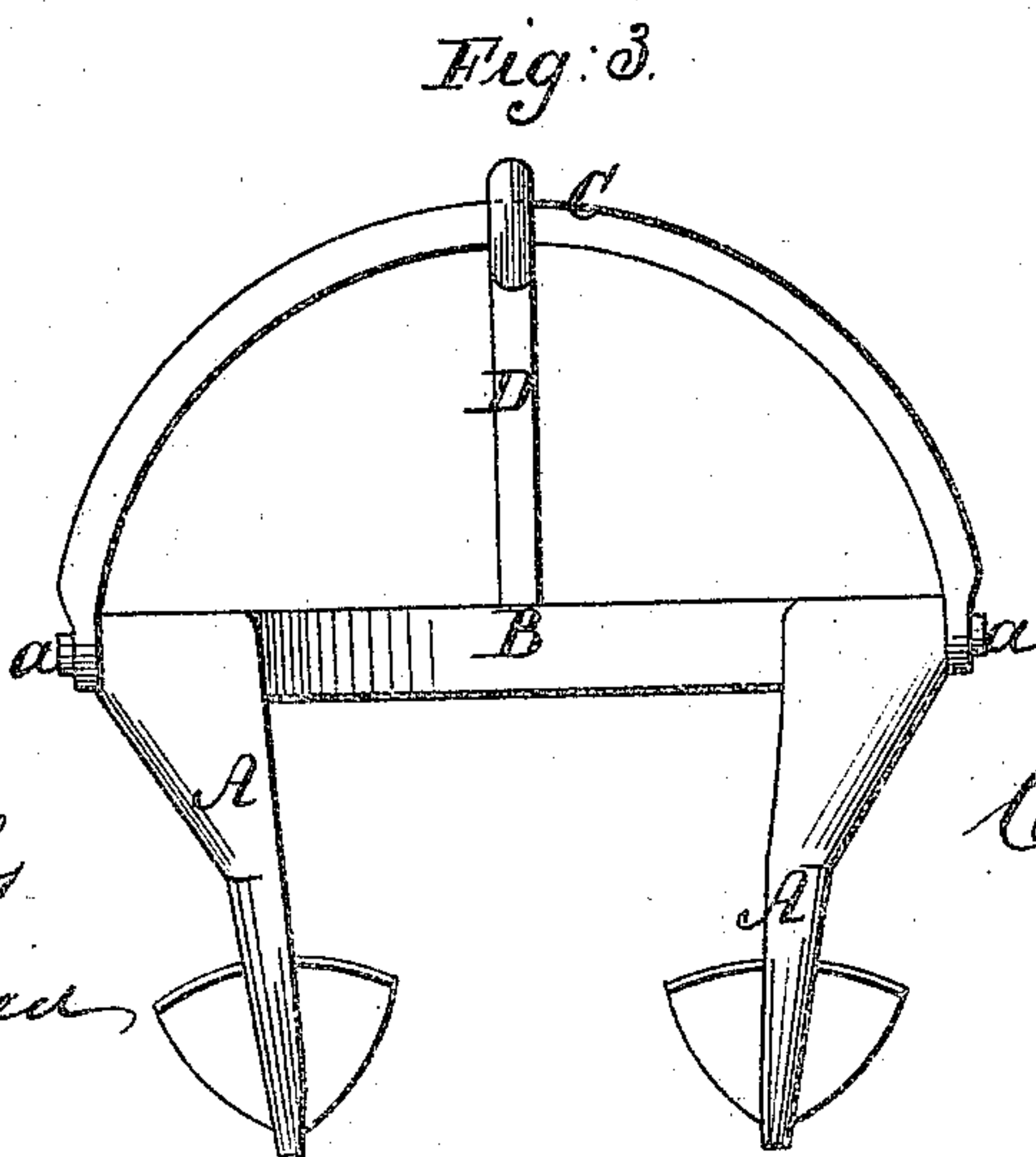
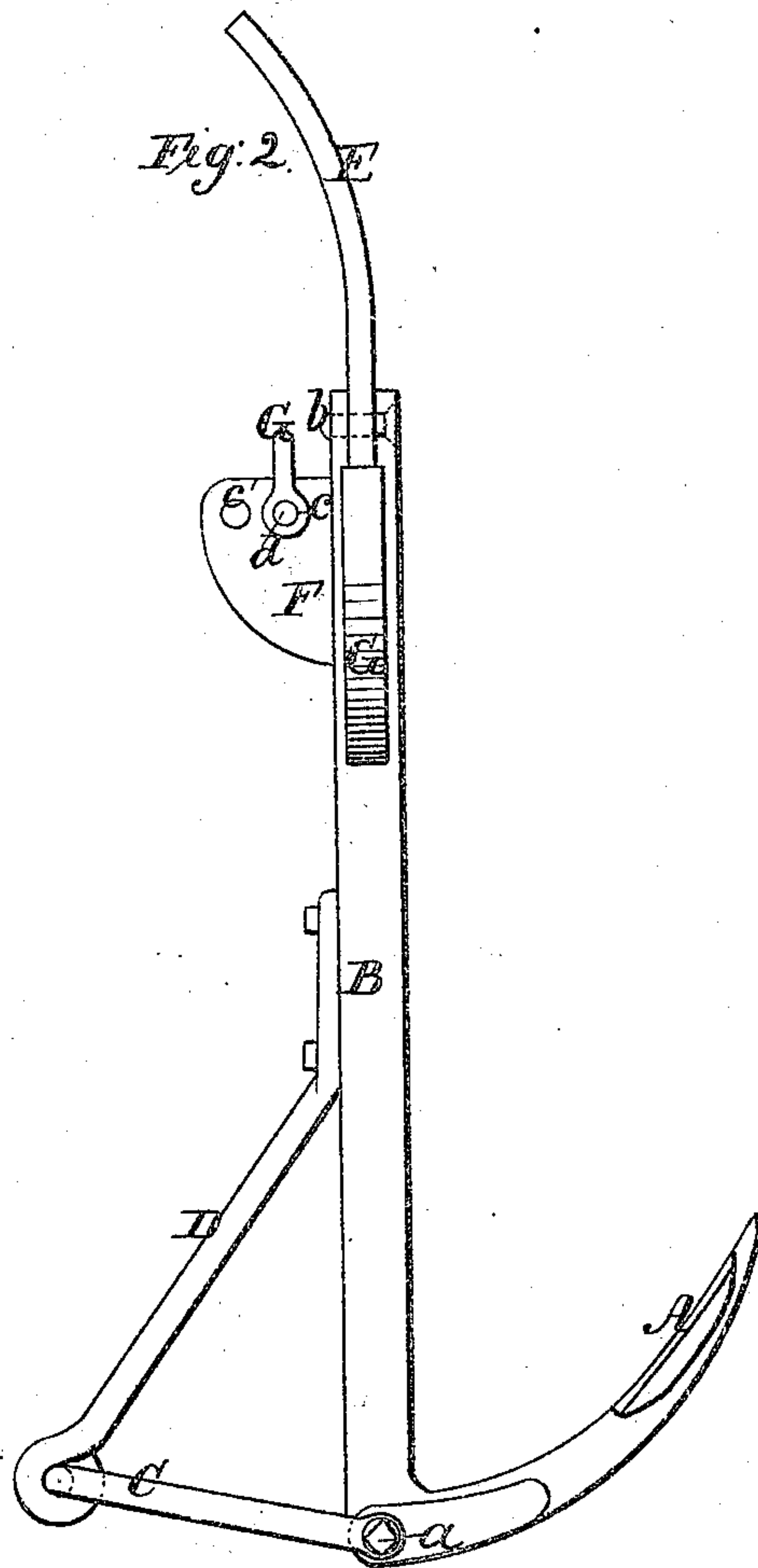
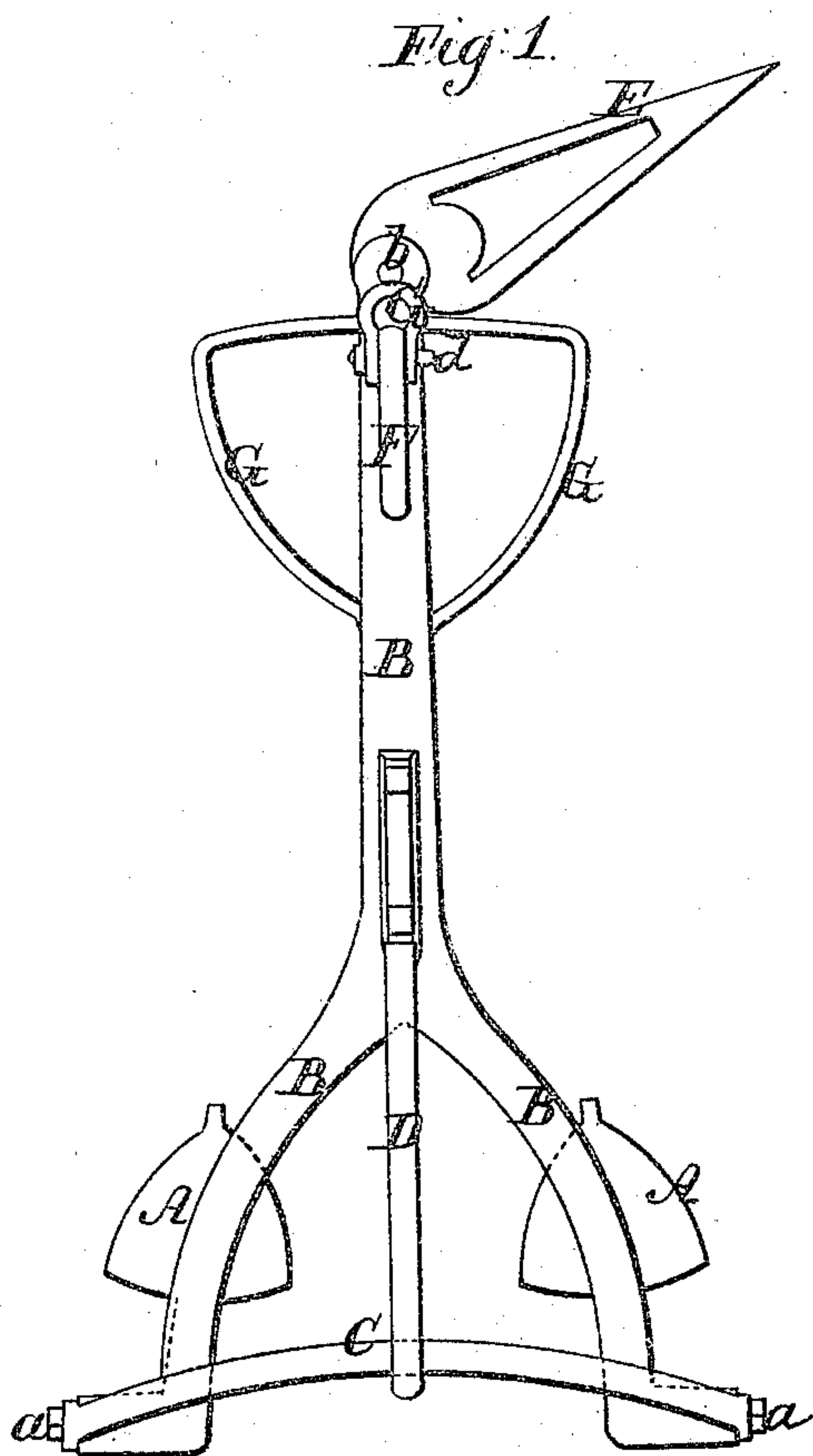


C. A. Chamberlain.

Anchor.

N^o 42,346.

Patented Apr. 19, 1864.



Witnesses.

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UNITED STATES PATENT OFFICE.

C. A. CHAMBERLIN, OF ALLEGHENY CITY, PENNSYLVANIA.

IMPROVED ANCHOR.

Specification forming part of Letters Patent No. 42,346, dated April 19, 1864.

To all whom it may concern:

Be it known that I, C. A. CHAMBERLIN, of Allegheny City, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Anchors; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figures 1 and 2 are longitudinal views at right angles to each other of an anchor constructed according to my invention. Fig. 3 is a front view of the same.

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

The main objects of my invention are, first, to insure the anchor catching quickly in the bottom, and thereby being brought quickly into position to hold the vessel; and, second, to obtain an anchor that will hold more in proportion to its weight than an anchor of the ordinary construction.

The improvements consist in certain devices which I term the "reverser," the "elevator," and the "depressor" and the "guard," applied and operating in combination with the anchor, as hereinafter specified.

To carry out my invention with the greatest advantage, the two flukes A A of the anchor are arranged side by side, that both may operate simultaneously and to obtain a firm hold on the bottom, the shank B being forked, as shown in Fig. 1, and one fluke being formed upon or attached to each prong thereof. The two prongs of the shank are connected by means of the reverser, which consists of a bow, C, arranged opposite to the flukes or across the back of the anchor and bolted to the two prongs of the shank by screw-bolts *a a*, and this bow or reverser is strengthened by a stout diagonal brace, D, which connects it with the shank above the fork thereof. The principal object of this reverser is to bring the anchor in such a position that the elevator, which will be presently described, can act, but it is also very convenient to catch with grappling-hooks when the anchor is lost.

To the upper end of the shank B is attached the elevator E, which consists of a piece of iron of a form somewhat resembling an elongated fluke, as shown in Figs. 1 and 2. This elevator is fitted into a mortise in the end of

the shank, and secured therein by a pivot, *b*, upon which it is free to work in a direction transverse to the flukes A A. The concave side of the said elevator is toward that side of the shank on which the flukes are arranged, and its convex side toward that side of the shank on which the reverser is arranged. The said elevator is intended to supply the place of the stock commonly employed, but is free from the defects of the stock—that is to say, it catches into the ground better, and consequently does not require to be so long, and it can never, under any circumstances, foul the cable. Instead of being applied at the end of the shank, as described, the elevator may be pivoted to any portion of the length of the shank, so as to be capable of swinging toward either side in the same manner as when applied to the end. On the back of the shank B, near the upper end thereof, is the depressor F, consisting of a flat flange forged upon or rigidly secured to the shank and standing out edgewise therefrom. This depressor has provided in it two or more holes, *c c*, at different distances from the shank for the reception of the pin *d* of the shackle G, by which the cable is attached, the said pin being inserted into one or the other of the said holes according to the depth of water in which the anchor is to be used, the hole nearest the shank being used for shallow water, and one farther from the shank being used for deeper water, that farthest off for the deepest. The depressor is intended to lower the line of draft, so that the flukes are kept at the proper angle for holding, and it enables a vessel to be anchored more securely in deep water.

On either side of the shank B, near the upper end thereof and set at right angles, or nearly so, to the depressor F, there are two curved elbow-like pieces of iron firmly secured to the shank. These constitute the guard. One end of each is welded or otherwise rigidly secured to the shank close below the mortise in which the elevator works, and the other end secured in a similar manner lower down the shank. The purpose of this guard is to cause the depression of the point of the elevator when the anchor comes with its side on the bottom, and thereby enable the said point to catch quickly in the bottom and bring the anchor sooner into position.

The operation of the anchor is as follows:

In most cases, owing to the superior weight of the flukes, it will strike the bottom in its proper position. In case, however, of its falling on its back the reverser causes it to roll over onto one side, and the point of the elevator, then entering the bottom, causes the end of the shank to which it is attached to be elevated in such manner that the anchor will fall over into the proper position for holding.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The reverser C, constructed and applied to an anchor, to operate substantially as herein specified.

2. The elevator E, applied and operating substantially as herein described.

3. The depressor F, applied and operating substantially as and for the purpose herein set forth.

4. The guard G G, applied and operating substantially as herein described.

5. The combination of the two flukes A A, arranged side by side, the reverser C, elevator E, depressor F, and guard G, substantially as herein set forth.

Witnesses: C. A. CHAMBERLIN.

SAML. DYER,

WILLIAM CHAMBERS.