

W. A. CURRIER.
Anchors.

No. 164,975.

Patented June 29, 1875.

Fig. 1.

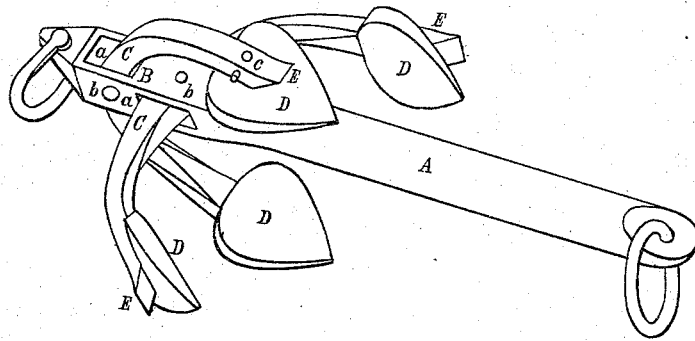
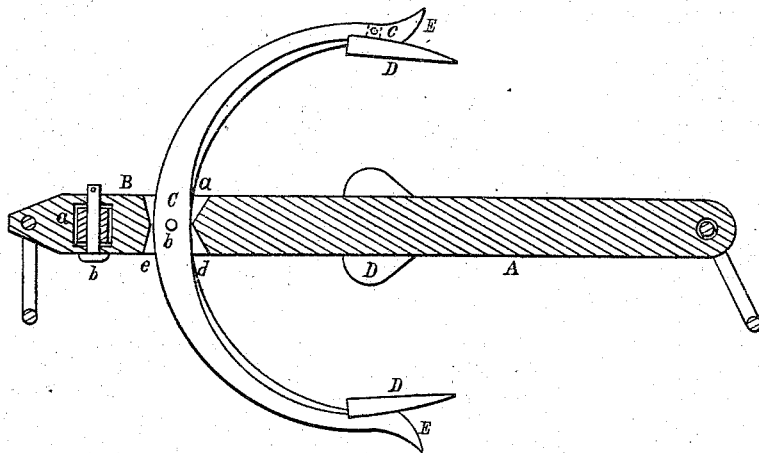


Fig. 2.



Witnesses;

W. C. Bathrick,
C. Pusey

Inventor;

William A. Currier,
per *Edu. Dummer,*
Atty.

UNITED STATES PATENT OFFICE.

WILLIAM A. CURRIER, OF NEWBURYPORT, MASSACHUSETTS.

IMPROVEMENT IN ANCHORS.

Specification forming part of Letters Patent No. **164,975**, dated June 29, 1875; application filed April 6, 1875.

To all whom it may concern:

Be it known that I, WILLIAM A. CURRIER, of the city of Newburyport, State of Massachusetts, have invented an Improved Anchor, of which the following is a specification:

The object of my invention is to so construct an anchor of four flukes that each pair, consisting of two opposite flukes, shall be connected with a throat-piece or connecting-bar, which shall be pivoted at its center in the crown of the anchor, thus making an anchor that is sure to seize and maintain its hold, easily raised and stowed away, and dispenses with the need of a stock.

In the drawings, Figure 1 is a perspective view of an anchor embodying my invention. Fig. 2 is a longitudinal section of same, taken through the center of the shank and crown on the plane of one pair of flukes and the throat-piece, to which they are joined.

A is the shank; and its continuation forms the crown B. The crown has cut in it two mortises, *a a*, at right angles to each other, and at such distance from each other, and so related to the crown, as to give the greatest strength to the latter. They are also of such form and size as to admit and allow the free working of the two throat-pieces or connecting-bars C C, which are pivoted at their centers by the pins or bolts *b b*, that pass through them and the sides of the mortises, as shown. The flukes D D D D are secured rigidly to their throat-pieces, either welded to them or dovetailed and pinned or bolted, as shown at *c*, or secured by some equivalent device, so that one of each pair may be removed. The mortises may be beveled on both sides of the crown for each throat-piece, and front and back of the throat-piece, as shown at *d* and *e*, so that the throat-piece may have a solid and durable bearing in the crown, and not strain the pin or bolt by which it is pivoted. At the back of the flukes are the spurs E E E E, of suitable form and location to insure the proper position of the flukes for grappling—that is, by coming in contact with the ground to open

out the flukes, so that they will present their points to the ground, the throat-pieces swinging on the pivots at *b b*. Anchors of the common form, with two flukes, must have what is called a stock—that is, a long cross-piece near the upper end of the shank, to so tip the anchor that the flukes may take hold. My anchor needs no stock, as will be readily seen, and when dropped it is at all times in position for grappling. It will always have two flukes in the ground, and each of them may be lighter than one of an anchor with two flukes; hence the whole anchor is lighter by dispensing with the stock or cross-piece. Should the cable fall on my anchor, on being strained it will readily slip off, since the flukes will close, and it will present no obstruction to entangle the cable, as does the common anchor. Moreover, my anchor is more easily and safely raised to position for carrying, or shipped, there being no stock, and the flukes closing and not standing out to interfere with any obstruction. It is, therefore, easily taken in, and it may be stowed in the smallest possible space, for one of the flukes may be detached from its throat-piece, the latter withdrawn, and the anchor laid flat. The flukes may have any required spread by making the bevels of the mortises, as at *d* and *e*, of the proportionate angles. The crown about the mortises may be strengthened, as desired.

I claim as my invention—

1. An anchor having two throat-pieces or connecting-bars, C C, pivoted in the crown and working independently of each other, substantially as and for the purpose hereinbefore set forth.

2. The combination of the crown B, having the two mortises *a a*, with the throat-pieces C C, each having one or both of the flukes removable, substantially as and for the purpose hereinbefore set forth.

WILLIAM A. CURRIER.

Witnesses:

JOHN HARRINGTON,
EDW. DUMMER.