J. P. DORR, Jr.
Anchor-Tripper.

No. 197,348. Patented Nov. 20, 1877.

Fig. 1.

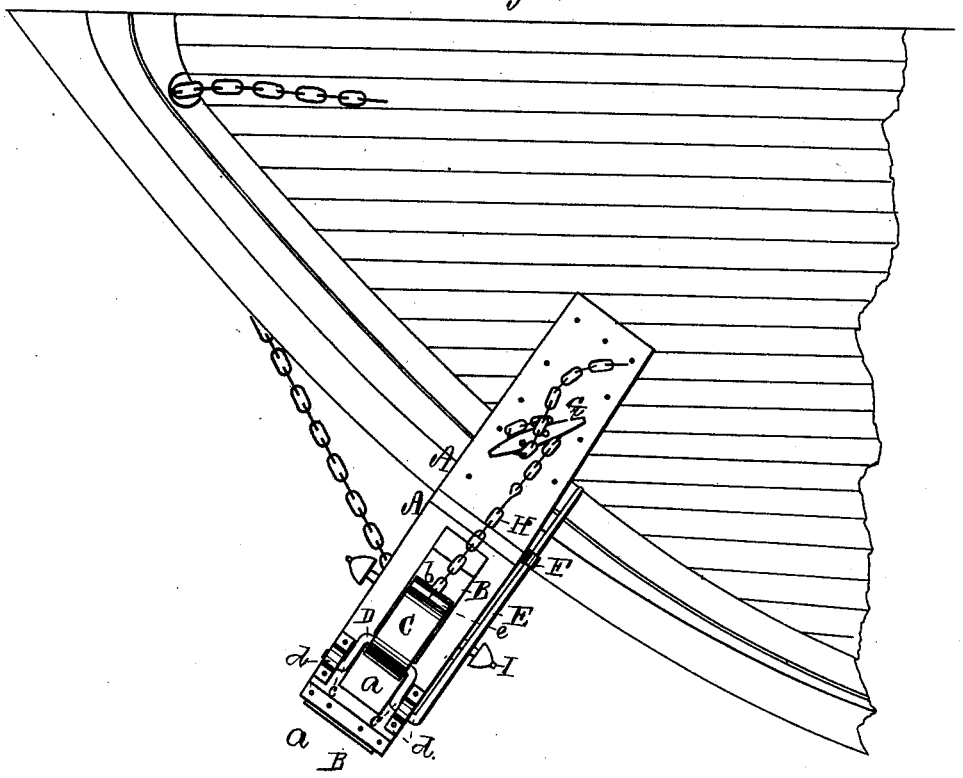


Fig. 2.

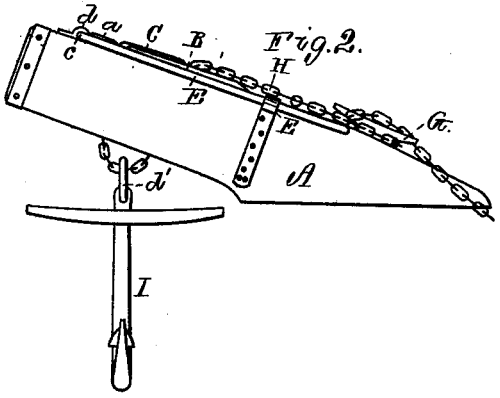
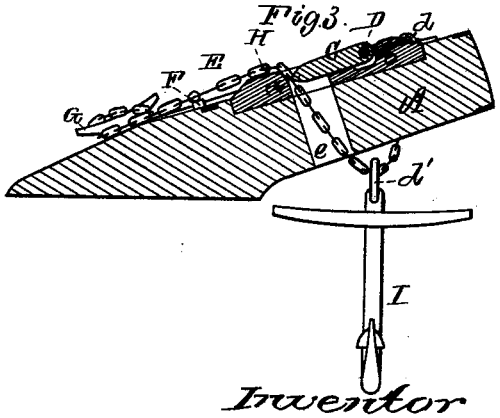


Fig. 3.



Witnesses.
S. N. Piper
L. W. Miller

Inventor
Joseph P. Dorr, Jr.
by his attorney
R. H. Eddy

UNITED STATES PATENT OFFICE.

JOSEPH P. DORR, JR., OF INDIAN RIVER, MAINE, ASSIGNOR TO HIMSELF AND H. H. LEIGHTON, OF SAME PLACE.

IMPROVEMENT IN ANCHOR-TRIPPERS.

Specification forming part of Letters Patent No. **197,348**, dated November 20, 1877; application filed October 16, 1877.

To all whom it may concern:

Be it known that I, JOSEPH P. DORR, Jr., of Indian River, of the county of Washington and State of Maine, have invented a new and useful or Improved Anchor-Tripper; and do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a side elevation, and Fig. 3 a longitudinal section, of the cat-head of a navigable vessel with my invention applied thereto.

The said invention is to support an anchor depending from the cat-head, and to trip or set free such anchor therefrom, as occasion may require.

In such drawings, A denotes the cat-head, and B a metallic frame fixed to the top thereof, and provided with two strong abutments, *a b*, arranged as shown. Within the said frame is a pawl, C, which turns on the wrist of a bell-crank, D, whose journals *c c* are supported in and by boxes *d d*, fixed to the cat-head. An arm, E, is extended from one of the crank-journals, in manner as shown.

For the purpose of holding the crank down, or in range with the pawl, there is applied to the side of the cat-head a hook or catch, F, to engage with such arm.

Furthermore, there is fixed to the upper surface of the cat-head a belaying-cleat, G, such being arranged therein in manner as shown, and there is attached to the lower side of the cat-head, beneath the abutment *a*, a short chain, H. This chain, after having been passed through the ring *d* of the anchor I, is to be carried up through a passage, *e*, leading through the cat-head, thence through the frame B.

On depressing the arm E into engagement with the catch, the crank and the pawl will be forced down, so as to cause the latter to enter between links of the chain, and, with the abutment *b*, to hold such chain from slipping under the strain of the anchor. The sides of the frame are notched, in order to allow the crank and the pawl to be brought into line.

To trip the anchor, one has only to spring the arm out of engagement with the catch and raise such arm, so as to turn the crank, and cause it to draw the pawl backward out of engagement with the tripping-chain. This having been done, the anchor will at once fall and draw the chain through the passage *e* and escape from the chain, it being understood that a cable is attached to the ring of the anchor.

The hole through the pawl, to receive the wrist of the crank, may or should be large enough to allow the heel of the pawl to rest against the abutment *a* when the pawl is down in engagement with the tripping-chain.

By the heel of the pawl resting against the abutment the crank will be relieved from the back pressure of the pawl.

The belaying-cleat is for supporting the tackle-rope used in setting the anchor-ring well up to the cat-head, a short chain having a hook to it being generally employed with the tackle for such purpose.

I claim—

1. The combination of the frame A, the abutment *b*, pawl C, crank D, and the arm E, all arranged and applied substantially as set forth.

2. The combination of the tripping-chain H and the catch F with the cat-head A, and the frame *a*, pawl C, crank D, and arm E, arranged and applied to the said cat-head substantially as specified.

3. The combination of the belaying-cleat G with the cat-head A and the chain H, frame B, pawl C, crank D, and arm E, arranged and applied to the said cat-head as set forth.

4. The combination of the abutments *a b* with the frame B, and the pawl C, and bell-crank D, applied thereto, and to operate therewith, as explained.

JOSEPH P. DORR, JR.

Witnesses:
R. H. EDDY,
JOHN R. SNOW.