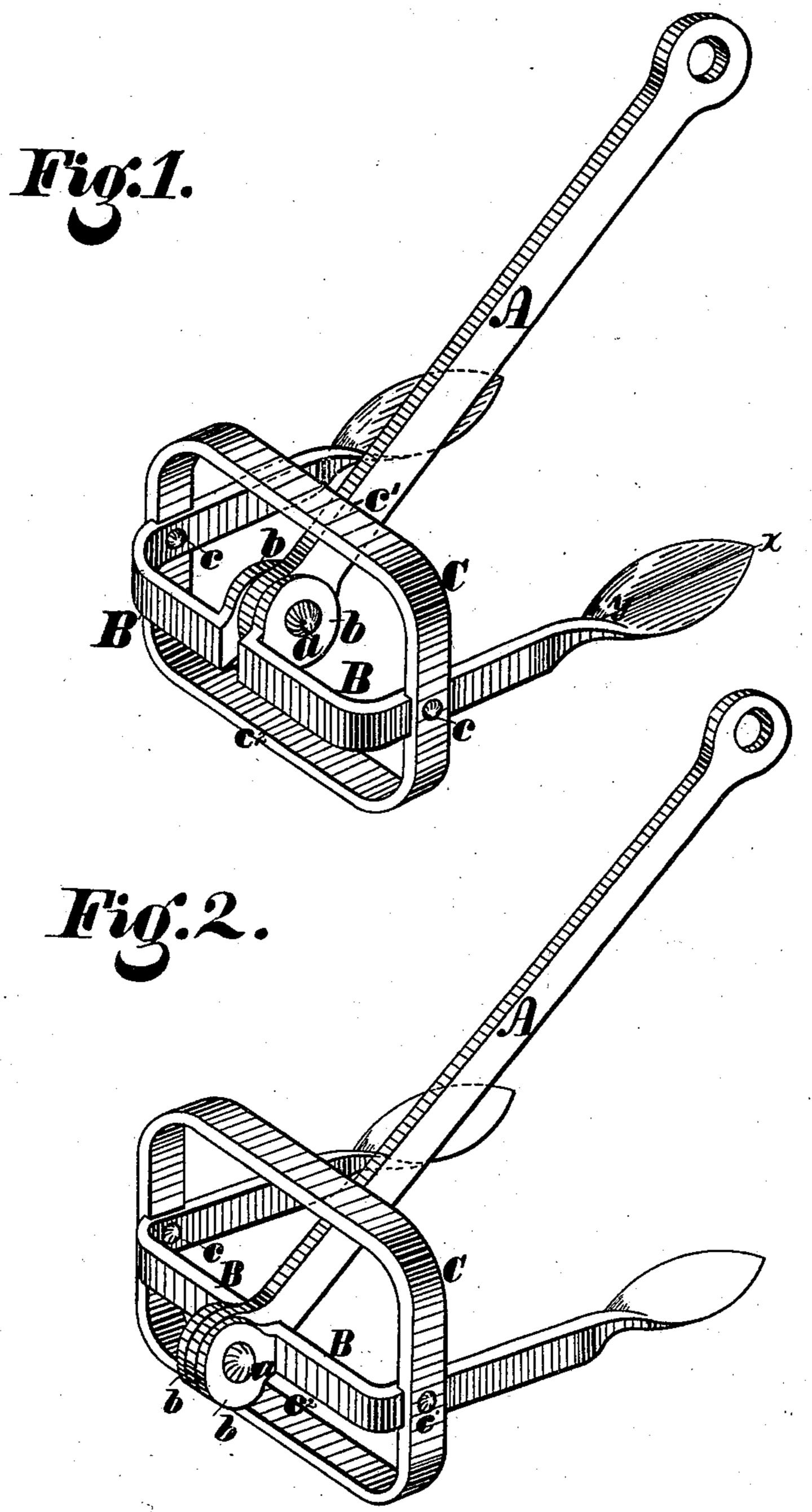
T. J. WHITECAR. Anchor.

No. 169,069.

Patented Oct. 19, 1875.



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UNITED STATES PATENT OFFICE.

THOMAS J. WHITECAR, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN ANCHORS.

Specification forming part of Letters Patent No. 169,069, dated October 19, 1875; application filed September 18, 1875.

To all whom it may concern:

Be it known that I, Thomas J. Whitecar, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Anchors; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification, in which—

Figures 1 and 2 are perspectives of my invention.

My invention has for its object to provide a two-fluke anchor of light but stable construction, which may be easily forged and manufactured at slight expense, and which will be more perfect in operation than any device for

the purpose heretofore produced.

My anchor is designed to be made throughout of flat or square iron. The shank is a straight bar of such material, of greater diameter vertically than horizontally, having an eye at its outer end for the attachment of the chain, and a similar opening at its opposite extremity for the passage of the pivot or bolt by which the fluke-arms are secured. The fluke-arms are each composed of bars of flat metal, suitably curved, as hereinafter described, pivoted to the rear end of the shank, and having their lower or outer ends twisted and flattened out into suitable shape to form palms. The fluke-arms are surrounded by and attached to a metallic band, which serves to brace said arms, and to give the flukes the proper inclination, and which, on rocky bottoms or places where the palms may not readily take hold, will operate also as a palm.

Referring to the accompanying drawing, A shows the shank, formed of a bar of flat iron, oblong in cross-section, and provided with an eye at each end, for the purposes already described. BB are the fluke-arms, formed of similar material, bent to form ears b b, by which they are pivoted to the shank A at a. These arms have their outer extremities twisted one-quarter, and then flattened out to form palms. These palms are of peculiar shape, tapering in both directions from their middles

or greatest diameters, (indicated by the line xy.) thus avoiding a shoulder at their point of connection with the arms, and preventing the possibility of the chain fouling therewith, as heretofore. The ears b b of the arms B B may be bent in the opposite direction, as shown in Fig. 2, which will enable them to be more readily riveted to the shank, and which is the construction intended for large anchors. C represents a band encircling the arms B, being riveted or otherwise made fast thereto at the points cc. This band serves as a brace for each fluke, and also causes both flukes to move together at all times. In addition to these functions, the band C, resting, as shown at the point c^1 upon the shank A, gives the proper inclination to the flukes, so that they will readily and properly take hold. Should the flukes fail at any time to engage, said band will operate as a palm, taking hold at or about the point indicated at c^2 . A still further advantage of the band is, that it offers a ready means of engagement for the hook when the anchor is being fished.

As will readily be perceived, the anchor may be inverted or turned over the flukes at once, swinging into the same position on the oppo-

site side of the shank.

I claim—

1. In combination with the shank A, the fluke-arms B B, formed with ears on their inner extremities, by which said arms are pivoted to the shank, and bent or curved at substantially right angles to said shank, and then parallel with it, as described and shown.

2. The fluke-arms B, formed of square bars, having their outer extremities twisted and flattened to form palms, substantially as shown

and described.

3. In combination with the pivoted or swinging fluke-arms B B, the encircling band C, substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 15th day of September, 1875.

THOMAS J. WHITECAR.

Witnesses:

M. DANL. CONNOLLY, CHAS. F. VAN HORN.