

(No Model.)

D. CLARK.
ANCHOR.

No. 520,177.

Patented May 22, 1894.

Fig: 1.

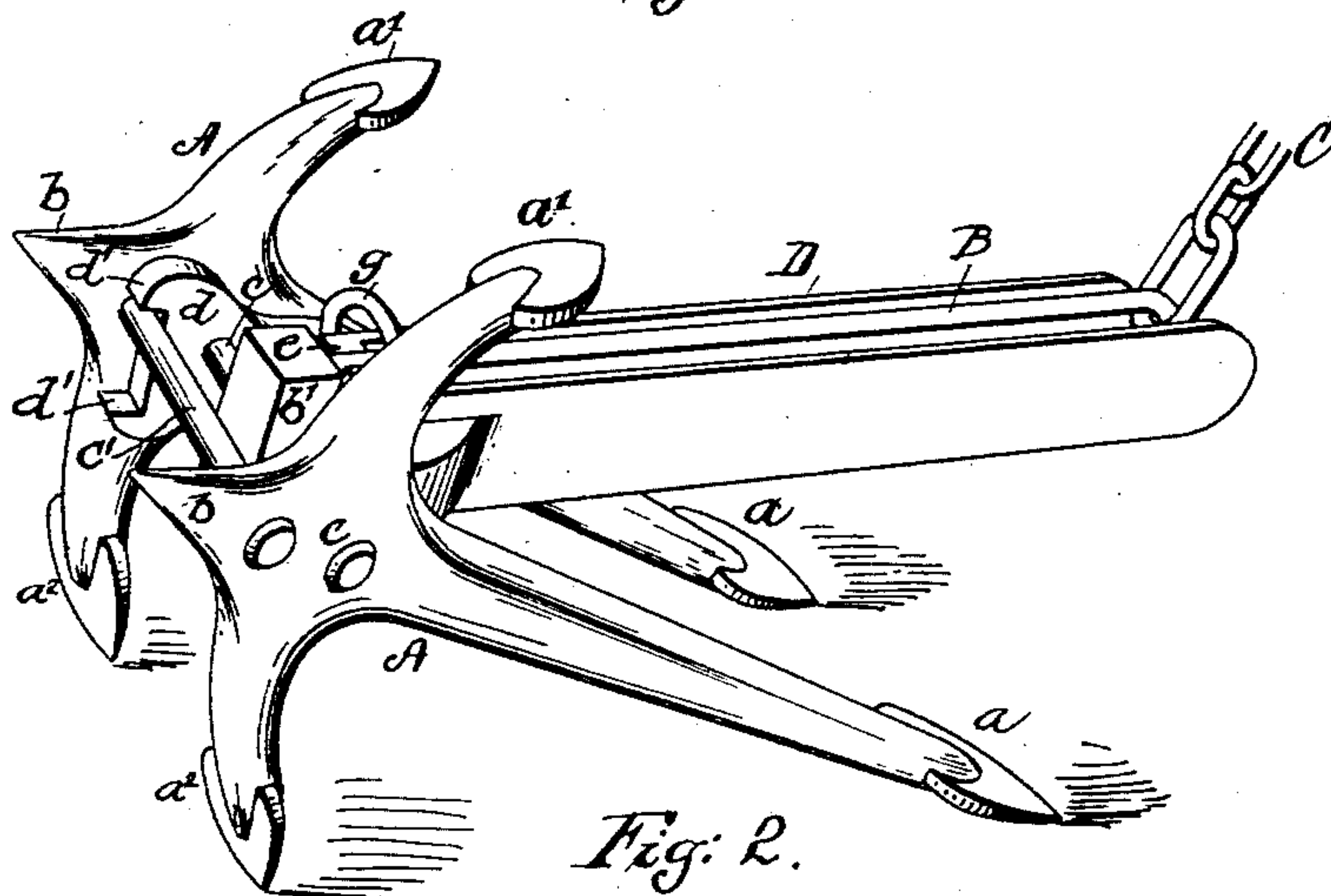


Fig: 2.

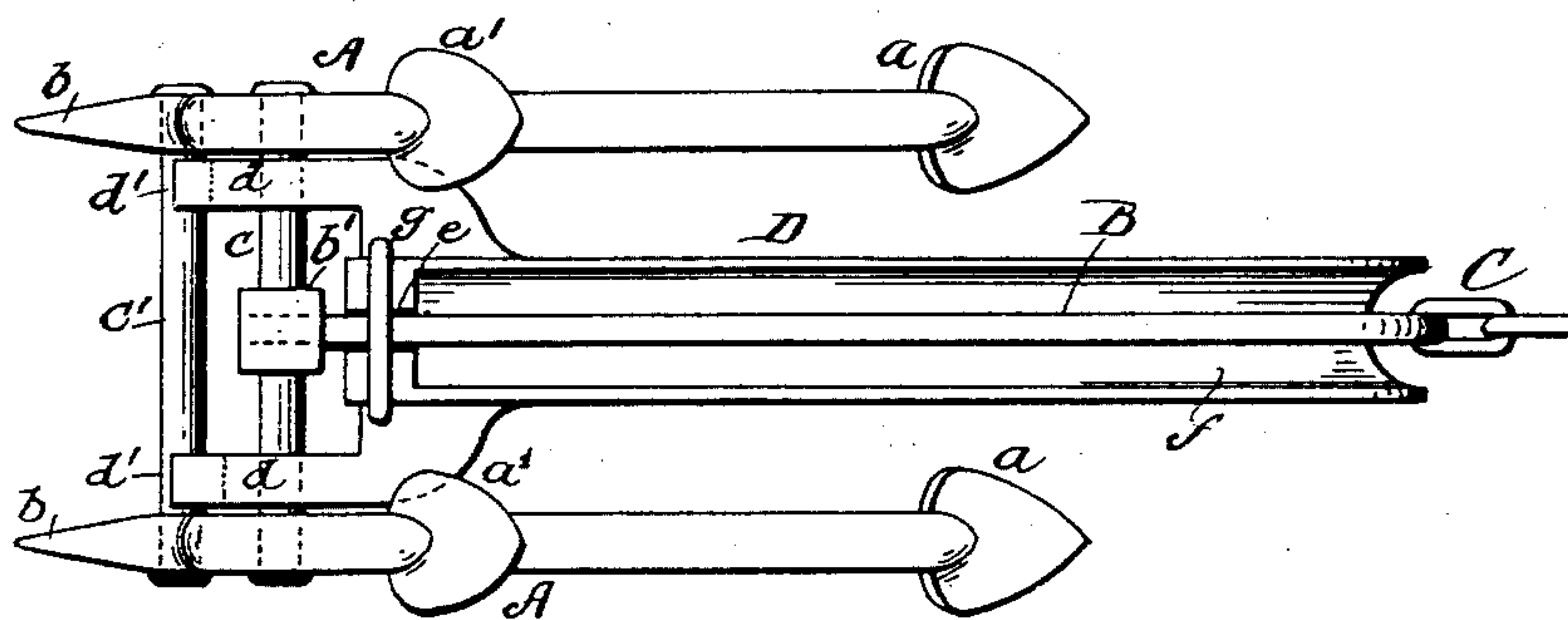
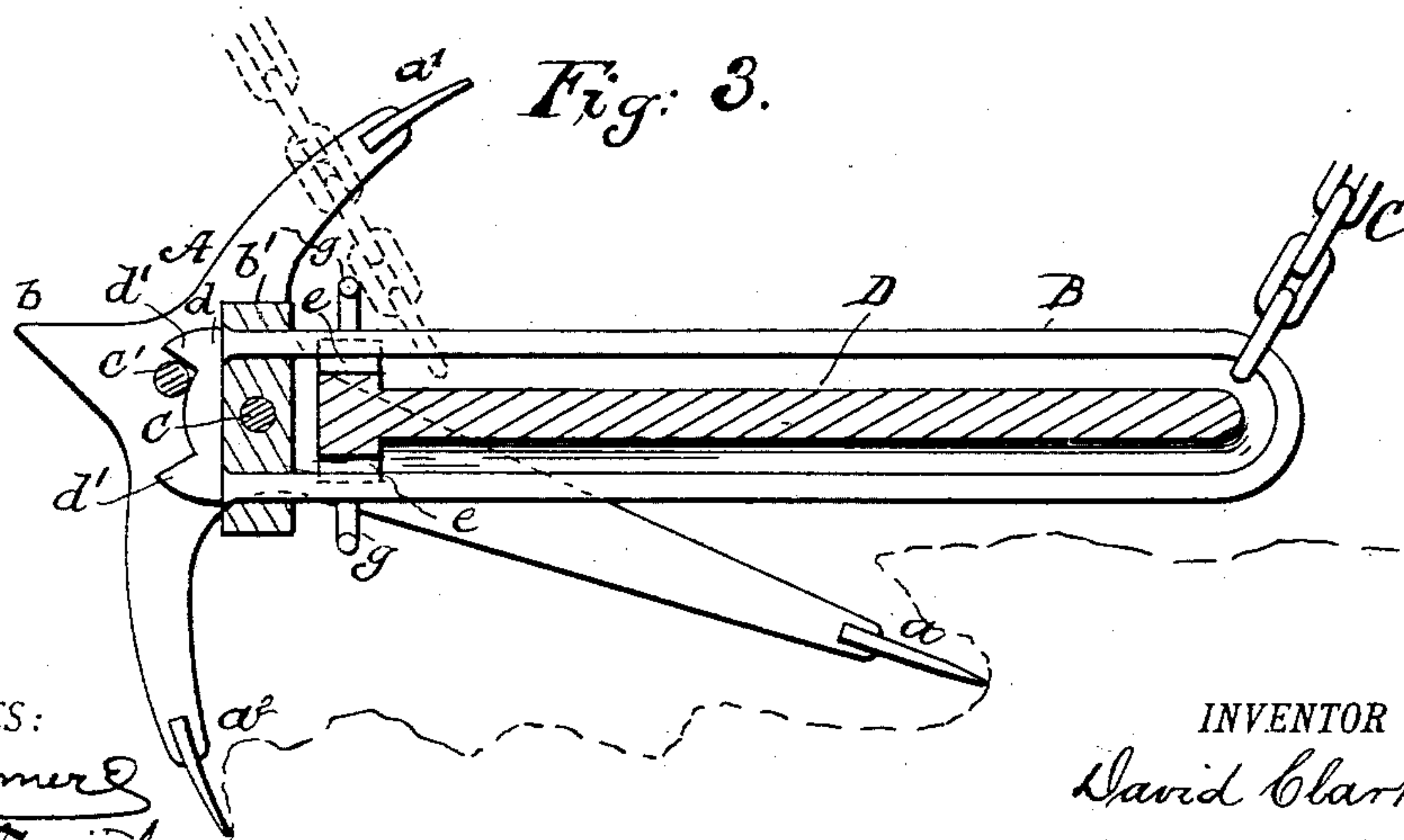


Fig: 3.



WITNESSES:

John H. Deemer
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DAVID CLARK, OF EASTON, PENNSYLVANIA.

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SPECIFICATION forming part of Letters Patent No. 520,177, dated May 22, 1894.

Application filed May 27, 1893. Serial No. 475,666. (No model.)

To all whom it may concern:

Be it known that I, DAVID CLARK, a citizen of the United States, and a resident of Easton, in the county of Northampton and State of Pennsylvania, have invented certain new and useful Improvements in Anchors, of which the following is a specification.

My invention relates to anchors for large and small vessels and crafts of every description; and the object of my invention is to devise such a form of construction of the anchor, and such a combination of the parts thereof that while possessing additional holding capacity, the danger of the flukes becoming fast in a rocky bottom, or otherwise, is to a large degree, if not altogether, obviated, thus reducing to the minimum the danger of losing the anchor.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which like letters of reference indicate like parts in all of the figures.

Figure 1 is a perspective view of my new and improved anchor. Fig. 2 is a plan view of the same; and Fig. 3 is a central sectional elevation, taken on line $x x$ of Fig. 1 and illustrating in dotted lines the action of lifting when the main flukes of the anchor are locked in rock crevices or ledges.

The main anchor flukes A A are by preference each constructed with three fluke points $a a' a^2$ and with a central tilting point b which latter serves to tip the anchor and prevent sliding which might otherwise occur on a smooth bottom. The main flukes A A are connected together by a shaft c on which they are free to turn to a limited extent. They are also connected by an auxiliary rod c' which passes loosely through aperture in the center of the anchor heads. This rod c' serves to limit the pivotal movement of the anchor flukes in this instance by the notched plates $d d$ of the shank D pivoted on the said shaft c . These plates, one or both—both as here shown,—are formed with stop lugs, $d' d'$ which span the rod c' , and the distance between the said lugs determines the distance of pivotal movement of the flukes. The shank D has also a pivotal movement on the shaft c , the distance of which is prescribed by the lugs d' and shaft c' , as clearly illustrated in Fig. 1.

B represents a guide for the anchor chain C, which guide is by preference in the form of a loop or link as shown clearly in Fig. 3, so that the chain may slide along the guide on either side of the shank D. The guide B may be rigid but I prefer to pivot it by means of a block b' on the shaft c . It is held in line with the shank D by recesses e formed at the inner end of the shank, and the sides of the shank are by preference channeled as shown at f to form a clearance for the chain in sliding along the guides.

$g g$ are rings attached to the inner end of the shank D for use in casting off and lifting the anchor on board.

When the anchor is cast off it will strike the bottom on the point b which will cause the anchor to tilt, and thus bring the points $a' a'$ or $a^2 a^2$ into action. When these catch the flukes will be tilted to the position shown in Figs. 1 and 3 causing the flukes $a a'$ to catch. At this time, and at all times the vessel is at anchor, the anchor chain C will stand at the outer end of the guide B. In hoisting, if the flukes are free and readily detached from the bottom the chain will remain at said outer end of the guide; but in case the flukes become fast, the chain will slide along the shank as indicated in dotted lines in Fig. 3 and thus invert or trip the anchor and withdraw its flukes by a direct upward, or by a backward and upward movement, so that under no circumstances can the anchor become permanently fast in the bottom.

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

1. In an anchor, the two three-fluked parts united by two rods or shafts and a shank pivoted on one of said rods and limited in its pivotal movement by the other rod combined with an anchor-chain guide which spans the said shank, substantially as described.

2. In an anchor the two three fluked parts and a shank pivoted on the front rod or shaft and limited in its pivotal movement by the other rod, combined with a pivoted chain guide which spans the said shank, substantially as described.

3. In an anchor the two three-fluked parts pivoted on and united by two rods or shafts and a shank pivoted on one of said rods, and

limited in its pivotal movement by the other in combination with an anchor-chain guide which spans the shank, substantially as described.

- 5 4. The anchor flukes A A formed with points a a' a^2 and united by front and rear rods or shafts, and a shank D pivoted on the front rod and limited in its pivotal movement by the rear rod, in combination with an anchor-chain guide B, which spans the shank

and which is attached to a block b' pivoted to the front rod or shaft, substantially as described.

Signed at Easton, in the county of Northampton and State of Pennsylvania, this 25th 15 day of May, A. D. 1893.

DAVID CLARK.

Witnesses:

C. STANLEY NEIMAN,
ELLSWORTH D. VOGEL.