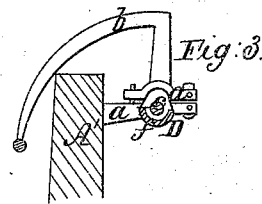
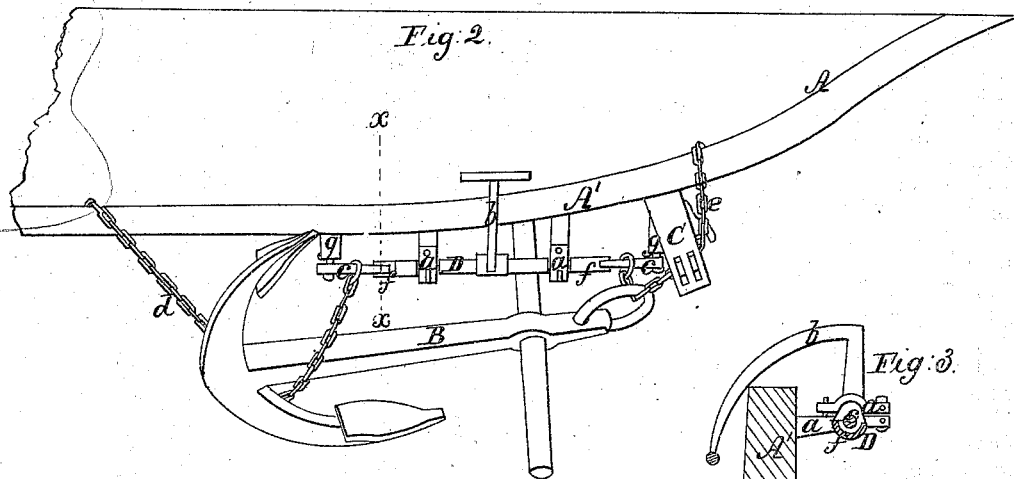
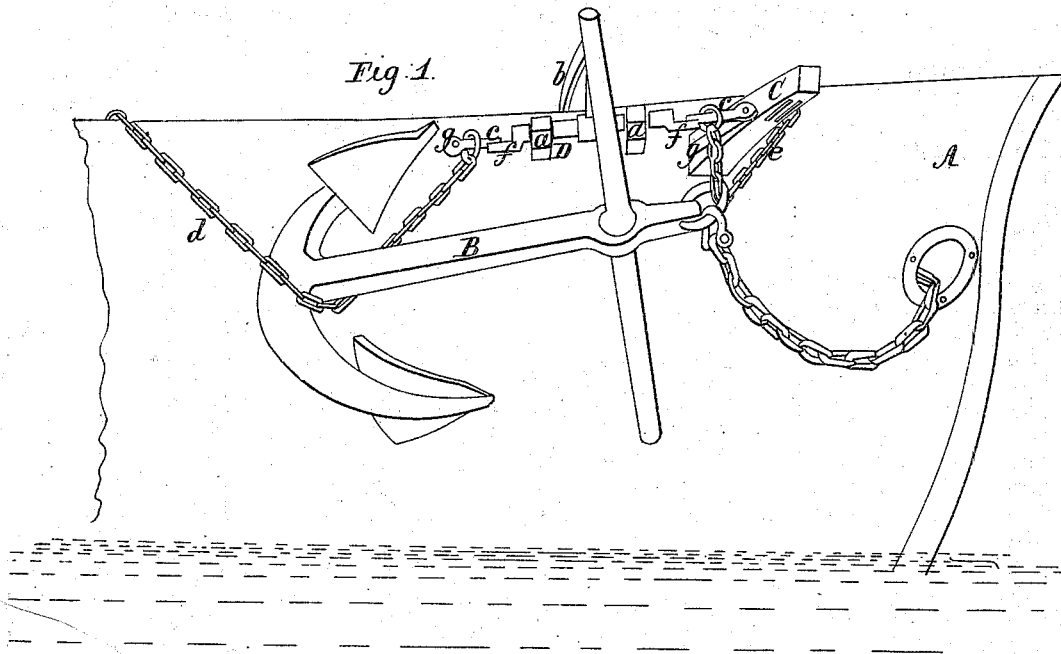


B. H. Heitman.
Anchors.

N^o 47,720

Patented May 16, 1865.



Witnesses
M. W. Wright
W. H. Heitman

Inventor
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UNITED STATES PATENT OFFICE.

B. H. HEITMANN, OF HOBOKEN, NEW JERSEY.

IMPROVED ANCHOR-TRIPPER.

Specification forming part of Letters Patent No. 477,200, dated May 16, 1865.

To all whom it may concern :

Be it known that I, B. H. HEITMANN, of Hoboken, in the county of Hudson and State of New Jersey, have invented a new and useful Improvement in Anchor-Trippers; 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 drawings, forming part of this specification, in which—

Figure 1 represents the portion of the side of a vessel with an anchor along its rail suspended by means of the devices which are the subject-matter of this application. Fig. 2 is a top view of the same features, in which my tripper is also seen. Fig. 3 is a cross-section of the tripper, taken on the line *x* of Fig. 2.

Similar letters of reference indicate like parts.

This invention consists in certain devices for tripping the anchor of a vessel, whereby much time and labor is saved in throwing it off from the rail, it being only necessary to raise a lever which rests upon the rail in order to disengage both the shank-painter and the ring-stopper at one movement.

The ordinary mode of hanging a ship's anchor is by securing its ring around or near the cat-head by means of a chain, called the "ring-stopper," and bringing its flukes well up toward the level of the rail by means of a chain called the "shank-painter," which passes around the shank of the anchor. The ends of these chains are fastened upon fixed hooks, or their equivalents, and when it becomes necessary to let go the anchor, it is first raised to a higher position by lifting its highest fluke up to and bringing it over so as to hang on the rail, in order to permit one end of the painter to be released, when the anchor is heaved or swung forward far enough to slacken the ring-stopper and allow one of its ends to be also released. The anchor may then be let go. These successive stages in the operation of lowering the anchor require the strength of several seamen, and a good deal of valuable time, varying according to the size of the anchor and the number of men which can be spared or mustered for the work. It is evident that when the anchor is to be lowered in cases of exigency and danger—such as the presence of breakers or other cause of peril—the lapse of

even ten or fifteen minutes before it can be got clear is a serious loss of valuable time.

My invention has for its object to remove this source of peril and enable one man to trip the anchor instantly without the loss of a moment of time.

In carrying out my invention I retain the ring-stopper *e* and shank-painter *d*, but instead of securing both the ends of each of these chains upon fixed hooks, I secure only one end of each in that manner, and I secure their other ends upon hinged latches, which are free to turn or fall upon their hinges in certain positions of the keeper which sustains them.

D is a keeper consisting of a rod or bar, which is sustained upon bearings made for it in two brackets *a a*, projecting a little distance from the side of the bulwark of the vessel. The keeper is so fitted in its bearings that it is free to turn therein, but has no motion lengthwise. Upon either end of the bar D, I form semicircular troughs *f*, the bottoms of which are below the center of axis of the bar. These troughs are meant to receive the latches *e e*, which are hinged to or swing upon standards *g g*, projecting from the side of the vessel.

b is a bent lever made fast to the bar or keeper D, between its brackets *a*, and which is so shaped as to extend over the rail A and rest upon its inner edge or against its inner side, when the keeper is in its normal position, which is the position given to it in the drawings.

In order to secure the anchor by means of my improvement, it is first brought up to its proper position behind the cat-head C, when the free end of the ring-stopper is passed through its ring and passed over the adjacent latch *e*, which is then suffered to rest in the adjoining trough *f*. The free end of the shank-painter is then passed about its shank, and the ring on the end of the painter, or one of its links, is slipped upon the other latch, *e*, which is then allowed to rest in the adjacent trough *f*. The anchor is now permitted to rest in the chains. When it is to be tripped in time of peril or on ordinary occasions, the operator seizes the lever *b* and raises it off and over the rail A', thereby rotating the keeper D and bringing its troughs to an inclined or a vertical position, when the latches will slip out of them and let the anchor fall into the

water. By placing the troughs *f* below the plane of the axis of the bar or keeper *D*, I bring the center of gravity of the weight sustained on the latches and keeper below the center of the journals of the keeper, and thereby prevent the keeper from being accidentally rotated. Furthermore, the lever *b* is so made that when it is resting on the rail its vertical part shall incline within the vertical plane passing through the axis of the keeper, thereby preventing it from being displaced by accidental causes. The lever *b* may also be held

to the rail by a spring latch or other common fastening, if thought desirable.

I claim as new and desire to secure by Letters Patent—

The anchor-tripping device above described, consisting of the rotating bar or keeper *D*, with its troughs *ff* and the latches *cc*, constructed and operated substantially as above set forth.

Witnesses: B. H. HEITMANN.
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