

J. T. FEWKES.

ANCHOR.

No. 173,929.

Patented Feb. 22, 1876.

Fig. 1.

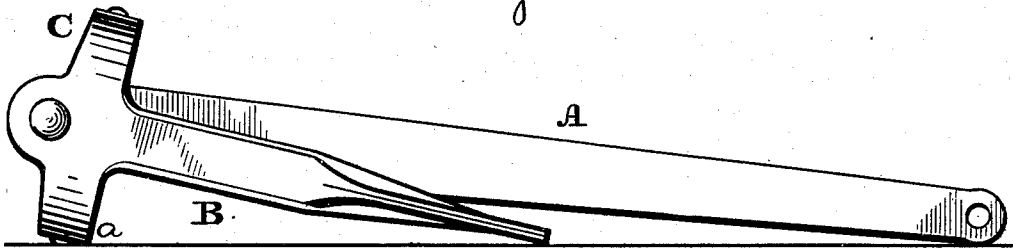


Fig. 2.

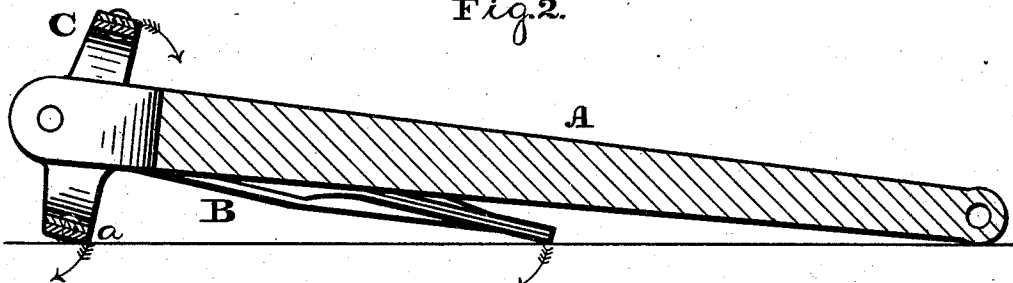
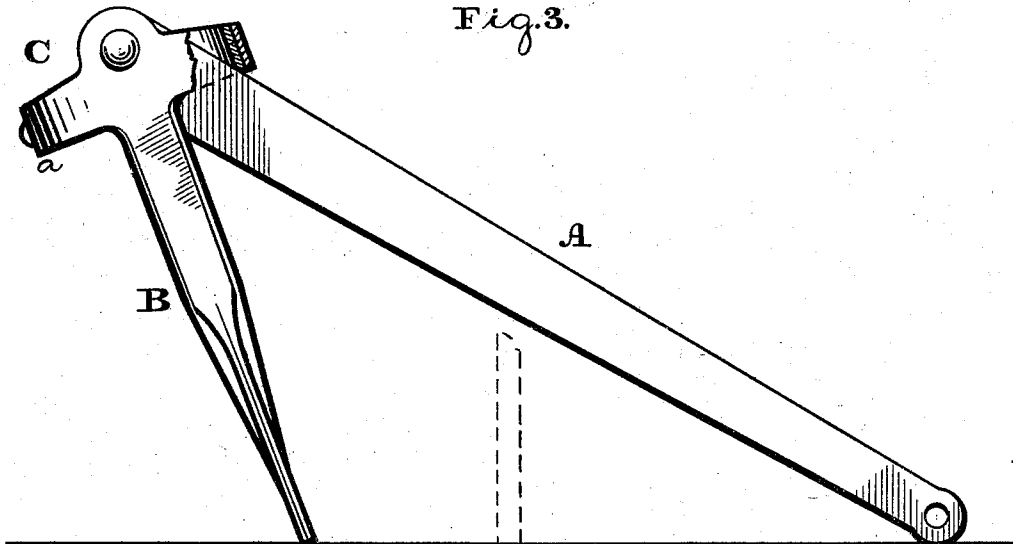
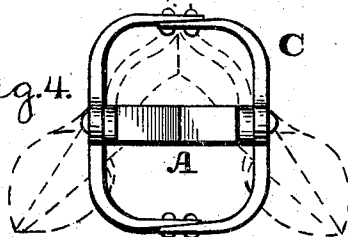


Fig. 3.



Witnesses:
Lewis T. Brown,
No. P. Grant.

Fig. 4.



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Att'y.

UNITED STATES PATENT OFFICE.

JOSEPH T. FEWKES, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO
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IMPROVEMENT IN ANCHORS.

Specification forming part of Letters Patent No. **173,929**, dated February 22, 1876; application filed
January 19, 1876.

To all whom it may concern:

Be it known that I, JOSEPH T. FEWKES, of the city and county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Anchors; and I do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand, make, and use the same, reference being had to the accompanying drawings making part of this specification, in which—

Figures 1 and 3 are side views of the anchor embodying my invention. Fig. 2 is a longitudinal section thereof. Fig. 4 is a bottom view thereof.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists of pivoted flukes having a yoke formed of two sets of inwardly-projecting arms, each made of one piece of metal, with the respective fluke-arm. It also consists of a bifurcated shank in combination with the fluke-arms and yoke. By this construction I greatly strengthen parts otherwise weak, produce a firm, serviceable, and reliable anchor, and reduce the cost of the manufacture thereof.

Referring to the drawings, A represents the shank, to the crown of which there are pivoted flukes B B. C represents a yoke, which occupies a position at the axial end of the fluke arms.

In forming the yokes, each fluke-arm is constructed with laterally-projecting arms in one piece therewith, which together form a T-shaped piece. The projecting arms are then bent toward each other so as to form arches of which the axial end of the fluke-arm is the crown; and, when the parts are in position, the bent or arched arms project inwardly. The two flukes, with their bent or arched arms, are then placed together, the two sets of bent or arched arms facing each other. The ends of the adjacent arms are overlapped, and the overlapping portions firmly riveted or bolted together, whereby the yoke C is complete, the

overlapped joint being at the center of the yoke.

The shank A is then fitted between the fluke-arms, and the end corresponding to the axis of the fluke-arms is bifurcated, and through openings in the bifurcations and fluke-arms the axial bolt is passed, and the several parts are in operative position.

It will be seen that, when the anchor reaches the bed or bottom of the water, it assumes the position shown in Figs. 1 and 2, and as the anchor is dragged, and the forward lower edge *a* of the yoke strikes an obstruction, or meets with resistance, the tendency is to draw down the points of the palms of the anchor, whereby said points immediately penetrate the bed or bottom of the water, and the anchor will be engaged or caught, and the vessel held, the parts assuming the position shown in Fig. 3.

The upper and lower faces of the yoke are curved or arched, and the flukes flare at their outer ends, so that, should the anchor be forced sidewise, the tendency of the curved form of the yokes is to cause the anchor to roll back to its first position, and thus right itself.

It will also be seen that each half of the yoke is formed in one piece with its respective fluke-arm, and that the point of junction of the fluke-arm and the arms that form half of the yoke is rendered firm and serviceable.

Moreover, the joint between the halves of the yoke consists of arms overlapped and riveted, or bolted, whereby said joint is firm and serviceable.

Now, as the strain on the anchor is on the yoke at the point of contact with the shank, and said point has a lap-joint, and also at the point of junction of the fluke arms and yoke, and said point is without joints, as the parts are made in one piece it is evident that a strong and reliable anchor is produced.

By this construction, also, the space within the fluke-arms and yoke is left entirely free for the insertion of the bifurcated end of the shank.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The yoke C, consisting of two sets of inwardly-projecting arms, each formed of one piece with the fluke-arms, substantially as and for the purpose set forth.

2. The bifurcated shank A, in combination

with the fluke-arms B, and yoke C, constructed, arranged, and operating substantially as and for the purpose set forth.

JOS. T. FEWKES.

Witnesses:

JOHN A. WIEDERSHEIM,
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