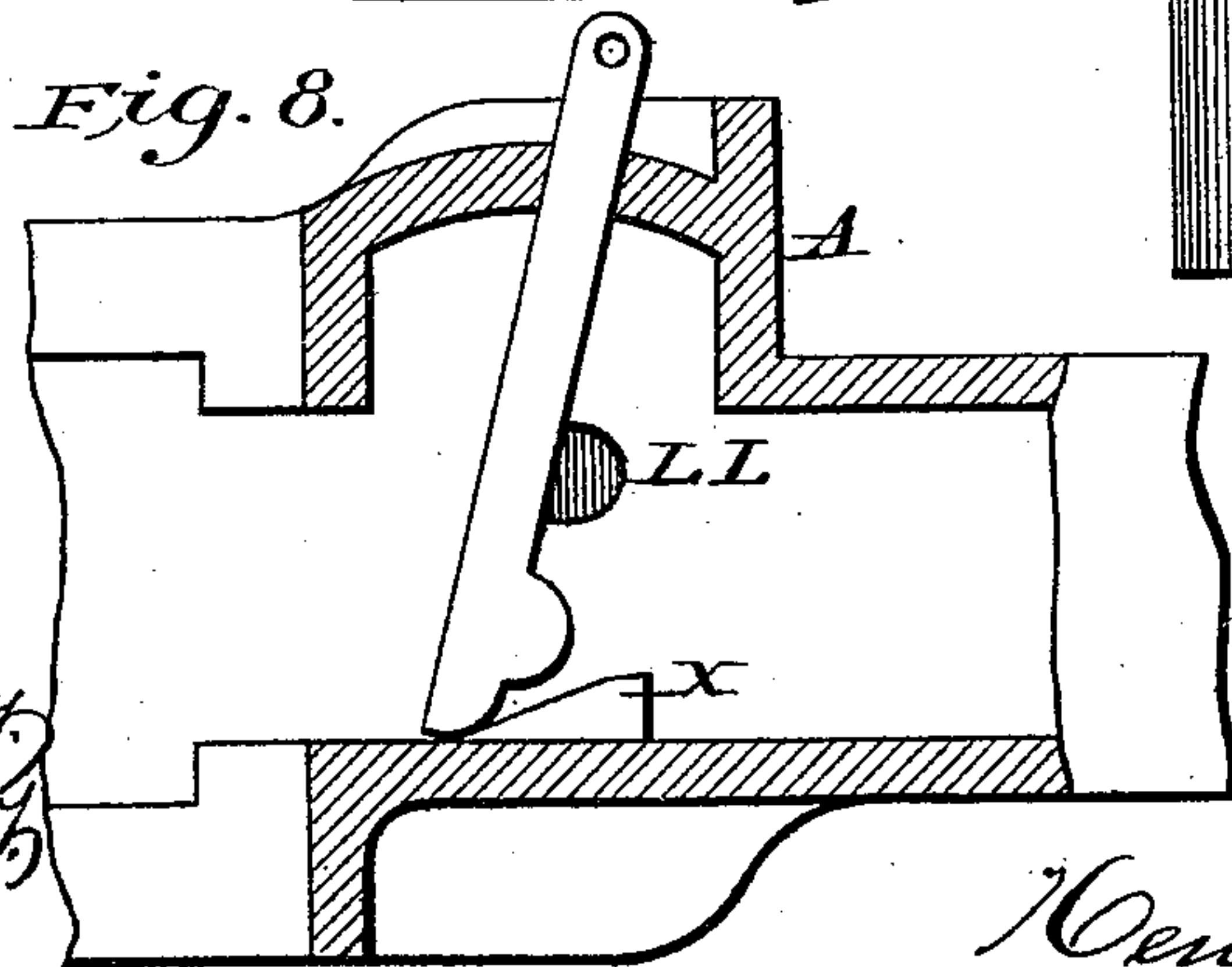
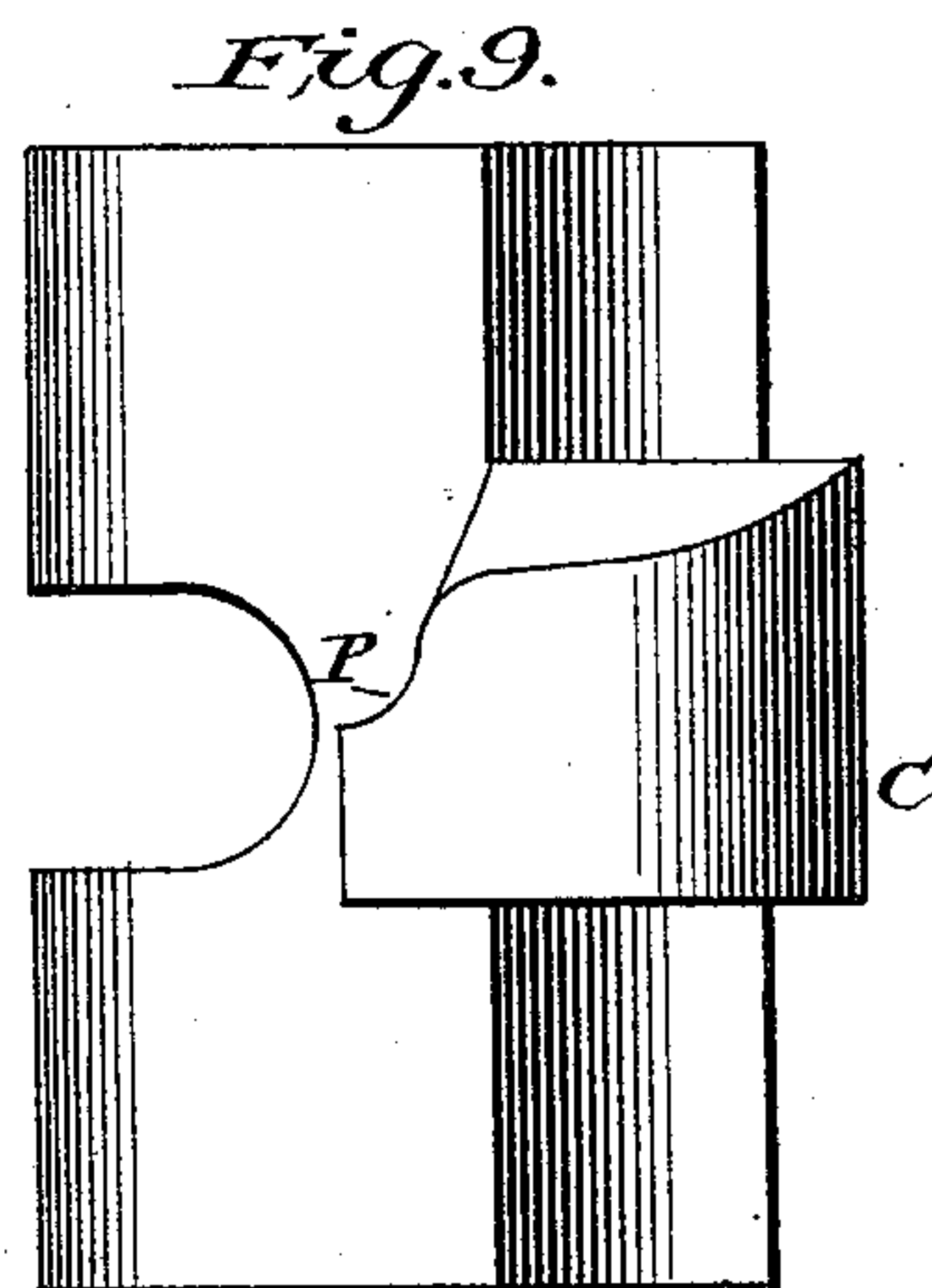
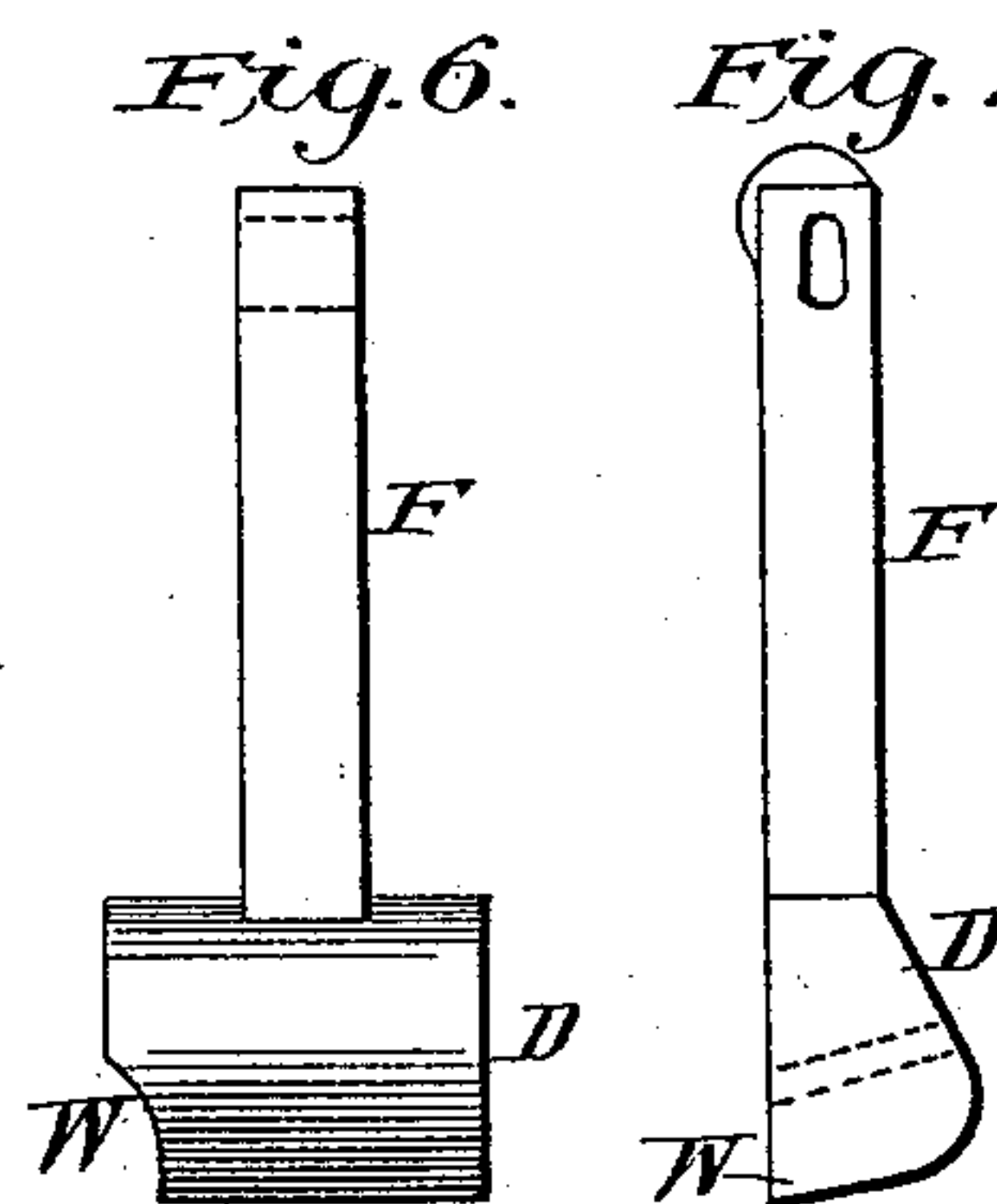
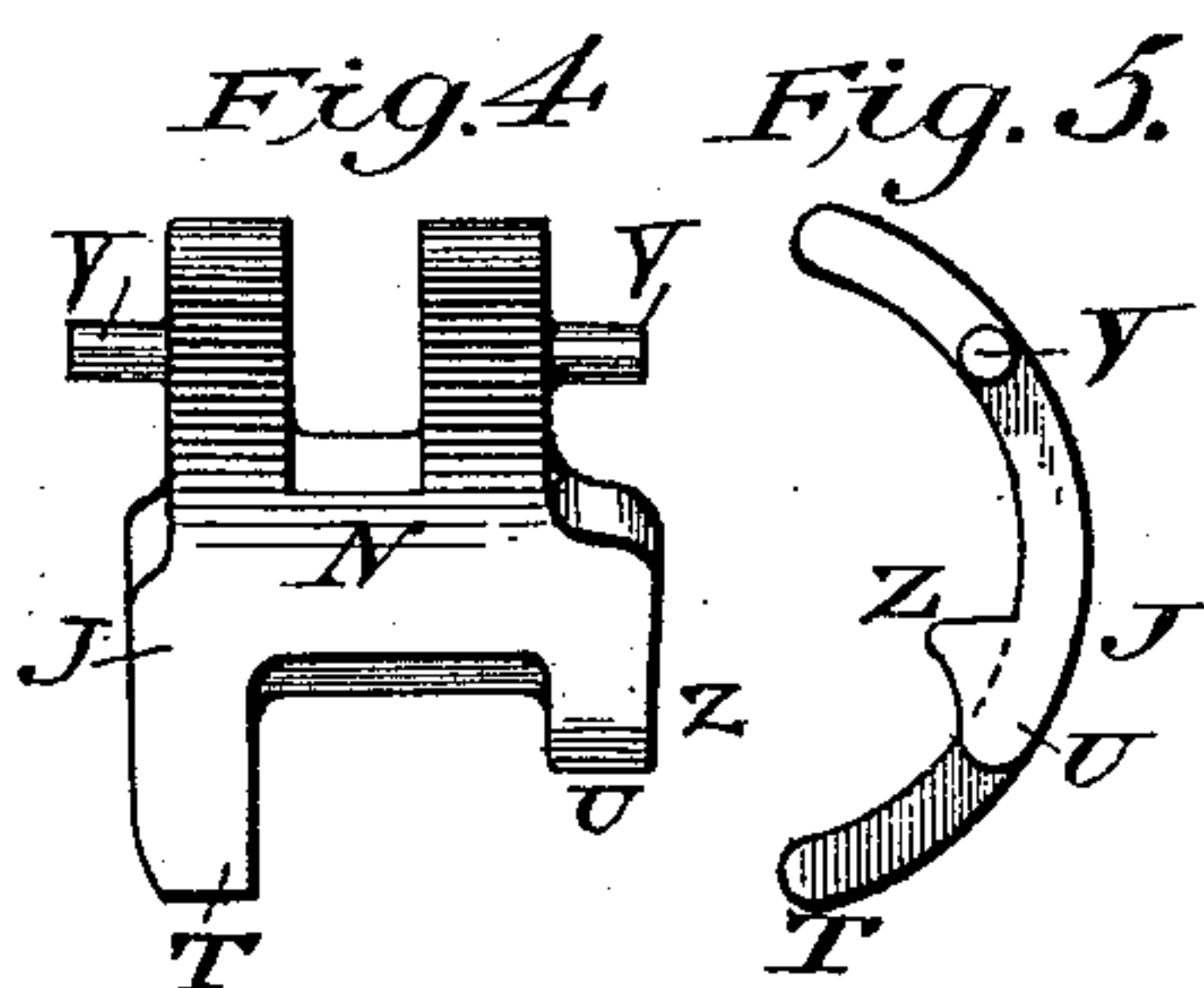
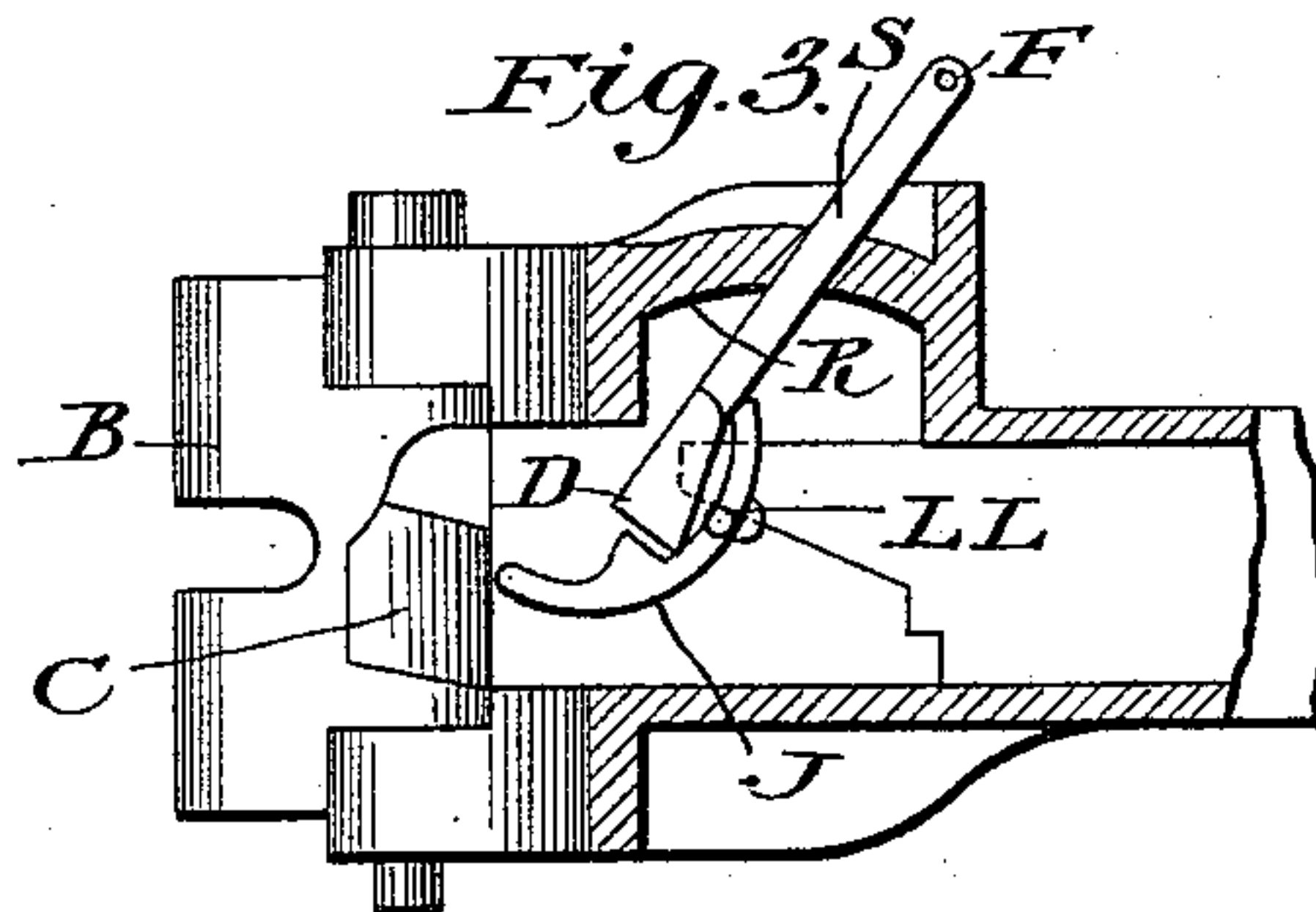
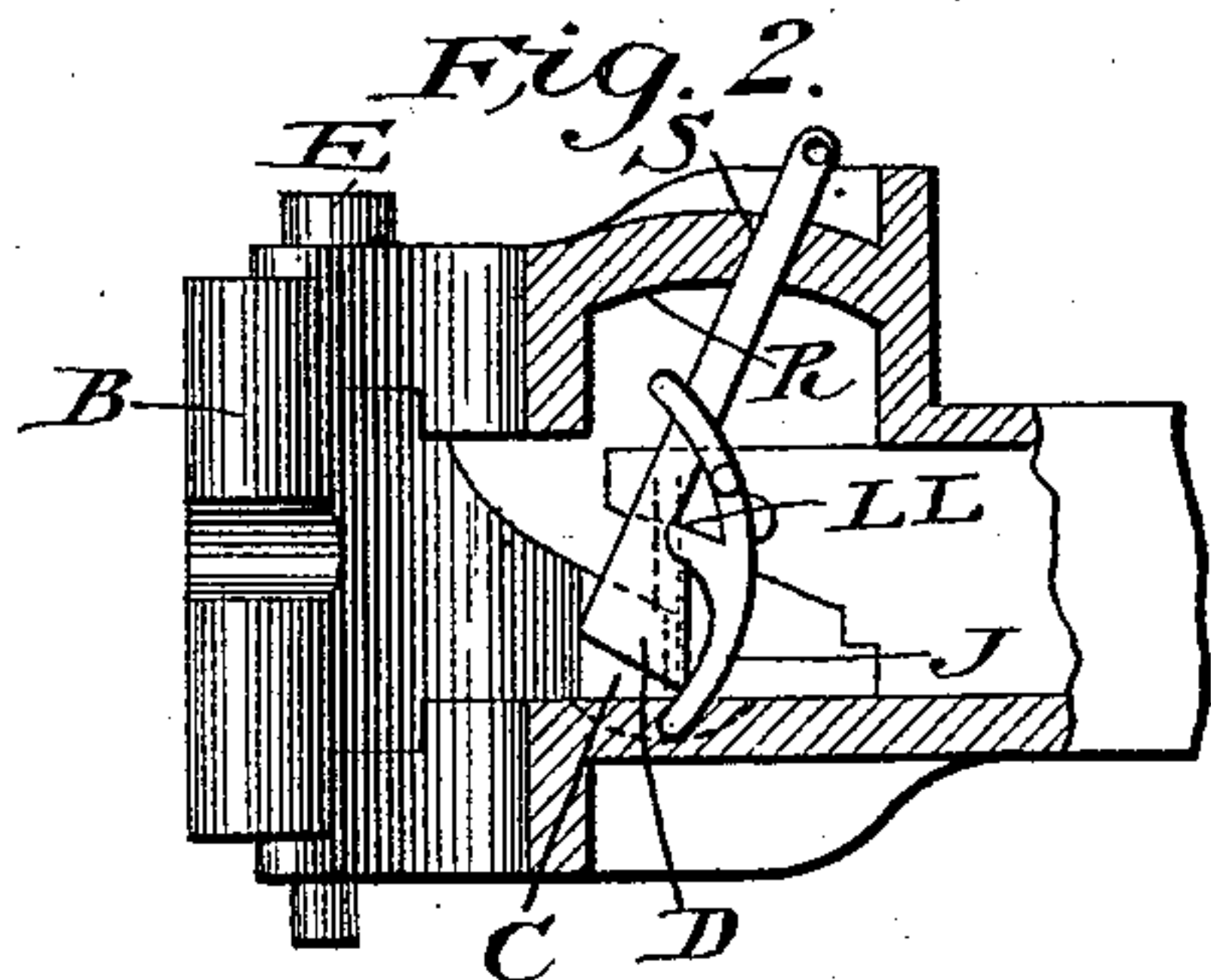
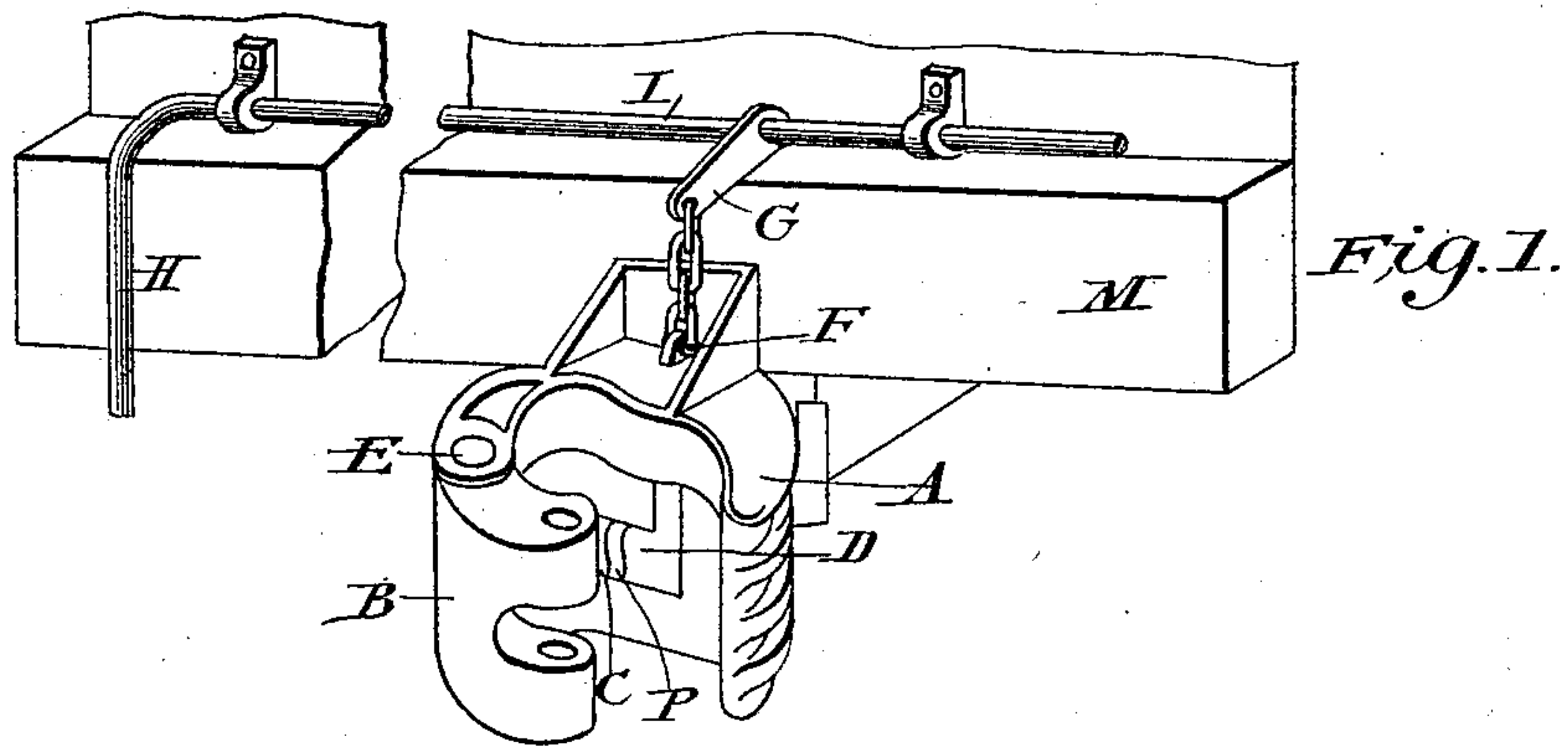


(No Model.)

H. GALLAGER.
CAR COUPLING.

No. 579,674.

Patented Mar. 30, 1897.



Witnesses.

Jos. E. Delamoy
Chas. B. Delamoy

Inventor.

Henry Gallagher

UNITED STATES PATENT OFFICE.

HENRY GALLAGER, OF SAVANNAH, GEORGIA, ASSIGNOR OF ONE-HALF TO
JOHN J. McDONOUGH, OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 579,674, dated March 30, 1897.

Application filed October 28, 1896. Serial No. 610,392. (No model.)

To all whom it may concern:

Be it known that I, HENRY GALLAGER, a citizen of the United States, residing at Savannah, in the county of Chatham and State of Georgia, have invented a new and useful Improvement in Car-Couplings, of which the following is a specification.

The same is an improvement on the device shown in my Patent No. 558,061, dated April 14, 1896.

The object of the invention is to provide a new and improved car-coupler which is simple and durable in construction, very effective and automatic in operation, and arranged to couple or uncouple without the operator stepping between the cars.

The invention consists of certain parts and details and combinations of same, as will hereinafter be described, and then pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a portion of an end of a car and coupler embodying my invention and showing the parts at rest. Fig. 2 is a sectional side view of the draw-head A, showing the knuckle B closed and the locking-block D down, with the curved twin lever J in position in the rear of the said locking-block D. Fig. 3 is a sectional side view of the draw-head A with the knuckle B open and the locking-block D raised, with the foot T of lever J bearing against the rear end of tongue C of knuckle B. Fig. 4 is a front elevation of the twin lever J. Fig. 5 is a side elevation of the twin lever J. Fig. 6 is a front elevation of the locking-block D. Fig. 7 is a side elevation of the locking-block D. Fig. 8 is a horizontal sectional view of draw-head A, showing perforations L L and the inclined elevation X. Fig. 9 is a side elevation of the knuckle B, showing the rabbet P on the upper side of the face of tongue C.

Referring to the drawings, Fig. 1 shows a draw-head A of the twin-jaw type, generally described as a "vertical-plane coupler," and having its contour-lines to conform to the requirements of the Master Car-Builders' Association.

Draw-head A is provided with a knuckle B, said knuckle B adapted to engage with the knuckles of other couplers of a similar type and the said knuckle B being pivoted to the draw-head A by a knuckle-pin E. The tongue C of knuckle B is rabbeted on the upper portion of its face, and said tongue C when arranged within the draw-head A is engaged by locking-block D, said locking-block D adapted to lock the knuckle B when in engagement with a similar knuckle of a twin draw-head.

Draw-head A is provided with an aperture S through its upper wall to admit the passage of the arm F of the locking-block D through the said aperture S thus made, as shown in Figs. 2 and 3. Draw-head A is provided with a recess R on the inner side of its upper wall, said recess R adapted to admit of the entrance of the head of the locking-block D when said locking-block D is raised for the purpose of coupling or uncoupling, all as shown in Figs. 2 and 3.

Draw-head A is perforated on its inner side walls, said perforations L L adapted to provide bearings for the trunnions V V of lever J for the purpose of allowing the said trunnions V V of lever J to rotate therein when desired, as shown in Figs. 2, 3, and 8.

Draw-head A is provided on the rear of its lower wall with an inclined elevation X, the higher part of said elevation X being at its rear and sloping downward toward the front of the draw-head, the said inclined elevation X adapted to control the movement of the locking-block D and to throw the said locking-block D forward as it falls into a position of rest on the lower wall of the draw-head A, as shown in Fig. 8.

The locking-block D is provided on its upper end with an arm F. The said locking-block D is also provided at the bottom of its inner side with a rabbet W, said rabbet W adapted to engage a similar rabbet P on the upper side of the face of tongue C of knuckle B to permit coupling on a curve, as shown in Fig. 1. Lever J is a curved twin lever connected by a cross-piece N and so arranged as to admit the arm F of the locking-block D between the two upper curves of the said lever J, as shown in Fig. 2. The said lever J

is provided on its sides with trunnions V V, said trunnions V V adapted to rotate in perforations L L, as shown in Figs. 2, 3, and 8.

5 The trunnions V V and holes or perforations L L are preferred over the trunnions and grooves shown in my previous patent for the following reasons, to wit: The grooves O O and L L in my former patent, No. 558,061, have a tendency to weaken the face of the
10 draw-head and to allow the lever or ejector to slip forward and prevent the closing of the knuckle B. Besides, the contraction of the arms of the lever J tends to give lever J a better control of the locking-block D, in that it
15 prevents a lateral movement of locking-block D and makes its locking properties sure and certain.

Having thus described my invention, what I claim as new is—

20 The combination of a draw-head and knuckle, said knuckle having a tongue, and a locking-block with a twin lever pivotally

controlled by means of trunnions on its sides, the said trunnions rotating in perforations on the inner side wall of draw-head A, the upper faces of the lever J being in engagement 25 with the rear shoulders of the locking-block, the inner foot of the twin lever adapted to bear against the rear end of the tongue of the knuckle and cause the knuckle to rotate 30 outward whenever the locking-block is raised and pressed against the upper arms of the twin lever, the opposite foot of said twin lever being provided on its face with a projection, adapted to support the locking-block, 35 when said locking-block is in a raised position, substantially as set forth.

In testimony of which I have hereunto subscribed my name.

HENRY GALLAGER.

Witnesses:

T. J. PHILPOT,

W. F. HENNESSY.