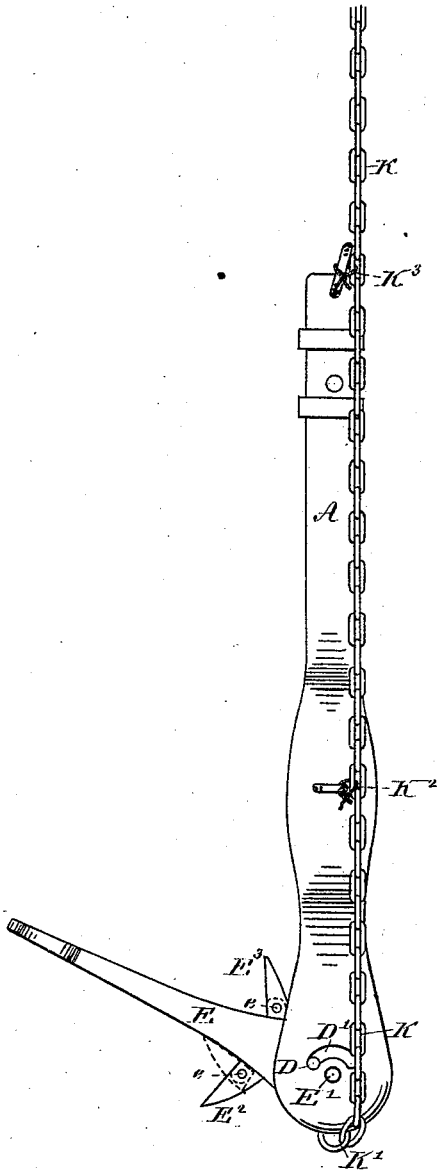
C. E. MARSHALL.
Anchor.

No. 211,474. Patented Jan. 21, 1879.



WITNESSES.
Frank S. Parker
Charles H. Fogg.

INVENTOR.
Charles E Marshall
Per William Edson Atty

UNITED STATES PATENT OFFICE.

CHARLES E. MARSHALL, OF BOSTON, ASSIGNOR OF ONE-HALF HIS RIGHT TO JOHN J. CLAPP, OF MILTON, MASSACHUSETTS.

IMPROVEMENT IN ANCHORS.

Specification forming part of Letters Patent No. **211,474**, dated January 21, 1879; application filed May 31, 1878.

To all whom it may concern:

Be it known that I, CHARLES E. MARSHALL, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Anchors, of which the following is a specification:

My invention relates to a method of attaching the cable or hawser to the anchor, said method consisting in attaching the cable or hawser firmly to the fluke end of the shank, and then attaching it at or near the middle of the shank and to the ring at the stock end of the anchor by means of connecting links or ties which are comparatively weak, so that when the cable or hawser has a long pull, as it does when the ship is riding at anchor, the strain, being nearly parallel to the shank of the anchor, will be sustained principally by the fluke-end fastening, the other fastenings being made so loose that no material strain comes upon them so long as the cable pulls in a direction parallel, or nearly so, to the shank; but in case it is desirable to raise the anchor, then the cable or hawser is pulled short; and if the anchor should be caught in rocks or other obstructions, the strain will come at an angle with the shank of the anchor, and the connection at the stock end and in the middle will break and leave the whole strain on the fluke end, which, coming in that direction, would readily lift the entangled anchor from obstructions.

The drawing represents an elevation of my invention.

Let A represent the shank of the anchor, which is forked at the lower end to receive the swinging fluke E, said fluke being pivoted at E^1, and limited in its motion by the pin D, which traverses in the slot D′.

To the swinging fluke E, I pivot the barbs E^2 E^3 at the points *e e*, so that the barb which is uppermost when the anchor is in use will fall down onto the fluke, and thus be out of the way of any cable or hawser that might be otherwise entangled with it.

The cable or hawser K K is firmly attached at K^1, and lightly and loosely attached at K^2 and K^3, so that so long as the strain is in the line, or nearly so, there is no danger of the cable breaking away; but when it is desirable to raise the anchor, and the fluke has become caught in rocks or other obstacles, a short pull on the cable will cause it to strain at an angle with the shank, and thus break the connection K^3 and K^2. This breaking will throw the entire strain onto the connection at K^1, and thus lift the anchor from its entanglement.

Having now described the construction and operation of my invention, what I claim, and desire to secure by Letters Patent, is as follows:

The combination of the anchor-shank A and the chain K K, said anchor-shank being provided with connecting-eyes at K^1, K^2, and K^3, the chain being securely attached at K^1, and lightly attached at K^2 and K^3, all arranged substantially as described, and for the purpose set forth.

CHARLES E. MARSHALL.

Witnesses:
W. EDSON,
NATL. EVANS.