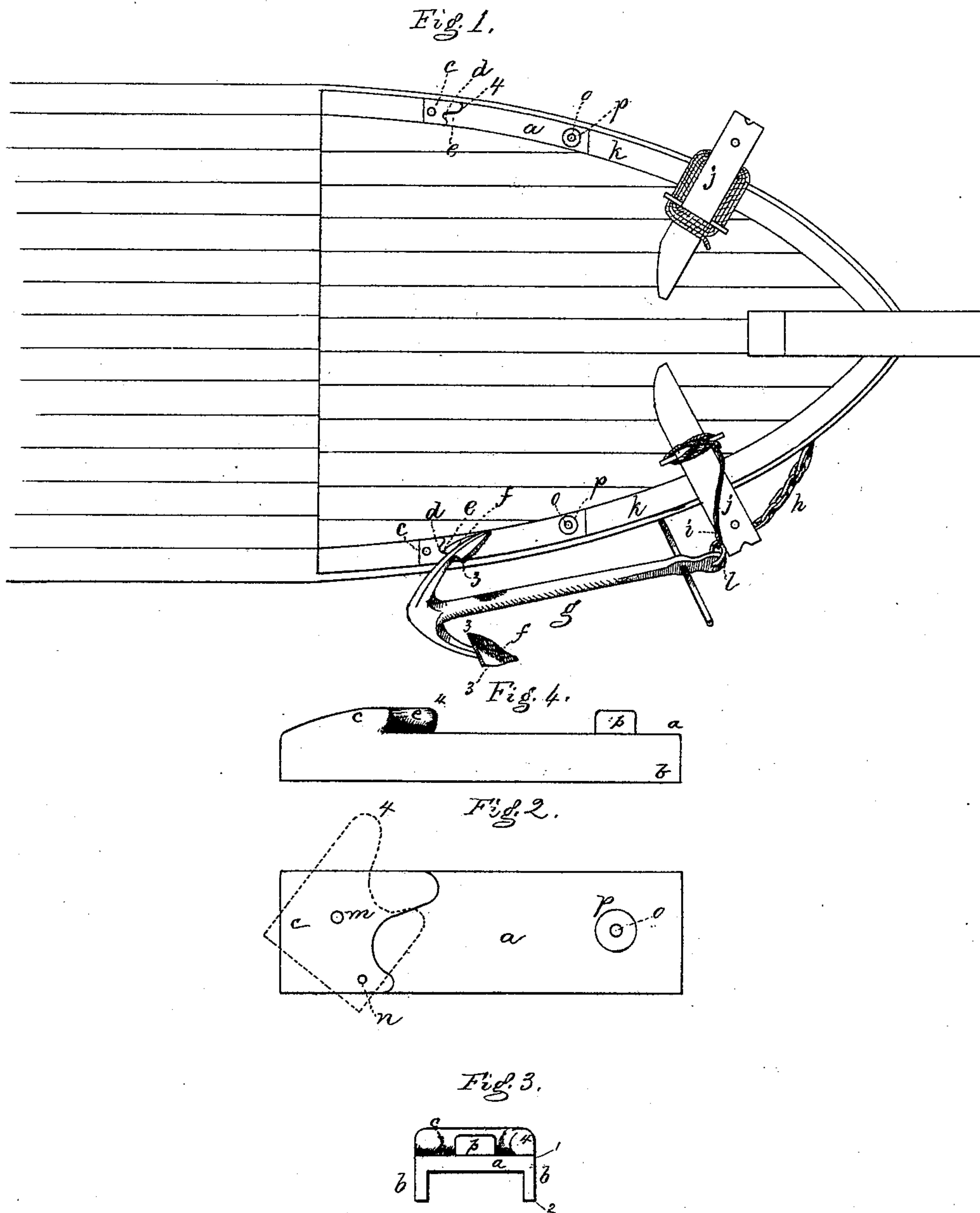


R. C. STURGES.  
ANCHOR-TRIPPERS.

No. 177,295.

Patented May 9, 1876.



Witnesses.  
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# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN ANCHOR-TRIPPERS.

Specification forming part of Letters Patent No. 177,295, dated May 9, 1876; application filed April 15, 1876.

*To all whom it may concern:*

Be it known that I, RETIRE C. STURGES, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improved Anchor-Tripper, of which the following is a specification:

This invention relates to an anchor-tripper, or a device to hold and permit the discharge of an anchor from the bow of a vessel; and the invention consists of a guard-plate arranged on top of the rail of the vessel, and provided with a projection beveled inwardly from its top, forming a recess to receive and engage the fluke of the anchor. This guard-plate embraces the rail, and guards and protects it. The flanges at the side of the plate serve to retain it in position, and, as shown, the guard-plate is also provided with a chock, provided with a friction-roller, to lessen the friction on lines being drawn over the rail.

Figure 1 is a top view of the forward portion of a vessel, showing my anchor-trippers in position on the rail, an anchor being held by one of them. Fig. 2 is a modified form. Fig. 3 is an end view of the tripper shown in Fig. 1; and Fig. 4 is a side view.

The tripper is composed of a plate or shell, *a*, provided with side flanges or guards *b b*, in practice about two inches deep from the bottom of the plate, it being usually one inch thick, more or less, thereby making the guard and plate about three inches from the points 1 to 2. (See Fig. 3.) Rising from the top of the plate, as shown in Figs. 1 and 3, is a projection, *c*, with a curved or proper shaped notch or recess, *d*, with the portion *e* thereof slanting inwardly from its top surface in order to present an acute-angled edge to fit and receive the portion 3 of the fluke *f* of the anchor *g*, attached, as usual, to a chain, *h*, and provided with a rope, *i*, to confine the anchor-head *l* to the cat-head *j*.

When the anchor is being raised over the rail *k*, about which the guard-plate is fitted, the sides or flanges *b* present a smooth hard surface, against which the anchor moves, and when high enough, the portion 3 of the fluke is placed in the recess *d*, and hooks over the inclined portion *e* of the projection *c*, and as long as the head of the anchor is held up, as

shown in Fig. 1, the anchor-fluke will engage the edge *e*, and be retained in position thereon; but when the head of the anchor is allowed to drop, the fluke swings about the rounded edge 4 of the projection, and slips from the guard into the water.

In some instances, on steamers or large vessels, I propose to make the projection *c* as a separate piece, and pivot it to the plate *a* at *m*, (see Fig. 2,) and provide it with a suitable pin or locking or unlocking device, *n*, and when it is desired to loosen and swing off the anchor, it is only necessary to draw the pin *n*, when the independent block forming the projection will turn on the pivot, as shown in dotted lines, and discharge the anchor.

Near the opposite end of the plate I provide a pin or chock, *o*, on which I place a friction-roller, *p*, and ropes or lines drawn over the plate, either in front or back of the chock, will be relieved from much friction, thereby making it easier for the seaman to move such lines, and save wear on the rail. These guards are placed on the rail at each side the vessel.

The anchor may be raised or lowered in any usual way, and the cat-head may be of any usual form.

The extreme outer end of the projection *c* is beveled, as shown at *r*, Fig. 4, and this facilitates the easy passage of the anchor over the end of the tripper.

Anchors are usually very heavy, and exert great strain on the holder, and, by reason of the flanges embracing the rail, additional strength and durability are attained.

I claim—

1. The plate *a*, adapted to be fitted to the surface of the rail, and provided on its upper surface with a projection, *c*, and a recess, *d*, to receive, and shaped to retain, the anchor-fluke, or permit its discharge therefrom, all substantially as described.

2. The plate *a* and guards *b*, in combination with a projection, *c*, on the top of the plate, and shaped, as described and shown, to receive and operate in connection with the fluke, as set forth.

3. The guard-plate, in combination with the pivoted projection *c*, adapted to retain or discharge the fluke, and a locking device to per-



mit the projection to turn on its pivot, substantially as set forth.

4. As a new article of manufacture, a metallic guard-plate, *a b*, provided with a projection to operate in connection with the anchor, substantially as described, and with a chock and friction-roller, as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

RETIRE C. STURGES.

Witnesses:

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