

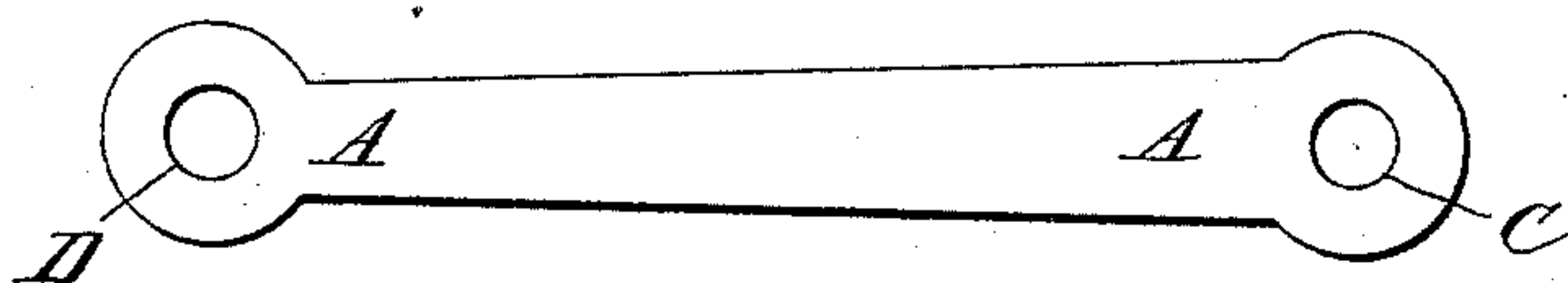
(No Model.)

H. O. DUNN.  
ANCHOR.

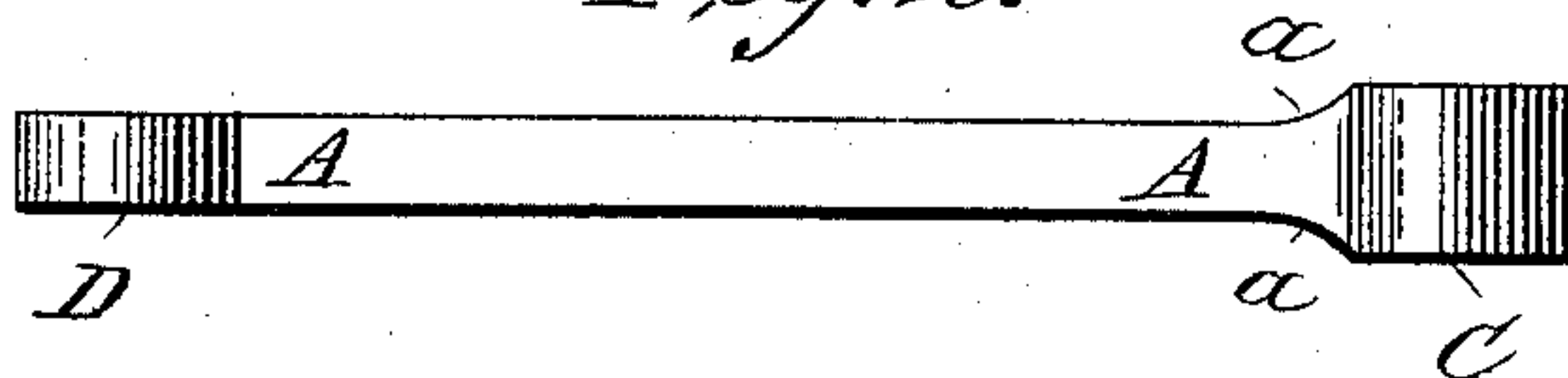
No. 395,429.

Patented Jan. 1, 1889.

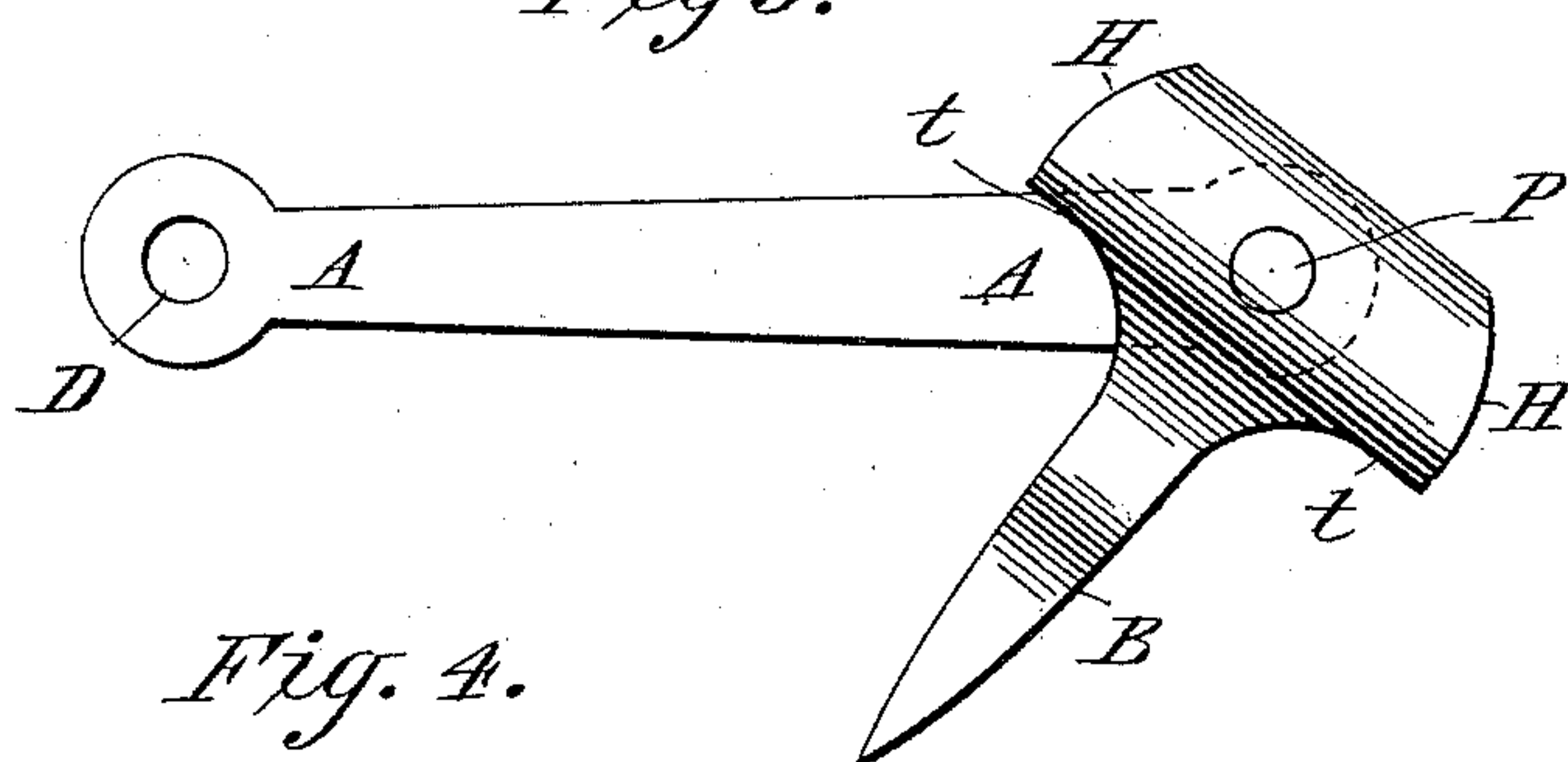
*Fig. 1.*



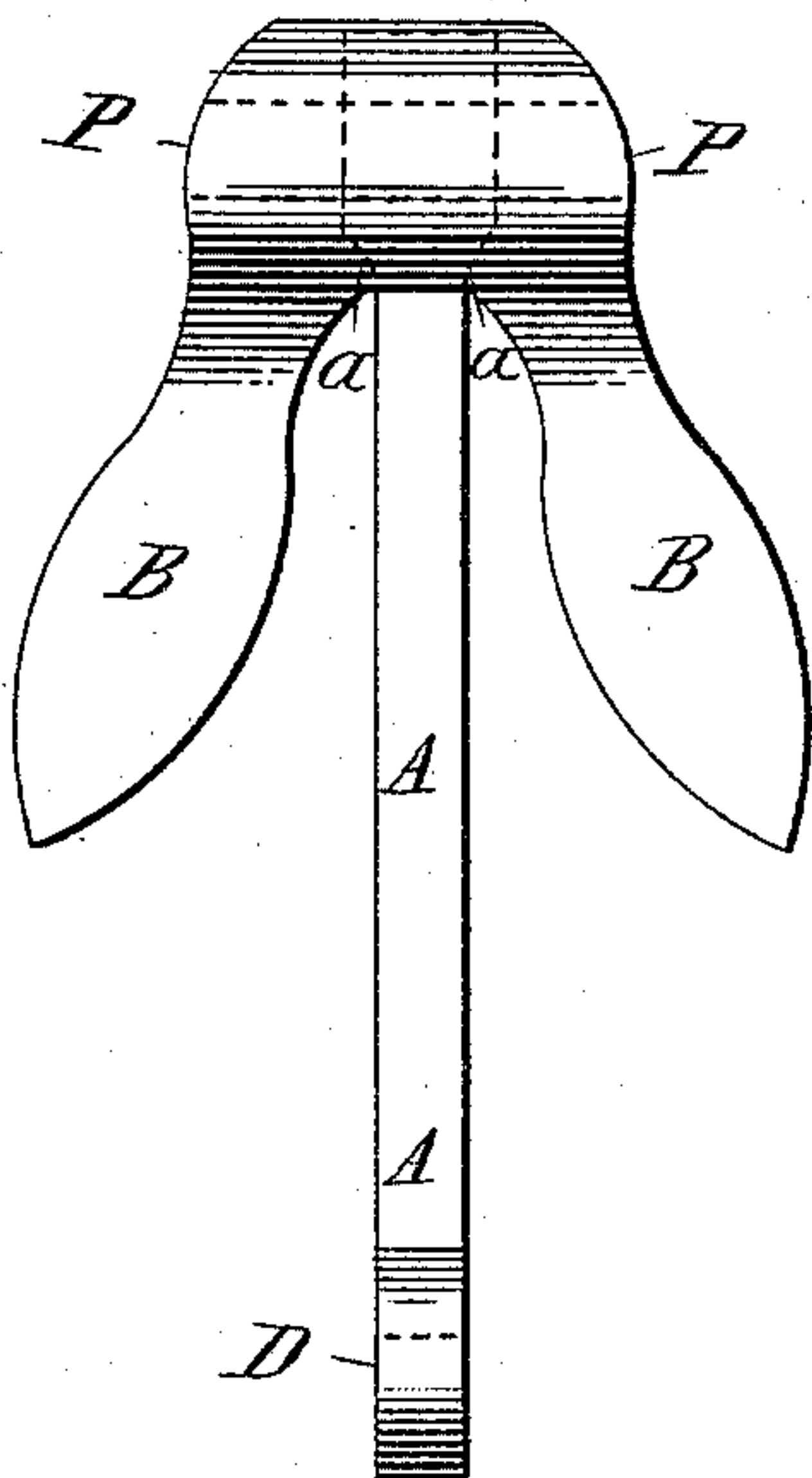
*Fig. 2.*



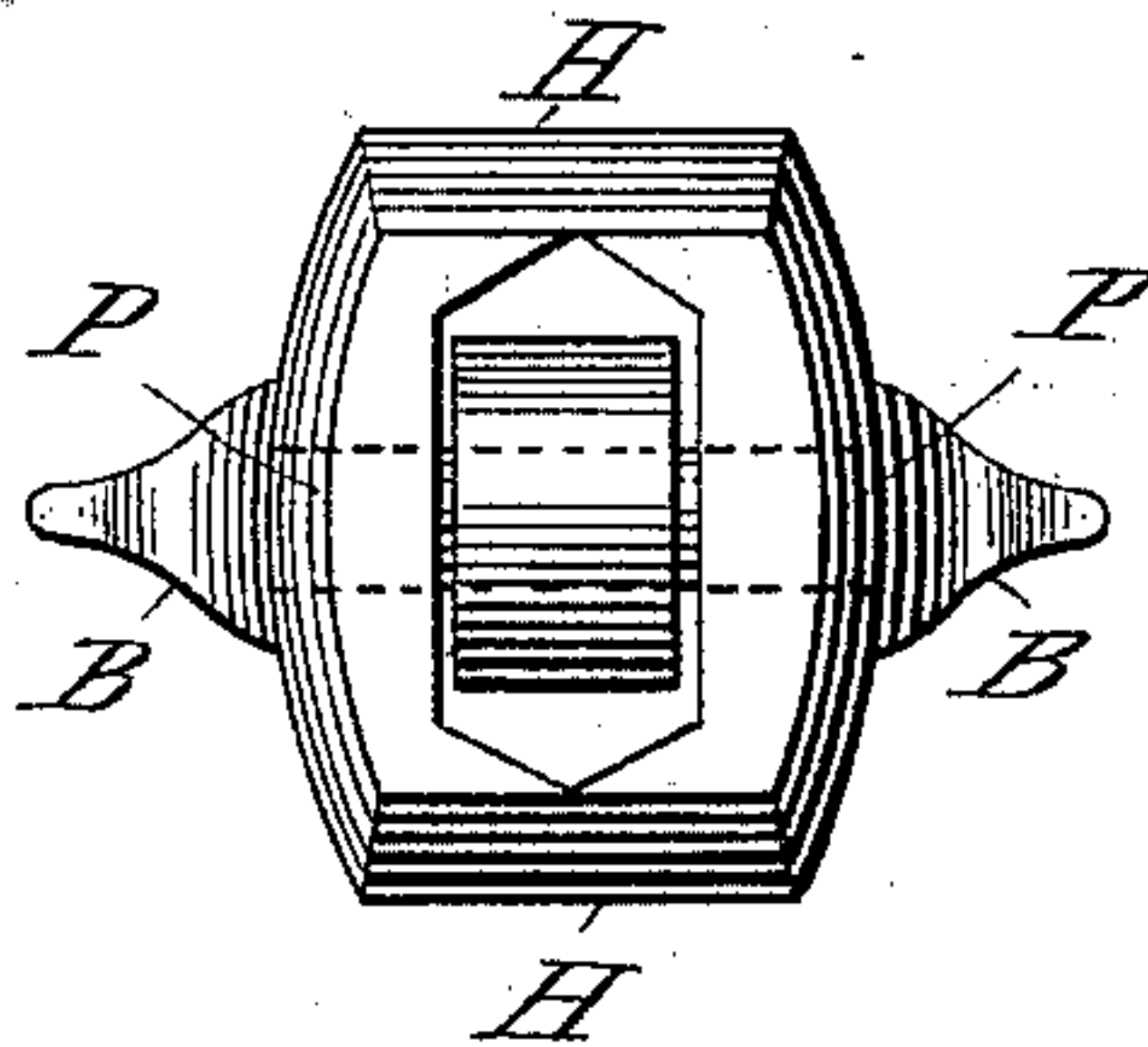
*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



Witnesses:

H. J. J. M. J.  
G. W. Denfeld.

Inventor:

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# UNITED STATES PATENT OFFICE.

HERBERT O. DUNN, OF WASHINGTON, DISTRICT OF COLUMBIA.

## ANCHOR.

SPECIFICATION forming part of Letters Patent No. 395,429, dated January 1, 1889.

Application filed June 1, 1888. Serial No. 275,784. (No model.)

*To all whom it may concern:*

Be it known that I, HERBERT O. DUNN, a citizen of the United States, residing at Washington, in the District of Columbia, have invented a New Anchor, of which the following is a specification.

My invention relates to the kind of anchors having movable flukes, and its object is to simplify the construction and improve the efficiency of such anchors, and at the same time insure quick "biting" or "taking" power of the flukes. In addition it prevents the loss of any part of the anchor should the axial bolt or pin be broken in actual use. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of the shank A A, with a cylindrical opening, D, for the pin of the anchor-shackle, and a cylindrical opening, C, through which passes the axial bolt P P, Figs. 4 and 5, which connects the combined crown H H and flukes B B of the anchor to the shank.

Fig. 2 is a plan of the shank, showing the tapering enlargement of the head at *a a*. This shank is placed through the central longitudinal opening in the crown H H, Fig. 5, from the crown end of the anchor, and is prevented from being pulled out, should the axial bolt break, by diminishing the size of the opening on the fluke side, as shown in Fig. 4 at *a a*.

Fig. 3 is an elevation of the anchor, showing the anchor in its position when in action. P is the axial bolt or pin connecting the shank A A to the crown H H and flukes B. The crown or head of the anchor is made in one piece with the flukes B B, Fig. 4, and the opening between the flukes and through the crown is so cut away on the fluke side that the shank A A abuts against the inside, taking the strain in weighing the anchor, and preventing the flukes from making more than fifty degrees angle with the shank. The flukes B B, together with the crown H H, turn on the axial bolt P to fifty degrees each side of the longitudinal line of shank A A and insure the engagement of the flukes whichever side the anchor falls on.

Fig. 4 is a horizontal plan of the anchor,

showing the spread of the flukes B B, which insures the anchor's turning quickly and engaging both flukes, thereby performing the functions of a stock.

*a a*, Fig. 4, shows the contraction of the opening in the head of the anchor between the shoulders of the flukes, which prevents the shank from pulling out and the head of the anchor from being lost should the axial bolt P P break or be removed.

Fig. 5 is a view of the anchor from the crown, showing the longitudinal opening through which the shank is inserted; also, the axial bolt P P, which connects the crown and shank.

As the figures show, the principal weight of this anchor is in the crown, which, with the spread of the flukes and the concave surface *t t*, Fig. 3, insures certain and quick engagement of the flukes.

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

1. In an anchor having a crown-piece integral with two spread flukes containing a longitudinal opening contracted on the fluke side, a shank with an enlarged tapered head containing a transverse cylindrical opening, said shank passing through the opening in the crown-piece, in combination with an axial bolt passing transversely through the shank-head and crown-piece, connecting the two, and allowing flukes to actuate each side of the shank, substantially as specified.

2. In an anchor having a crown-piece integral with two spread flukes containing a longitudinal opening shaped to fit a tapered shank-head and contracted on the fluke side, a bolt or pin, in combination with a shank having an enlarged tapered head containing a transverse cylindrical opening, said shank passing through the crown-piece and connected thereto by said bolt passing transversely through the crown-piece and shank-head, allowing angular motion, substantially as set forth.

3. In an anchor having an enlarged headed shank containing a transverse cylindrical opening for axial bolt, a crown-piece integral with two spreading flukes containing a longitudinal slot or opening allowing shank-head

to actuate, in combination with an axial bolt,  
so that the shank has angular motion each  
sides of flukes, said slot or opening being con-  
tracted between the shoulders of the flukes  
5 and preventing detachment of shank in case  
of removal of axial bolt, substantially as  
specified and set forth.

Signed at Washington, in the District of  
Columbia, this 24th day of May, 1888.

H. O. DUNN.

Witnesses:

W. S. SCHLEY,  
G. W. DEUFELD.