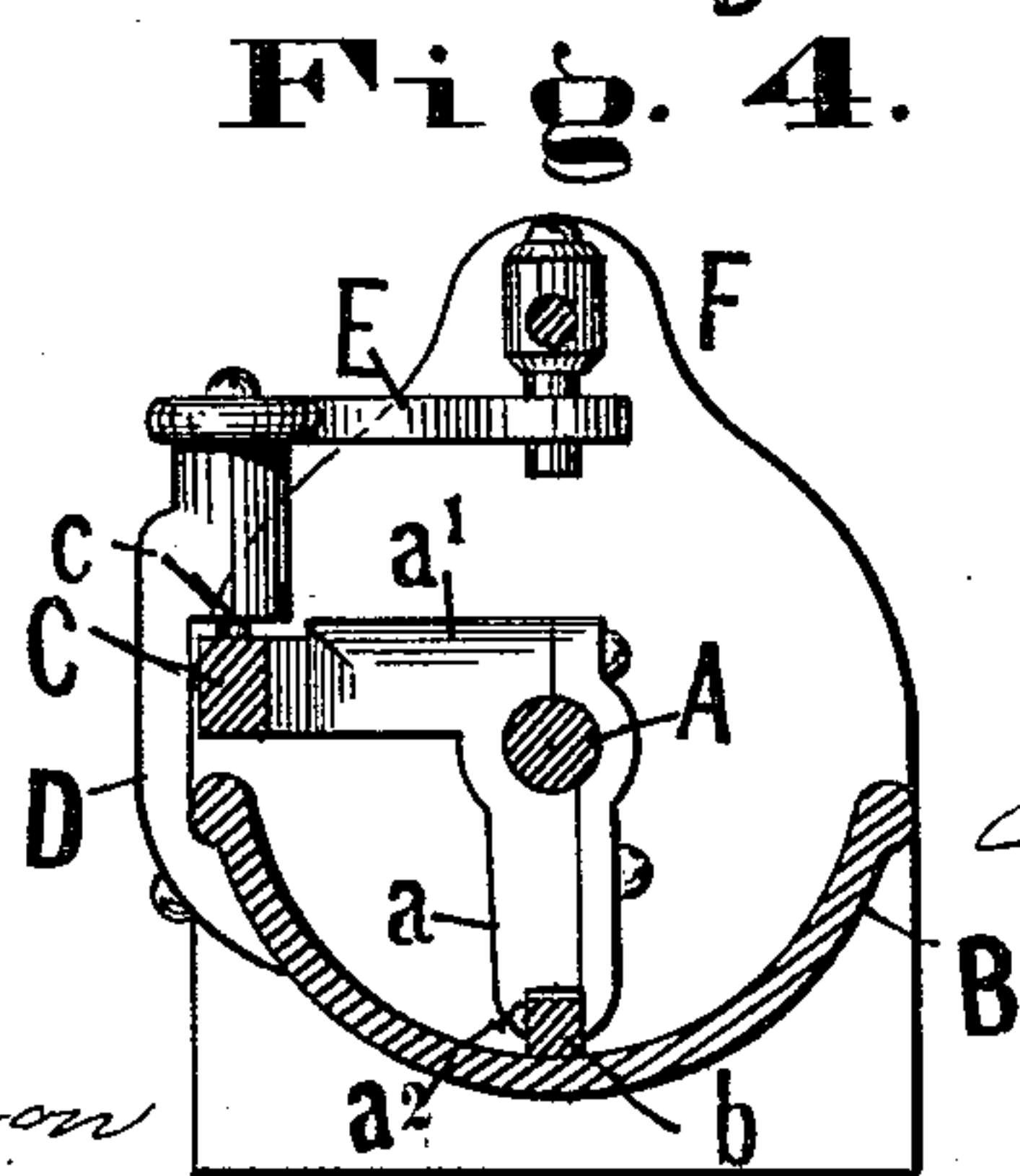
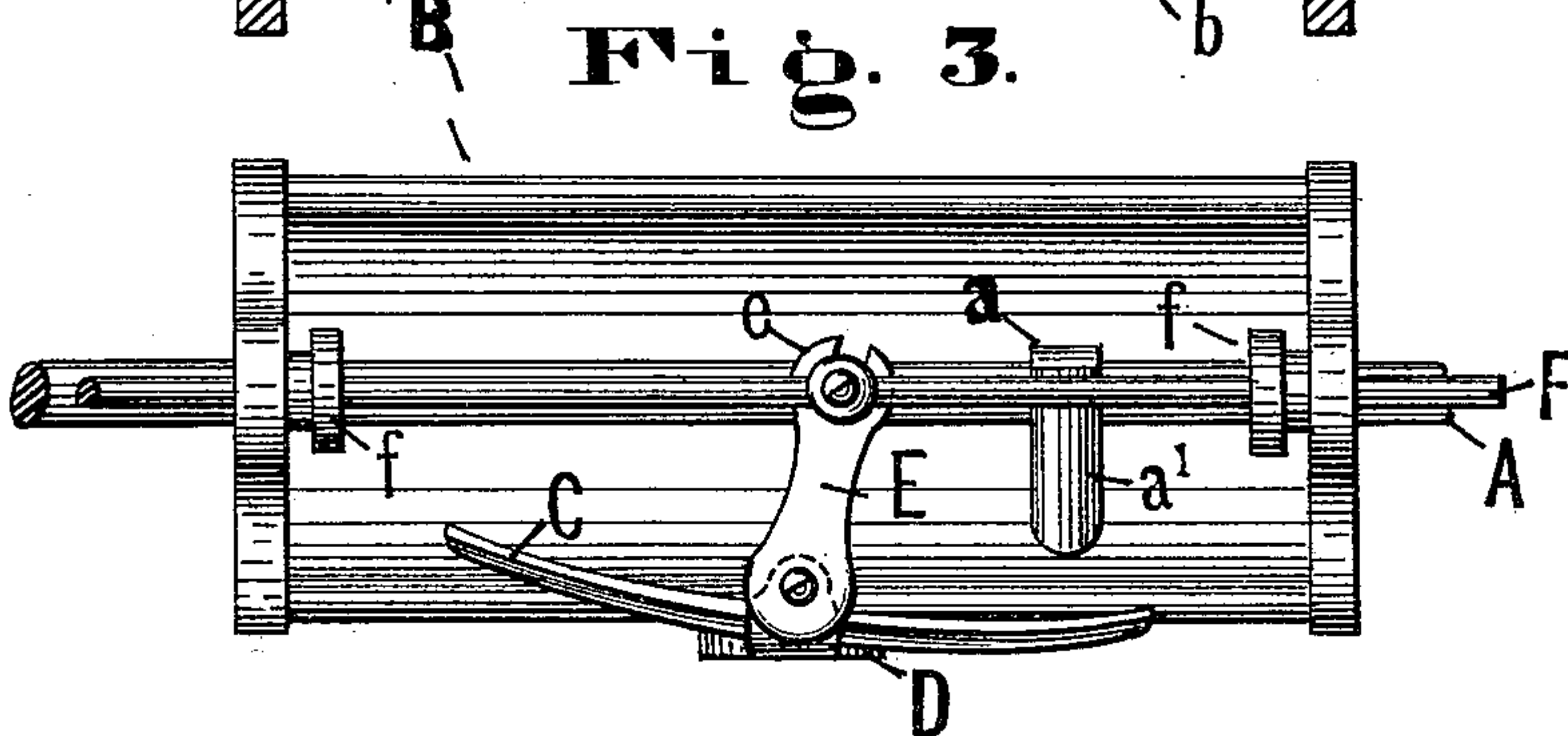
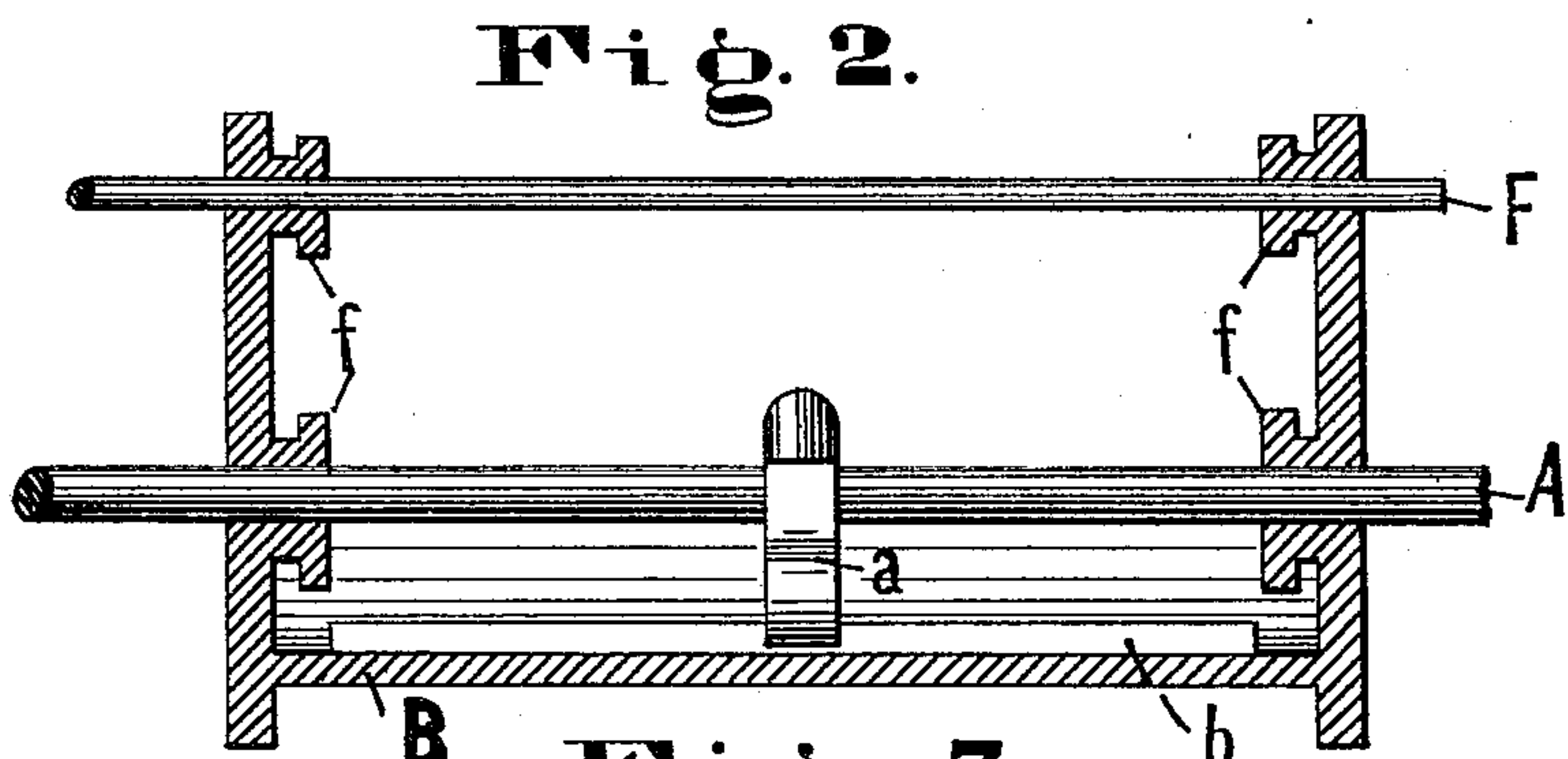
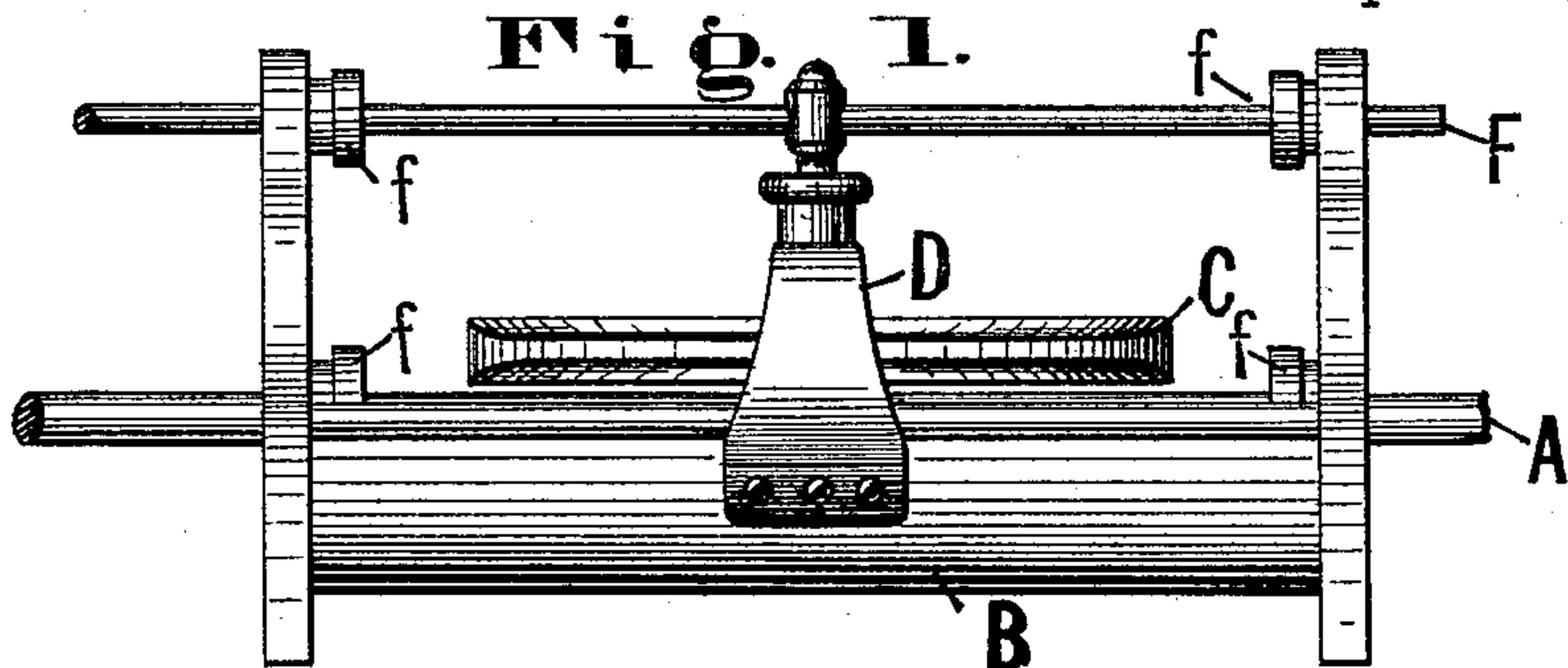


(No Model.)

J. MAYHER.
VALVE MOTION FOR STEAM PUMPS.

No. 327,002.

Patented Sept. 29, 1885.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOHN MAYHER, OF EAST HAMPTON, MASSACHUSETTS.

VALVE-MOTION FOR STEAM-PUMPS.

SPECIFICATION forming part of Letters Patent No. 327,002, dated September 29, 1885.

Application filed May 20, 1885. (No model.)

To all whom it may concern:

Be it known that I, JOHN MAYHER, of East Hampton, county of Hampshire, and State of Massachusetts, have invented new and useful
5 Improvements in Valve-Motions for Steam-Pumps; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference
10 marked thereon.

This invention consists in certain peculiarities of construction, fully described hereinafter, by means of which a better arrangement of parts, greater strength, and a more perfect
15 means of adjustment are obtained.

In the drawings, Figure 1 represents a side view of my improved valve-motion; Fig. 2, a longitudinal sectional view of the same; Fig. 3, a plan view, and Fig. 4 an end view, partially in section.
20

To enable others skilled in the art to make my improvement and to properly use the same, I will now proceed to describe fully its construction and manner of operation.

25 A represents the piston-rod of the pump, and a a tappet-block, of rectangular form, rigidly secured thereto at the proper point in the manner well understood, which is provided with a tappet arm, a' , extending at right
30 angles therefrom, as shown in Figs. 3 and 4.

a^2 , Fig. 4, represents a recess in the lower face of the tappet-block, which recess is adapted to engage with the longitudinal way-bar b , Figs. 2 and 4, in the bottom of the trough B,
35 as shown.

C represents a horizontal rocker-bar of proper form, having a vertical shaft c , Fig. 4, held by proper bearings in the bracket D, rigidly secured to the side of the trough B, as
40 shown.

E, Figs. 3 and 4, represents an arm rigidly secured to the upper end of the shaft and extending at right angles therefrom, which is provided at its free end with a fork, e , Fig. 3,
45 adapted to inclose the depending stud of the valve-rod F.

If desired, the ends of the fork may be united together to inclose the stud by means of a pin extending across the opening.

ff represent guide-pieces upon the support- 50 ing-standards of the piston and valve rod, which serve to support the rods more perfectly in their movements.

The general operation of this valve-motion is the same as that of valve-motions of this 55 class.

Certain advantages result from this construction. By means of the recessed tappet-block and the longitudinal way-bar the former is prevented from turning over in its move- 60 ment. By the employment of the forked arm in connection with the stud of the valve-rod it is possible to adjust these parts readily when desired. By means of this general construction and arrangement of parts greater strength 65 than ordinary is obtained.

The pump may be run at high speed without danger of breaking the parts. The valve is also moved the same distance at each stroke, whether the pump is running fast or slow. 70

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

In combination with the trough B, having the way-bar b , and the tappet-block a , having 75 the recess a^2 , the horizontal rocker-bar C, having the vertical shaft c , held in the socket-bearings of the vertical bracket D, the right-angled arm a' being adapted to act directly upon the rocker-bar at each movement of the piston, 80 and the arm E and valve-rod F, having a capacity for adjustable connection, and both ends of the latter extending through the guide-pieces.

This specification signed and witnessed this 85 18th day of May, 1885.

JNO. MAYHER. [L. S.]

Witnesses:

GEORGE M. JOHNSON,
E. L. MESSERSMITH.