Mas. 26, 1867.

Nº63, 289.

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Witnesses. W. H. Burniege J. H. Burniege

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## Anited States Patent Office.

### D. P. NICKERSON, OF CLEVELAND, OHIO.

Letters Patent No. 63,289, dated March 26, 1867.

### IMPROVED SHIP'S DAVIT AND WINCH.

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

#### TO ALL WHOM IT MAY CONCERN:

Be it known that I, Captain D. P. NICKERSON, of Cleveland, in the county of Cuyahoga, and State of Ohio, have invented certain new and useful improvements in a Ship's Davit and Winch combined; and I do hereby declare that the following is a full and complete description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which-

Figure 1 is a top view of a section of a vessel.

Figure 2 is a longitudinal vertical section.

Figures 3 and 4 are detached sections, to which reference will be made.

Like letters of reference refer to like parts in the views.

A, fig. 2, is a davit, which is constructed of iron or other suitable material, and of the shape indicated in the drawing, and which is placed either upon the main rail or monkey rail of the ship, as circumstances may determine. The inner end of the davit is provided with a number of teeth, B, in which works the pinion C, fig. 1. This pinion is not fixed to the shaft D, upon which it is placed, but free, so that the shaft can be made to slide through it, backward and forward, as will hereafter be shown. E is a clutch fixed to the shaft, and by which the pinion is operated, said pinion being provided with an appropriate hole, F, fig. 4, to which the clutch is fitted. G, fig. 2, is a stay in which the shaft is supported and journalled, the outer end having its bearing in the side of the vessel. H is a winch secured to the shaft, and to the inner side of which is attached a ratchet-wheel, I, provided with a pawl, J.

The practical operation of the davit is as follows: As shown in the drawing, the davit is not projected beyond the stern of the vessel, but may be, as indicated by the dotted lines K, fig. 2, by the pinion C, which is operated by the shaft and winch referred to. By this it will be evident that the davit can be run out to any desirable distance, as the size of the boat to be suspended may determine. The davits on being run out are then secured in position by the dog L, fig. 2, which is dropped into the teeth B referred to; the boat is then raised by pulleys suspended from the davits, the line of which is passed around the winch; the clutch is then drawn out from the pinion, as shown in fig. 3. Now, on turning the winch, the boat is drawn up and secured by the pawl and ratchet above described.

The advantages derived from this arrangement of the davits are the facility, ease, and convenience of raising and lowering the boat, as it can be done in a much shorter time, with greater ease and convenience, than in the old way. When the davits are not in use they can be drawn in out of the way; hence the danger of their being broken when in port, and which is by no means an unfrequent occurrence, is by this means wholly avoided, as they are entirely out of the way, as shown in fig. 2. This arrangement of the davits is much neater, and as they are constructed of iron are more durable; they are easily adapted to any vessel, and can be taken from a worn-out one or a wreck and used in another. Also, by this arrangement of the davits, one hand alone can raise the boat, whereas in the old way a number are required for that purpose. The position of the winches is such that they can be used to great advantage for other purposes than the one specially designed, as the moving of the vessel along the dock, raising freight into or from the hold, &c.

What I claim as my improvement, and desire to secure by Letters Patent, is-

The adjustable sliding davit A, pinion C, as arranged, in combination with the adjustable shaft D, clutch E, and winch H, for the purpose and in the manner substantially as set forth.

D. P. NICKERSON.

Witnesses:

W. H. BURRIDGE, FRANK ALDEN.