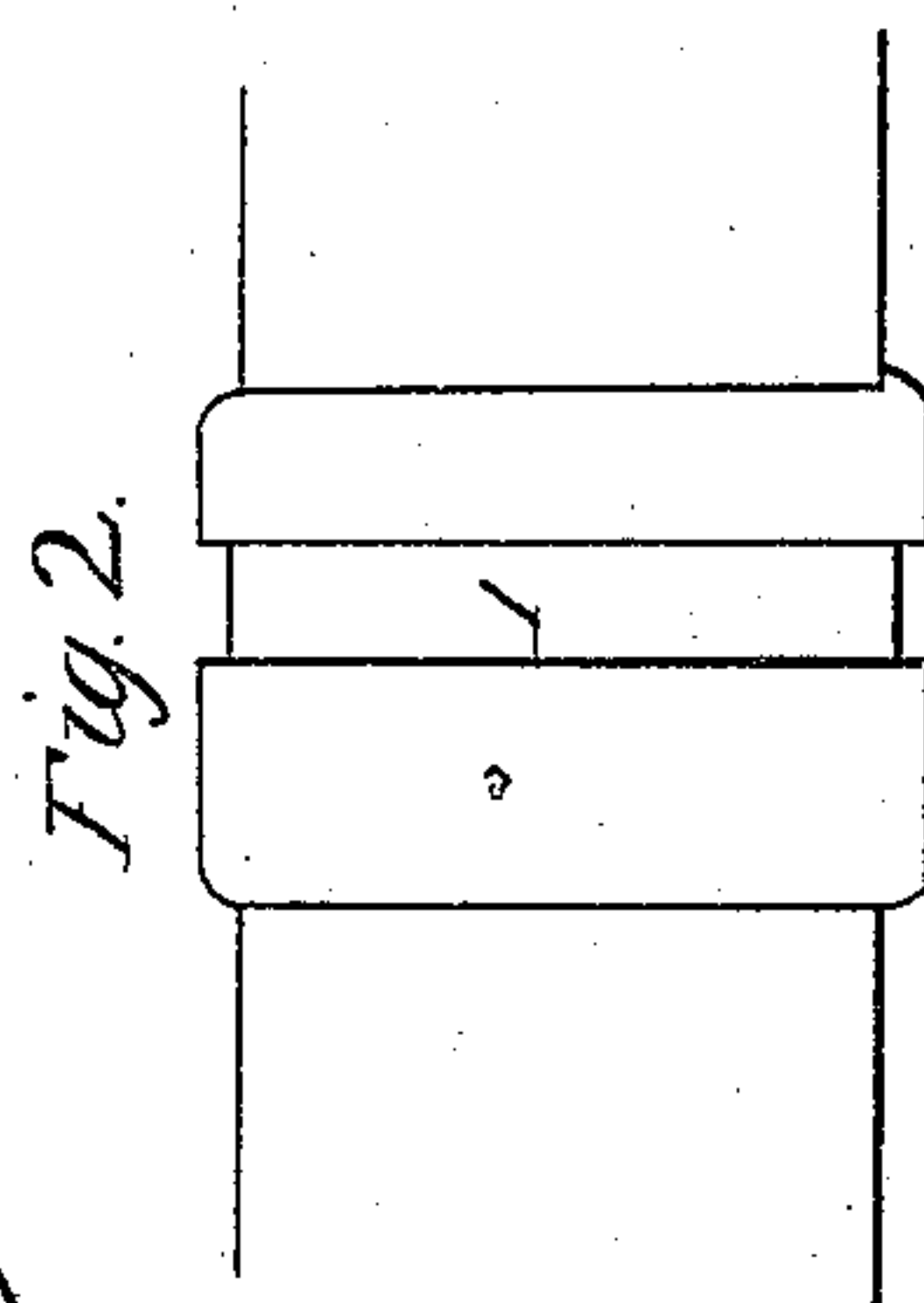
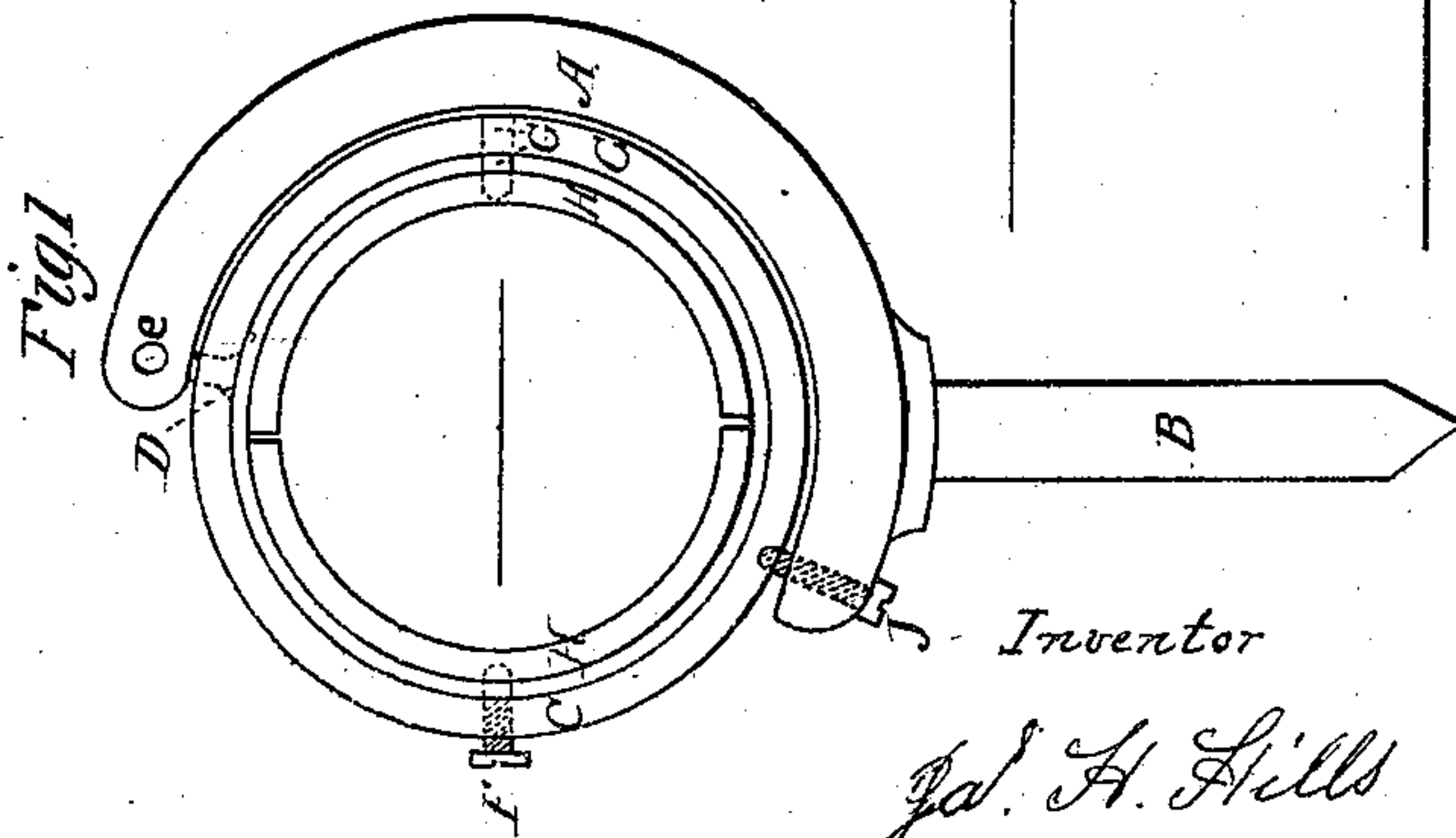
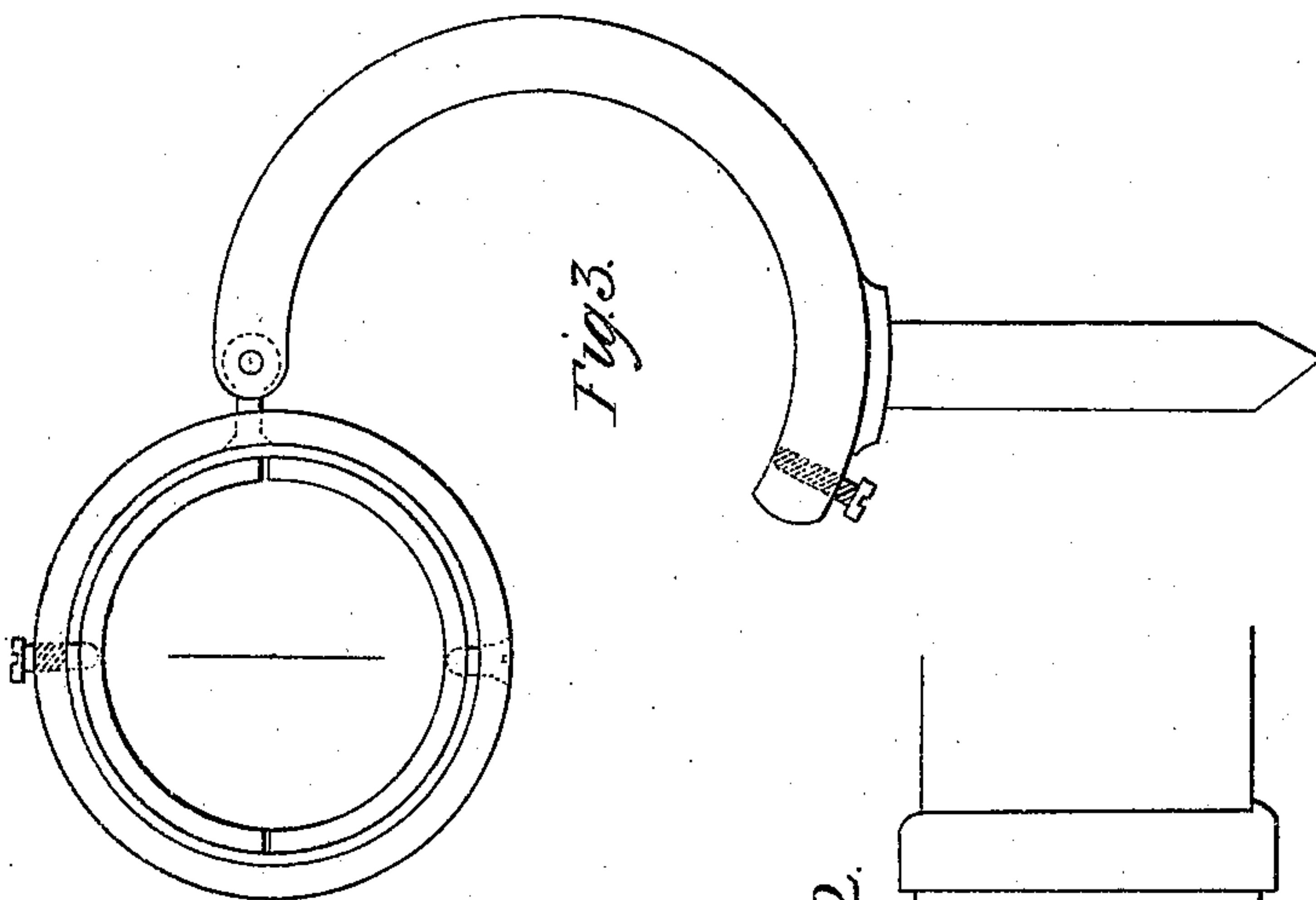
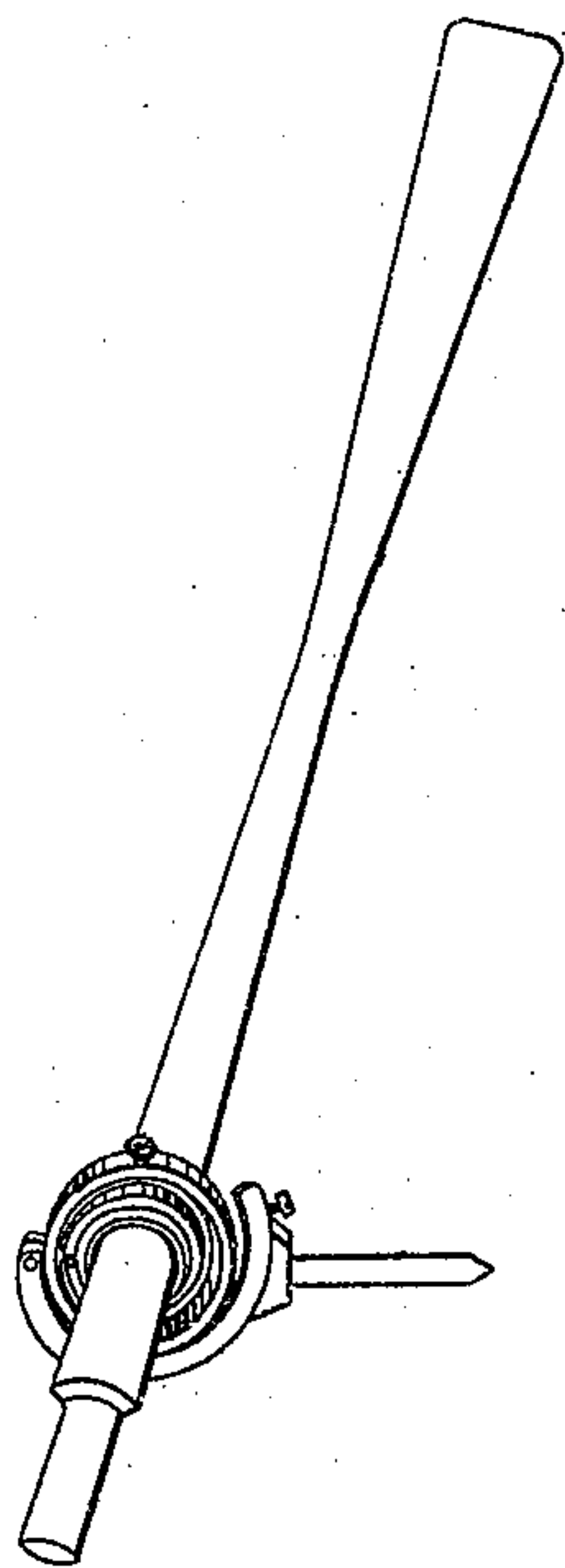
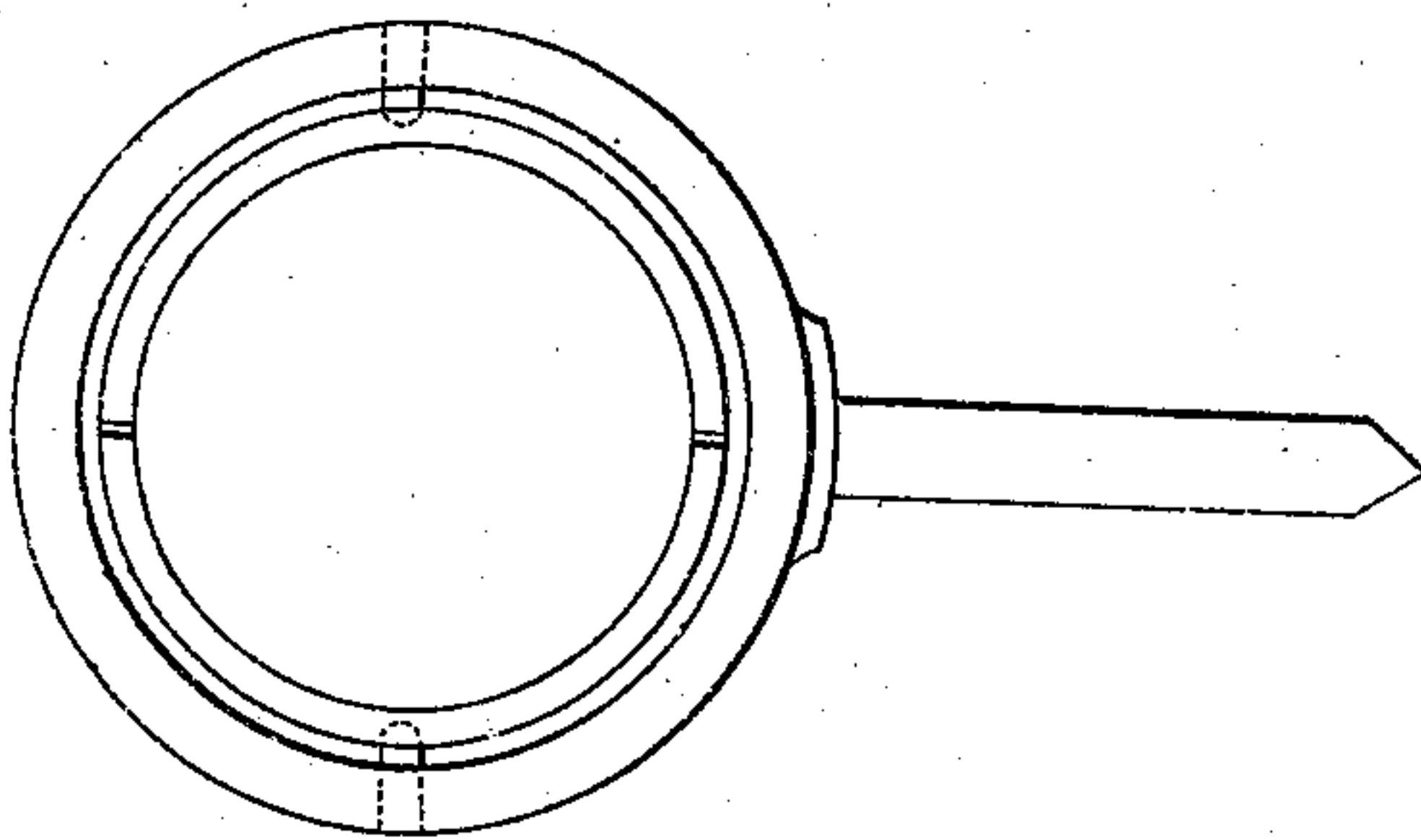
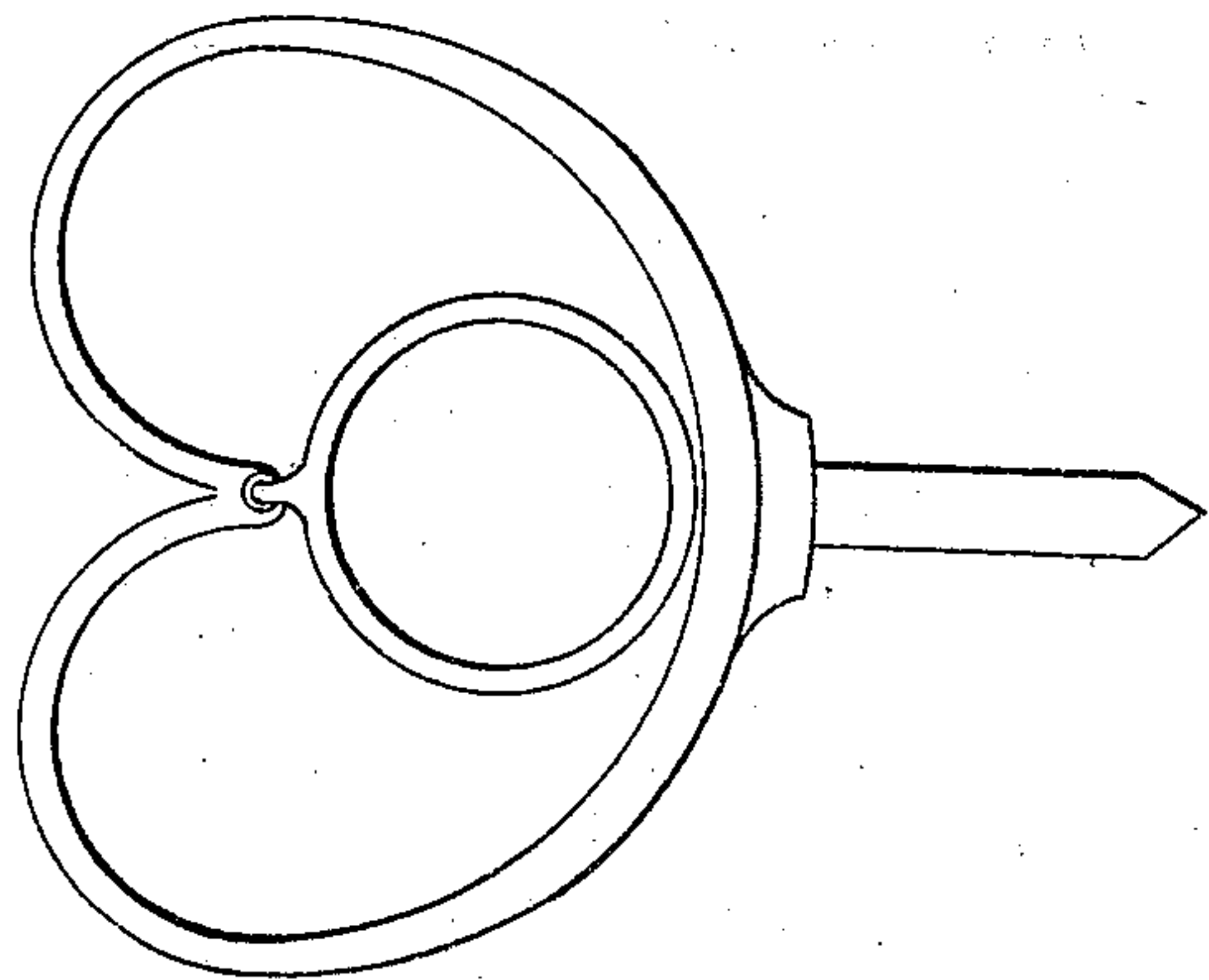


J. H. Hills.
Oar Lock.

Nº 19,851.

Patented Apr. 6, 1858.



Witnesses
Wm. Weston
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Inventor
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UNITED STATES PATENT OFFICE.

JAMES H. HILLS, OF BURLINGTON, VERMONT.

IMPROVED ROWLOCK.

Specification forming part of Letters Patent No. 19,851, dated April 6, 1858.

To all whom it may concern:

Be it known that I, JAMES H. HILLS, of Burlington, in the county of Chittenden and State of Vermont, have invented a new and Improved Rowlock for Row-Boats; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in constructing a rowlock in any convenient form, from the top of which the oar is suspended, and when operated in rowing the boat the oar will feather itself when the boatman may desire so to use it, or by the use of set-screws, as hereinafter described, the oar will cease to be a self-feathering oar, but may be feathered by the boatman with ease by turning the oar within a ring which encircles it, as hereinafter described.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I construct a rowlock of metal, the standard or support of which may be nearly in the form of a half-circle, as shown in the accompanying drawings, Figure 1, (marked A,) with a pin at the bottom thereof, (marked B in said Fig. 1,) which pin is made to fit into a socket attached to the side of a row-boat in a suitable position. I construct a ring (marked C in said Fig. 1) and attach it to said standard with a swivel (marked D) in said ring inserted into said standard and attached thereto, with a pin passing through the standard and upper end of the swivel, which forms a joint at point marked *e* in said Fig. 1. A set-screw passes through said ring at point F in said Fig. 1, and opposite thereto, at point marked G, a bearing passes through said ring, and within said ring I place two half-rings of proper size, which are marked H in Fig. 1. When set-screw F is screwed up, it presses the opposite half-ring against said bearing G, and said set-screw F and bearing G form pivots on which said half-rings (which form a circle when placed within the first-described ring, as shown in Fig. 1) turn.

I construct an oar of suitable form and a

band upon it, as shown in Fig. 2 of said drawings, (which Fig. 2 represents said band and a section of the oar,) with a groove in the band, as shown at point marked I in said Fig. 2, which band is placed within said half-rings, and confined thereby screwing the set-screw F against the half-ring with which it comes in contact. When this oar is used as a self-feathering oar, said screw at point F in drawing Fig. 1 is screwed up tight, so as to have said half-rings clamp the oar and prevent its turning within the said half-rings; but when the oar is feathered by turning it in the hand of the boatman, then said screw at point F in Fig. 1 is screwed up only to a point that will leave sufficient space between the band on the oar and said half-rings H for the band to turn easily within said half-rings. Within said band I in Fig. 2 the oar is placed and permanently attached at a suitable distance from the handle of the oar. I also insert a set-screw through the standard A in Fig. 1, at point J, which, when screwed up, so that the point of the screw enters into the ring marked C in Fig. 1, confines the ring C to the standard A, and at the same time forms a pivot, which, with swivel D in Fig. 1 as an opposite pivot, fixes the oar in a position to be worked backward and forward, but not feathering itself. When the set-screw J in Fig. 1 is screwed back, so as to leave said ring (marked C in Fig. 1) free from its confinement at that point, and the set-screw at point F in Fig. 1 is screwed up, so as to clamp the oar tight, (the blade of the oar being first placed in a horizontal position,) then when the handle of the oar is pushed forward in rowing the boat and the oar raised preparatory to its being dipped into the water the blade of the oar is thrown into a perpendicular position and thus enters the water and continues in that position until the force of the stroke is spent, when, as it comes out of the water, the blade of the oar by the action of the joint at point marked *e* in Fig. 1 falls into its former horizontal position, and thus, in the language of boatmen, feathering the oar.

Fig. 3 in said drawings shows the oar and rings attached thereto thrown out from the

standard or support preparatory to the blade of the oar being dipped into the water.

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

The arrangement and combination of half-rings H and set or adjusting screws F and J, and the suspension and operation of the

oar at point e, substantially in the mode and manner above described.

JAS. H. HILLS.

Witnesses.

WM. WESTON,
ELLEN M. HOLT.