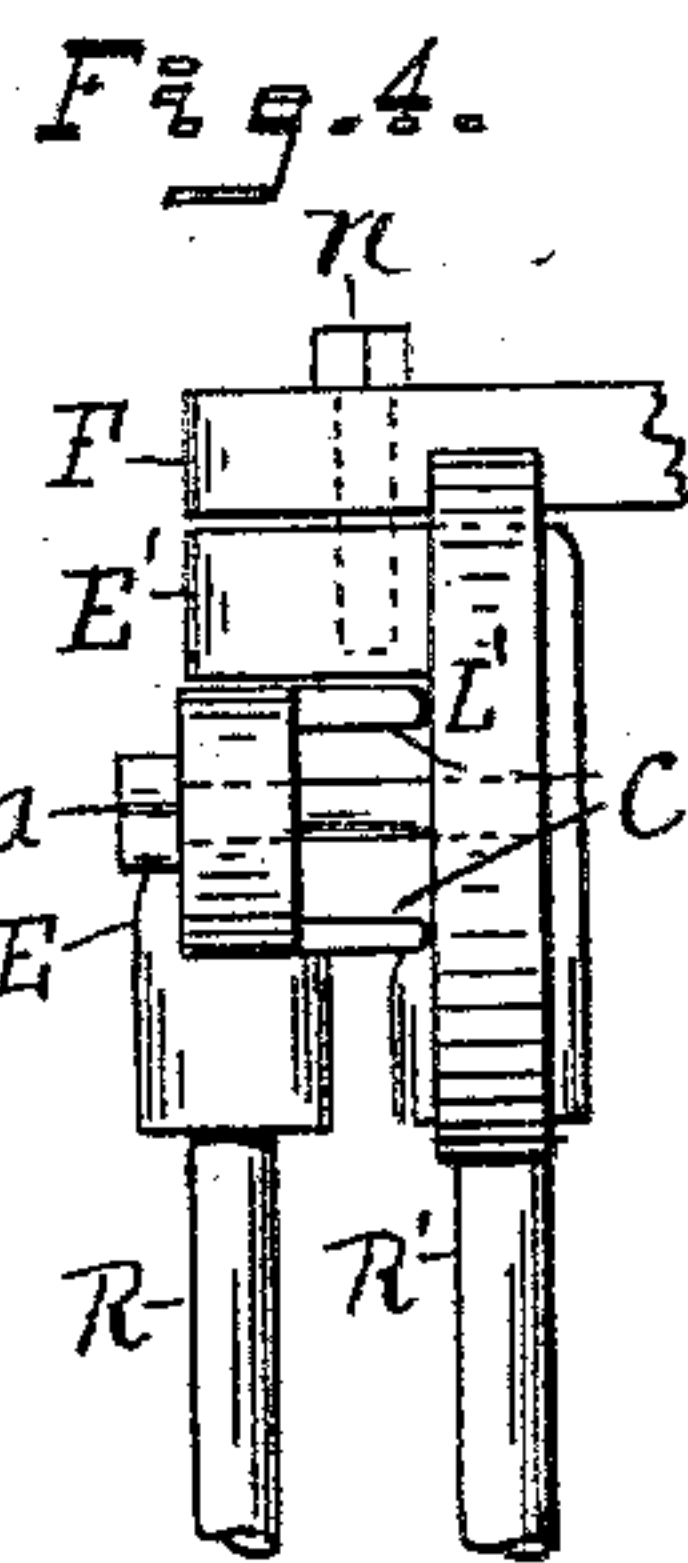
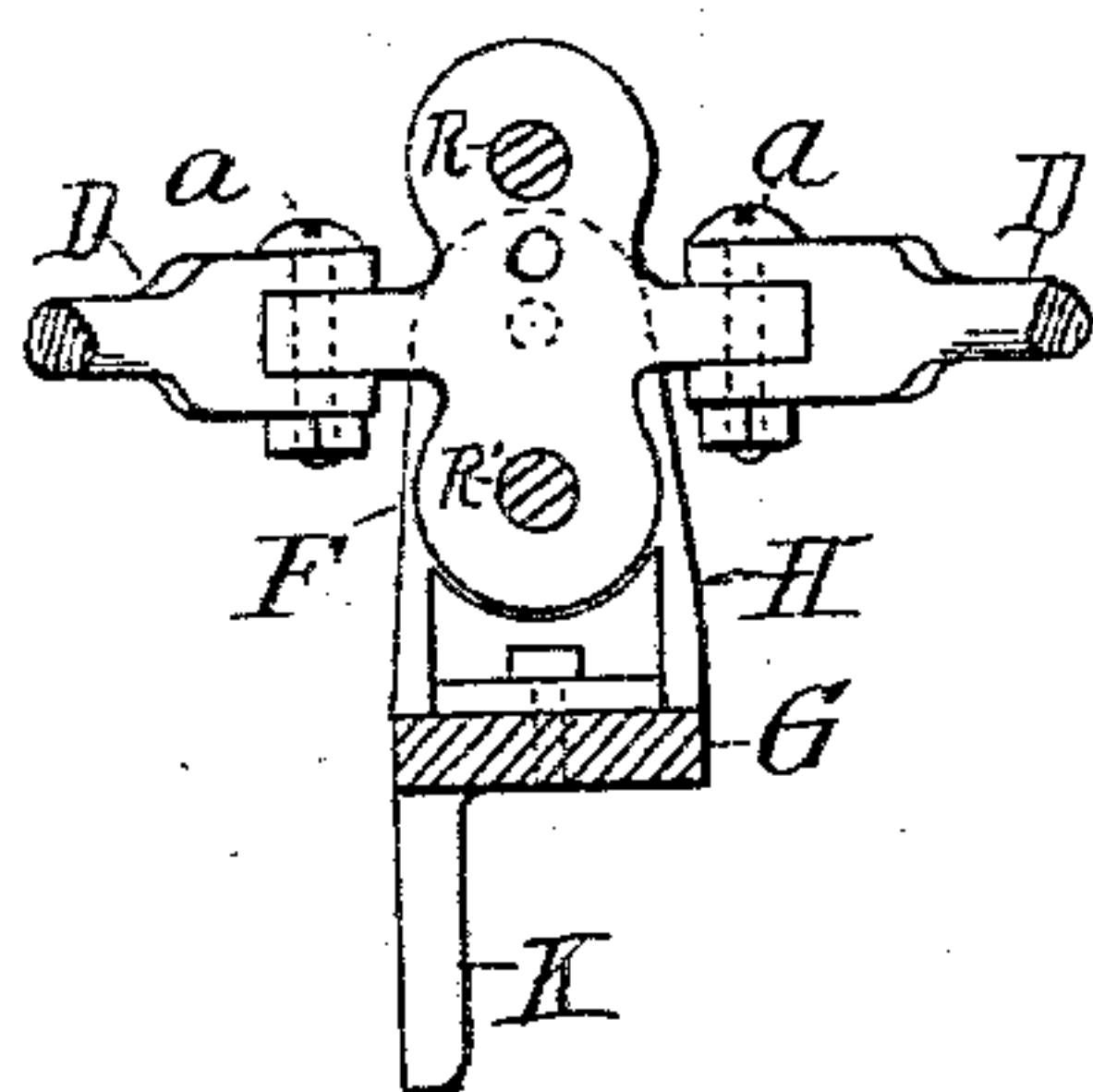
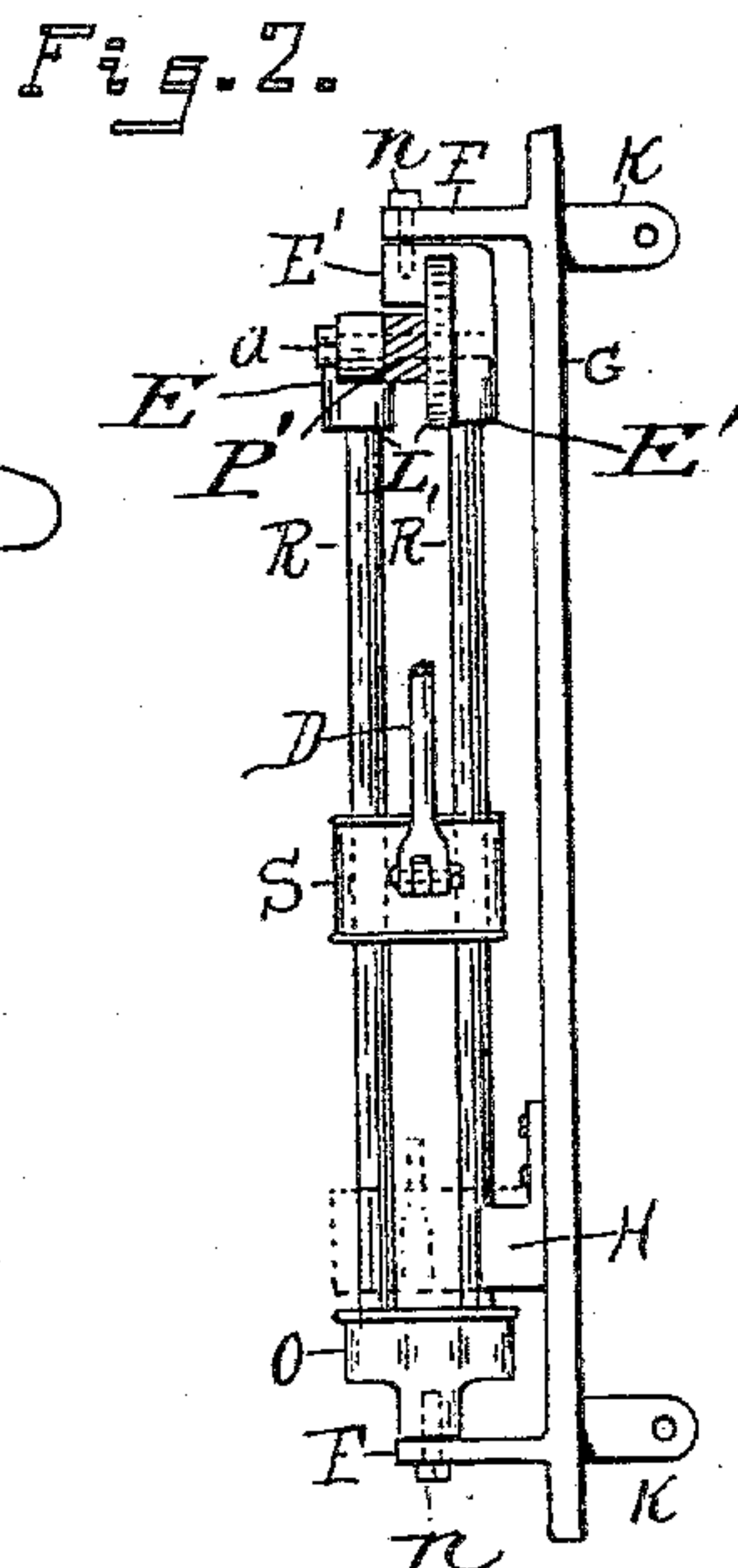
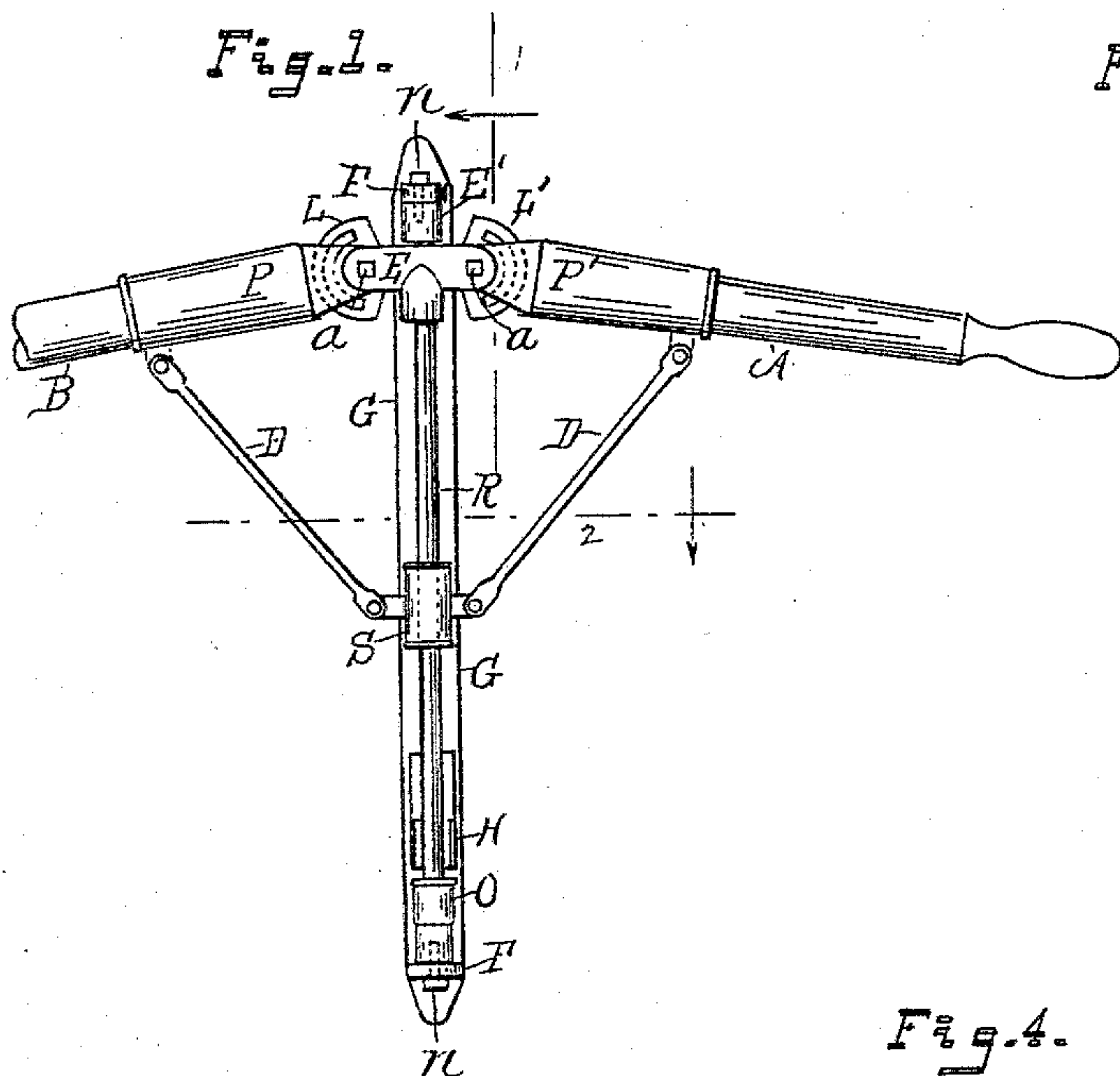


(No Model.)

A. C. DICE.
BOW FACING OAR.

No. 597,399.

Patented Jan. 18, 1898.



Witnesses

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UNITED STATES PATENT OFFICE.

ARTHUR C. DICE, OF JOLIET, ILLINOIS.

BOW-FACING OAR.

SPECIFICATION forming part of Letters Patent No. 597,399, dated January 18, 1898.

Application filed August 20, 1897. Serial No. 648,888. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR C. DICE, a citizen of the United States of America, residing at Joliet, in the county of Will and State of Illinois, have invented certain new and useful Improvements in Bow-Facing Oars, of which the following is a specification, reference being had therein to the accompanying drawings and the letters of reference thereon, forming a part of this specification, in which—

Figure 1 is a plan view. Fig. 2 is a side view of Fig. 1, taken on line 1, looking in the direction of the arrow. Fig. 3 is a cross-sectional view of Fig. 1, taken on line 2, looking in the direction of the arrow; and Fig. 4 is a side view of the castings forming the heads to which the inner ends of the parallel rods are attached, showing the manner of their attachment together by means of a bolt and showing supporting-lugs for preventing said heads from being brought in too close contact with the oar thus preventing friction of the oar with said heads.

This invention relates to certain improvements in bow-facing oars for boats or vessels, which improvements are fully set forth and explained in the following specification and claim.

Referring to the drawings, G represents a bar or rod having the depending lugs K provided with eye-holes, by means of which the device may be attached to the gunwale of a boat, and having the upwardly-extending arms F, one located at each end of said rod or bar G, for supporting the oscillating frame carrying the oars.

R and R' are a pair of parallel bars each having one end secured in a head O and having their opposite ends secured, respectively, in the cap-plate E and the head E', as shown particularly in Figs. 2 and 4. The frame thus formed of the two parallel rods R and R' and said heads O and E' and cap-plate E are pivotally supported by and between the arms F F' by means of the pivot-bolts *n n* in such manner that said parallel bars may oscillate between said arms for the purpose of permitting the oars to be dipped in and out of the water. The cap-plate E is T-shaped, as shown in Fig. 1, and is provided with holes at or near the extremity of

the said I-head with pivot-bolts *a* for connecting it. Said cap-plate E is provided with a pair of oppositely-arranged integral legs C for supporting said plate on the head E' for preventing said cap-plate and head from clamping too tightly the ends of the oar-socket P and handle-socket P' between them when the nuts on bolts *a a* are turned up tightly, and thereby prevent great friction between said parts.

P is a metal socket having its inner end pivotally attached to said head E' and cap-plate E by means of the bolt *a* and rests on the segment-plate L, integral with head E', and receives within its socketed outer end the oar B. P' is a similar matching metal socket having its inner end similarly pivotally connected to said head E' and cap-plate E and resting on a similar segment-plate L' and receives within its socketed outer end the oar-handle A.

S is a sliding head arranged to slide on the parallel rods R R' and is connected, respectively, with the sockets P P' by means of the link-rods D D, so that the oar-handle A and the oar B are connected through the medium of sliding head S, link-arms D, and sockets P P' in such manner that when the oar-handle A is vibrated it will vibrate the oar B.

H is a lock formed of a piece of metal formed on its upper side like a trough and secured to the bed-rod G, as shown in Figs. 2 and 3. This trough-shaped lock is intended to receive the sliding head S when moved outward to its fullest extent, as shown in broken lines in Fig. 2, and thus prevent the oscillation of the parallel rods and the oar and parts connected with said rods when the oar is brought to a position parallel with the gunwale of the boat for the purpose of securing the oar and its handle from opening from each other when they are not in use.

In operation the device is attached to the gunwale of a boat by means of the arms K, as stated. The boatman then grasps the oar-handle A while sitting facing the bow of the boat and vibrates it in the ordinary manner, and by means of its connection with the oar B will cause it to vibrate in like manner, and the oscillation of the parallel rods and the parts connected with them causes the oar and its handle to oscillate, so the oar can be

dipped in and out of the water in the ordinary manner.

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

The bow-facing oar comprising the combination of the bed-frame F, G, K, oscillating frame pivotally supported in said bed-frame in such manner as to oscillate therein and comprising the parallel rods R R' and their heads O, E' and cap-plate E, the oar B, P and oar-handle A, P', respectively pivotally con-

nected to said oscillating frame, the sliding head S arranged on said parallel bars, the link-rods D, D, connecting the oar and the oar-handle with said sliding head, and the lock-plate H for engaging said oscillating frame to prevent its oscillation, all arranged to operate substantially as and for the purpose set forth.

ARTHUR C. DICE.

Witnesses:

THOS. H. HUTCHINS,
J. R. SHULTZ.