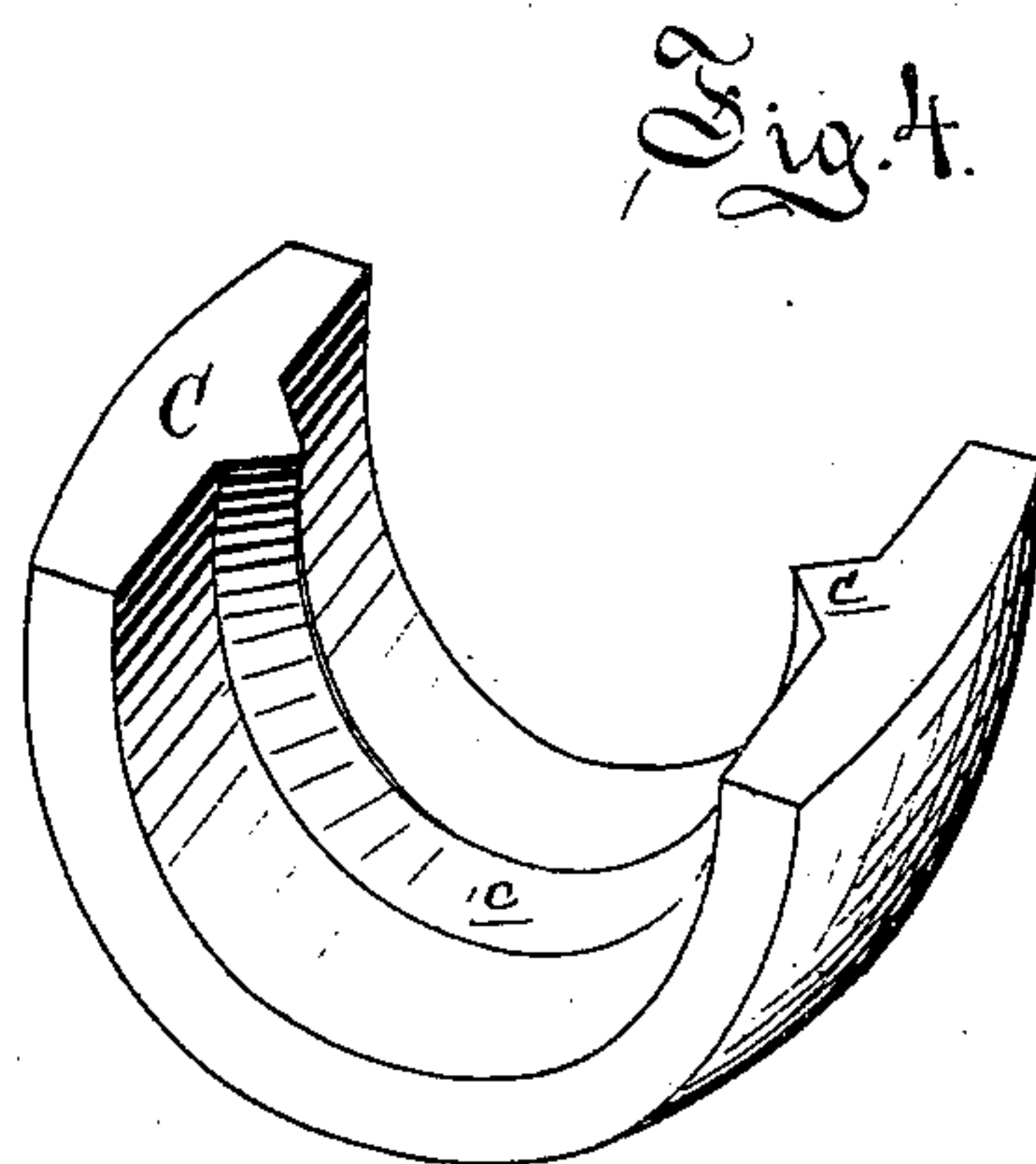
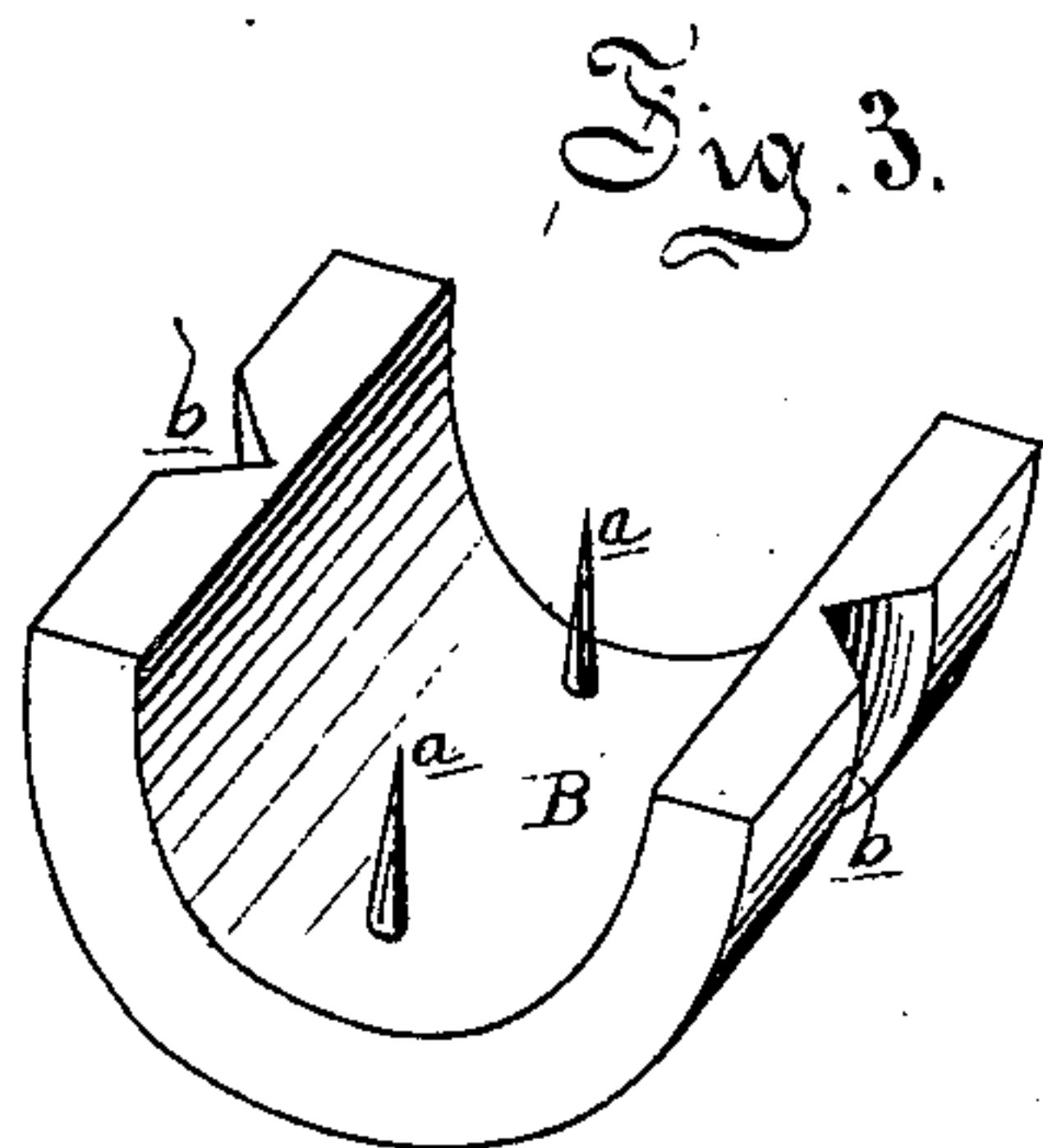
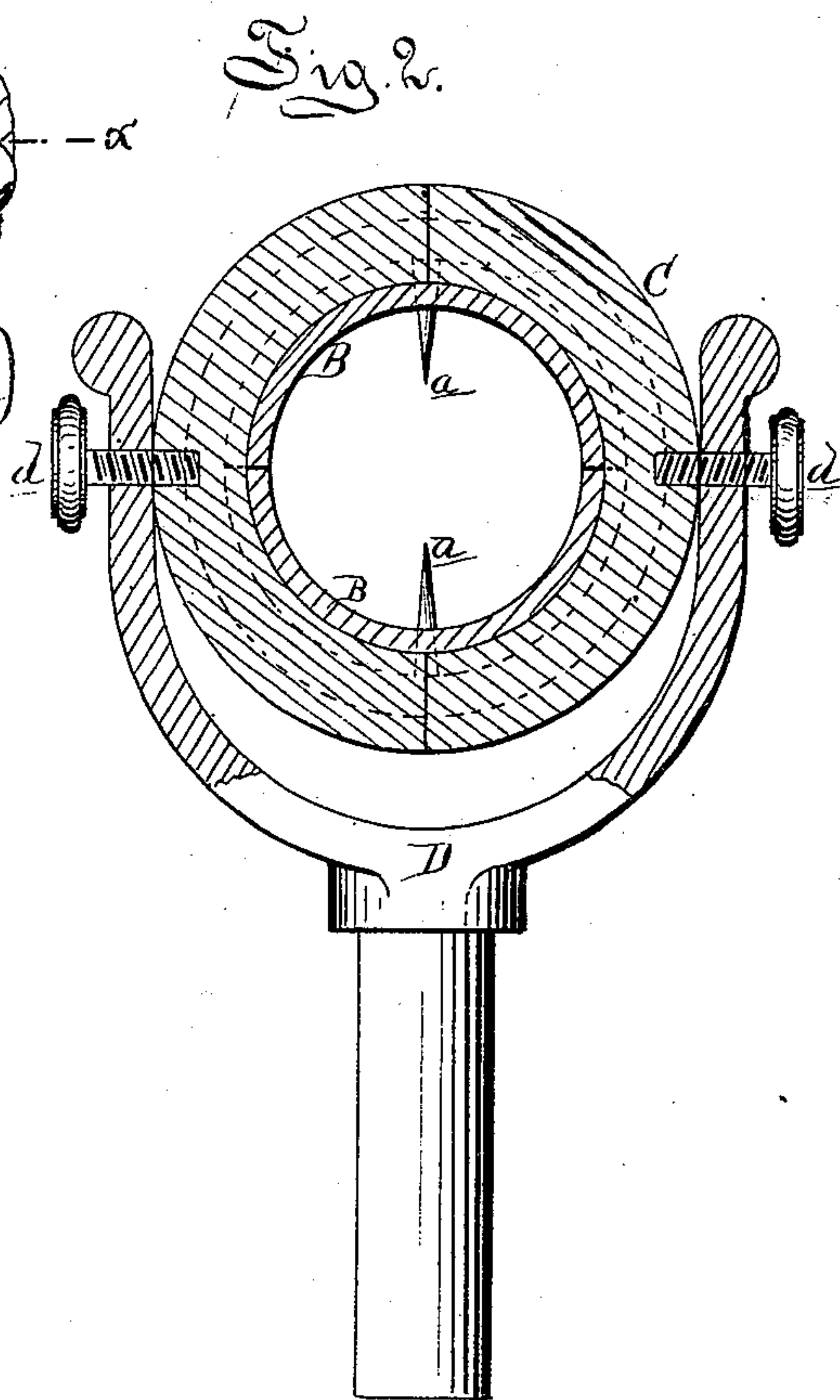
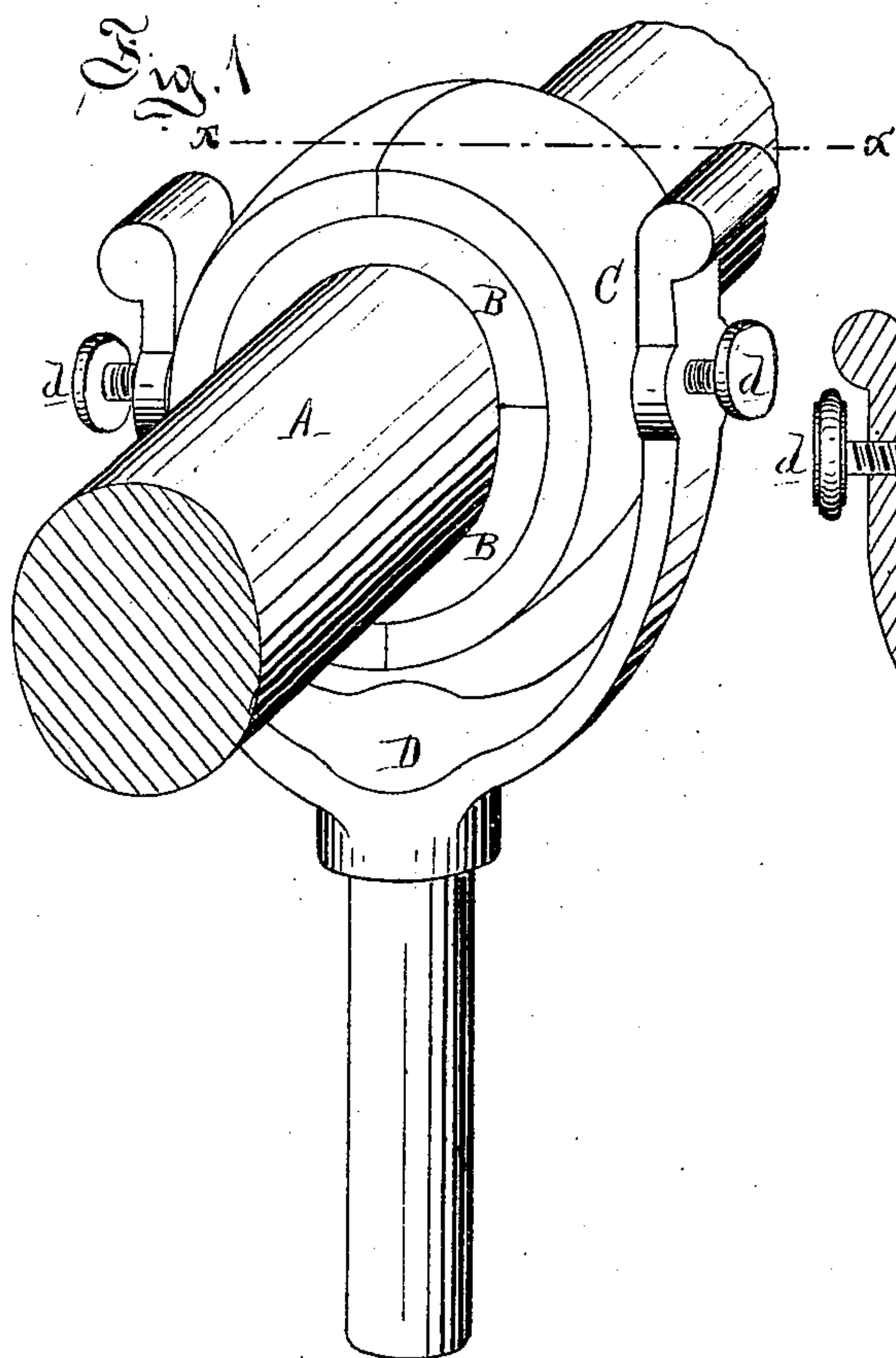


J. S. DOUGHERTY.

Row-Lock.

No. 168,000.

Patented Sept. 21, 1875.



Attest:
Edward Parthel.
Wm. P. Spalding

Inventor:
J. S. Dougherty
By Atty
Thos. S. Sprague

UNITED STATES PATENT OFFICE.

JOHN S. DOUGHERTY, OF SOUTH BAY CITY, MICHIGAN, ASSIGNOR TO
HIMSELF AND RODNEY ELLIS, OF SAME PLACE.

IMPROVEMENT IN ROWLOCKS.

Specification forming part of Letters Patent No. **168,000**, dated September 21, 1875; application filed
July 12, 1875.

To all whom it may concern:

Be it known that I, JOHN S. DOUGHERTY, of South Bay City, in the county of Bay and State of Michigan, have invented an Improvement in Rowlocks, of which the following is a specification:

My invention has for its object to so construct a rowlock that it will permit of the "feathering" of the oar, while the latter cannot be detached from the gunwale or outrigger without lifting the thole-pin out of its socket; and it consists in a collar and a sleeve, each made in two parts, the former secured to the loom of the oar, and the latter pivoted to a forked swivel thole-pin inserted in a socket in the gunwale or outrigger, as more fully hereinafter set forth.

Figure 1 is a perspective view, showing, also, a part of the loom of the oar. Fig. 2 is a cross-section at *x x*. Fig. 3 is a perspective view of one-half of the collar. Fig. 4 is a similar view of one-half of the sleeve.

In the drawing, A represents a part of the loom of an oar, banded by a two-part metal collar, B, having studs *a* on the inside of each half to keep it in place. The collar is cast with a V-groove, *b*, in its periphery. C is a sleeve, made in two parts, with an inner rib, *c*, which is received in the groove of the collar when clasped around it. D is a swivel-forked

thole-pin, in whose jaw the sleeve C is hung on two trunnion-screws, *d*, each being journaled through a hole drilled in the end of the jaw and tapped into the sleeve-section, thus securing the two parts of sleeve C and inner sleeve B together.

The pin is inserted in a suitable socket in the gunwale or outrigger, and turns therein at each sweep or stroke of the oar. The trunnions permit the oar to rise and fall in the vertical plane, while the collar rotates in the sleeve in the axis of the loom, to permit of the feathering of the oar.

What I claim as my invention is—

The oar-lock described, consisting of the collar B, constructed in two parts, and having the groove *b* on its outer surface; the sleeve C, made in two parts, and having the rib *c* on its inner surface, adapted to turn in the groove on the collar B, and the forked thole-pin D, the said sleeve C, collar B, and oar being pivoted to the forked end of the said thole-pin by the trunnion-screws *d*, when the several parts are constructed and arranged to operate substantially as described and shown.

JOHN S. DOUGHERTY.

Witnesses:

H. F. EBERTS,
H. S. SPRAGUE.