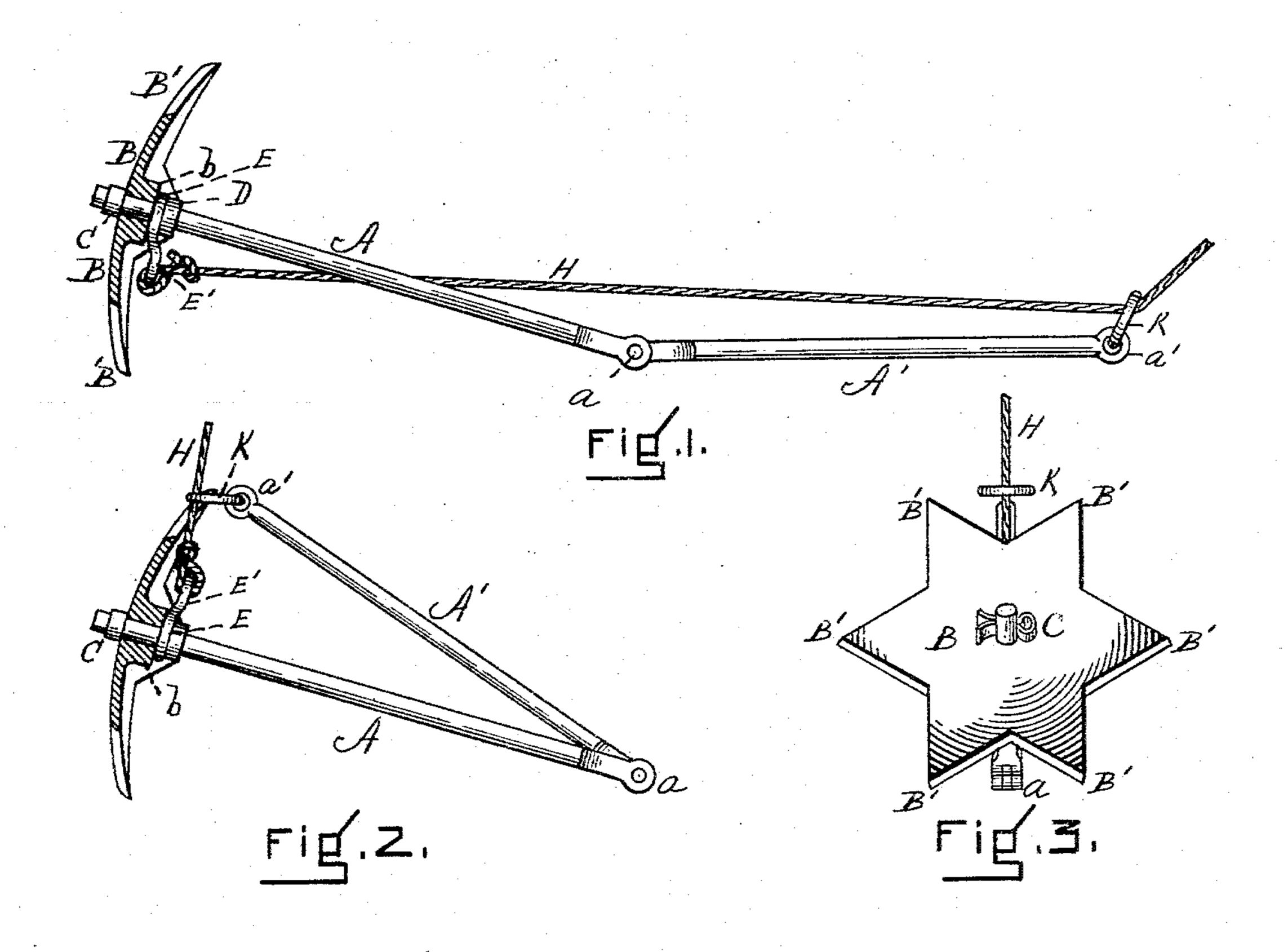
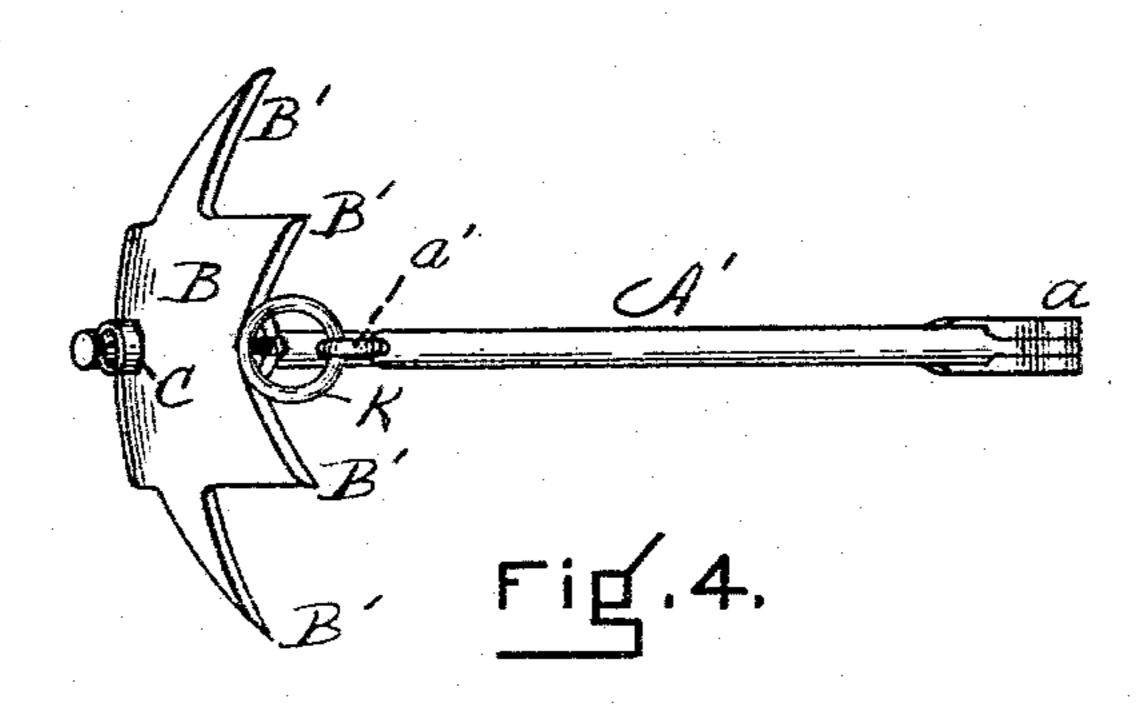
(No Model.)

## C. R. REEVES.

No. 533,668

Patented Feb. 5, 1895.





INVENTOR

Charles R. Reever

By his Atty

Ferry weekliams

## United States Patent Office.

CHARLES R. REEVES, OF FITCHBURG, MASSACHUSETTS.

## ANCHOR.

SPECIFICATION forming part of Letters Patent No. 533,668, dated February 5, 1895.

Application filed November 17, 1894. Serial No. 529,129. (No model.)

To all whom it may concern:

Be it known that I, CHARLES R. REEVES, a citizen of the United States, residing at Fitch-burg, in the county of Worcester and State of Massachusetts, have invented new and useful Improvements in Anchors, of which the

following is a specification.

This invention comprises an anchor whose head is star-shaped or provided with a number of radial points, said points constituting the flukes and being adapted to extend practically vertically into the bottom, never less than two being in such engagement, so that they cannot readily catch under a projecting rock, and a jointed shank with the rope or warp-chain so arranged that when the anchor is to be raised the flukes are drawn vertically out of the mud, the warp passing between two flukes, and the shank folding.

The nature of the invention in detail, is fully described below and illustrated in the

accompanying drawings, in which-

Figure 1 is a view partly in side elevation and partly in vertical section of my improved anchor in the position in which it usually lies. Fig. 2 is a similar view with the anchor in the position assumed as it is beginning to be drawn up. Fig. 3 is a front elevation of the same. Fig. 4 is a plan view of the same.

Similar letters of reference indicate corre-

sponding parts.

A and A' represent the two portions of the

shank jointed at a.

B is the head made convexo-concave as shown and provided with a number of radial or star-shaped points B' which constitute the flukes. The flukes follow out the general curvature of the body of the head, such curvature being not far from that described by an arc of a circle whose center would be the joint a. Thus when the anchor is in its normal position, that is, with the joint lying on the bottom, two of the flukes will be projecting into the mud in lines which are very nearly vertical.

The portion A, of the shank extends centrally through the head B and is secured there to by a removable key C, which extends through a suitable opening in the shank outside the head. Thus the shank and head can be disengaged, and the former folded, so that the unassembled parts of the anchor can be placed in a small space for shipment.

The shank is provided, at the point shown is in the drawings, with a check-ring D, and be-

tween said ring and the hub b of the head is placed a double ring or double loop, one eye E of which embracing the shank between the ring D and the hub b, the other eye E' serving as a means of attachment of the rope or warp- 60 chain H which extends therefrom through a ring K secured by means of an eye a' to the free end of the portion A' of the shank, such warp extending therefrom up to the vessel.

When the anchor is to be raised, the vessel 65 being nearly or quite over it, the warp H is pulled and hence assumes a position in a substantially vertical line, as shown in Figs. 2 and 3, and as it becomes taut it folds the portion A' over above the portion A of the shank 70 and, operating through the double loop E E', draws the flukes B' vertically out of the mud and raises the anchor, extending meantime naturally between two of the upper flukes. Thus it will be seen that from the nearly ver- 75 tical position of the flukes, they cannot catch under a projecting rock, and are easily withdrawn vertically, while their grip when the anchor is pulled upon by the vessel in the ordinary manner is very strong.

Having thus fully described my invention, what I claim, and desire to secure by Letters

Patent, is—

1. In an anchor of the character described, the combination of the head B provided with 85 the radial flukes B' set at such a curve or angle as to project substantially vertically into the sea-bottom or ground, and the jointed shank A A' provided with the ring K, said shank being furnished with means for attachoing the rope or warp-chain to it near the head and said warp-chain being thereby attached and extending through said ring K, substantially as described.

2. The hereinbefore described improved 95 anchor, comprising the head B provided with the radial flukes B', the jointed shank A A', the portion A thereof being secured to the head and being provided with the check-ring D and the portion A' thereof being provided 100 at its free end with the ring K and the double looped ring E E' secured loosely on the portion A of the shank between said head and check-ring, and the rope or warp chain H extending from said double looped ring E E' 105 through said ring K, substantially as set forth. CHARLES R. REEVES.

Witnesses:

STILLMAN HAYNES, RALPH M. BOUTELLE.