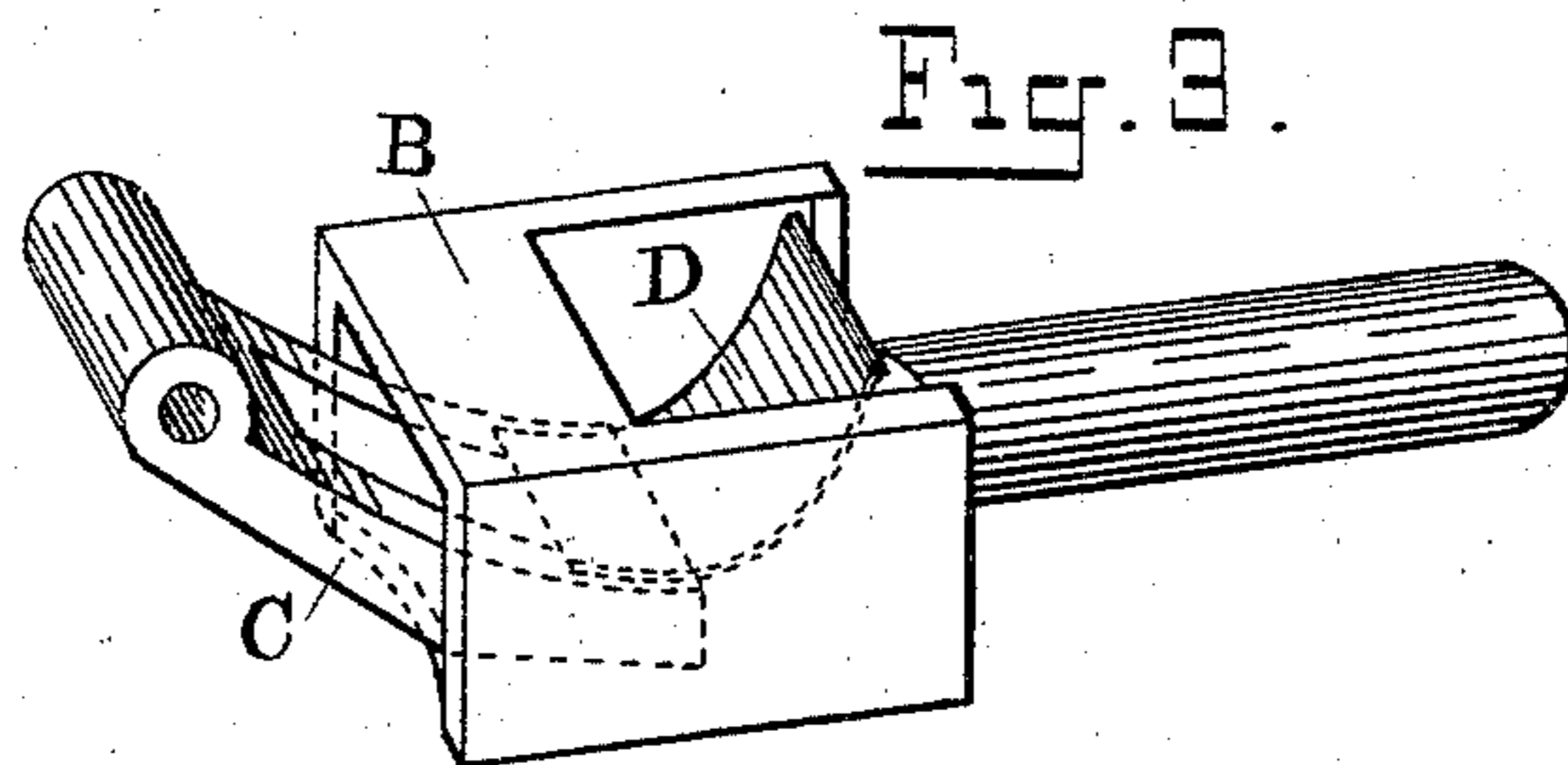
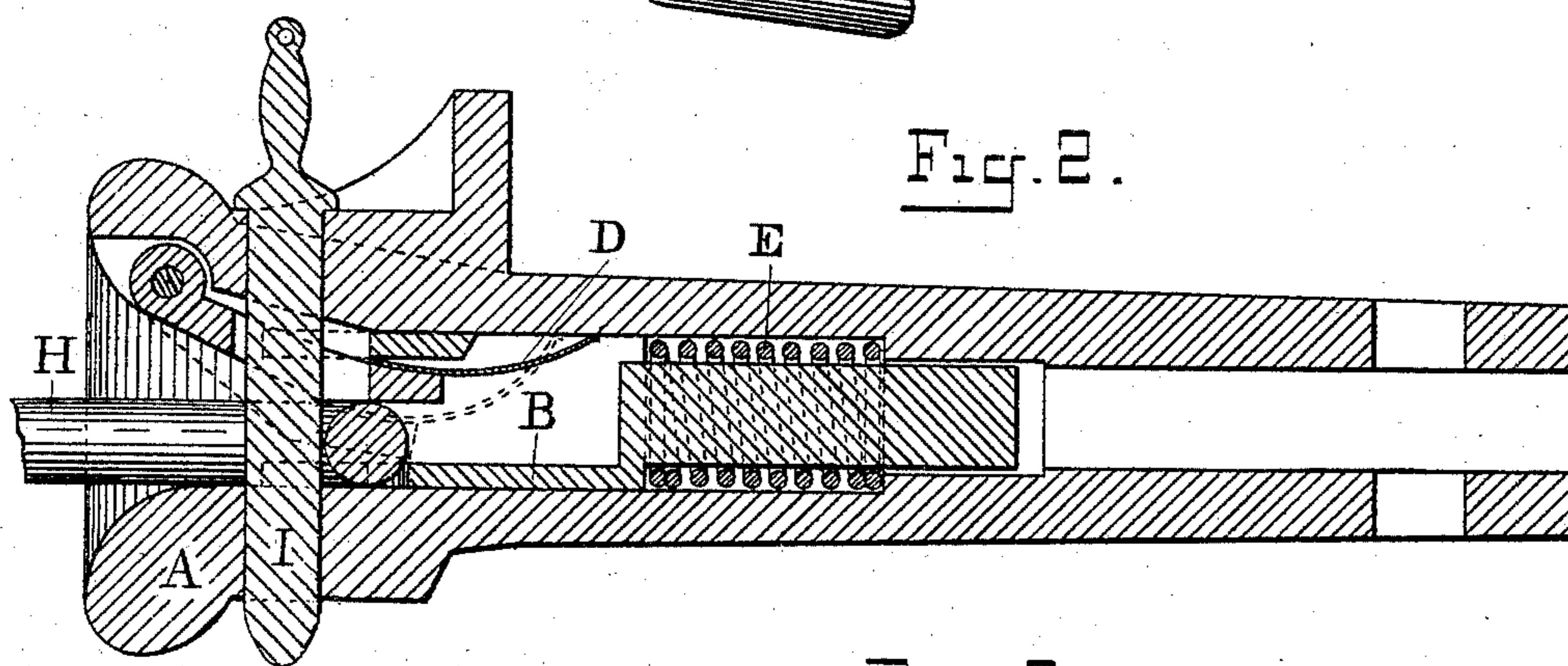
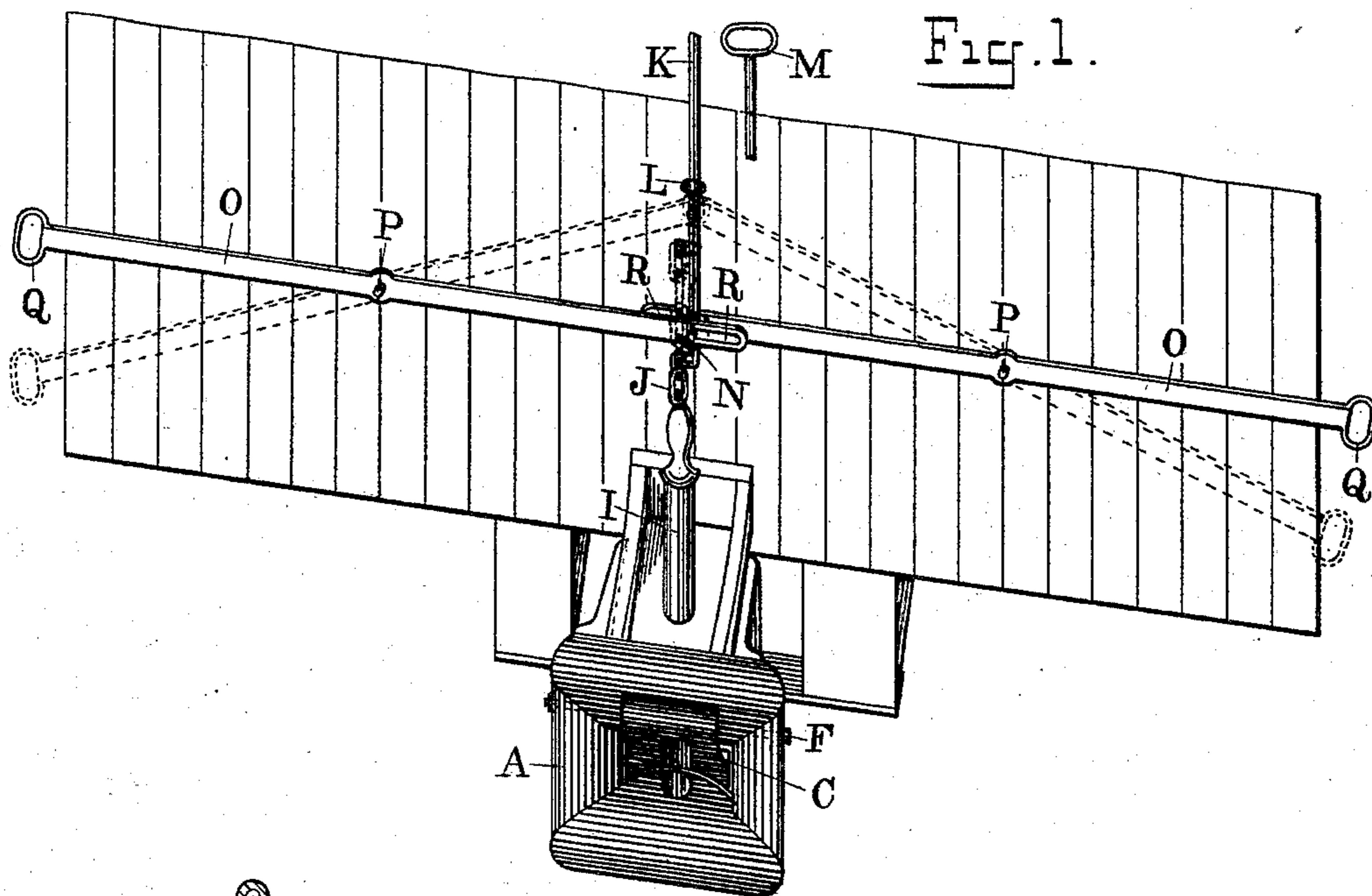


(No Model.)

J. B. HUGHES.  
CAR COUPLING.

No. 496,939.

Patented May 9, 1893.



Witnesses

H. Albr

R. A. McAdory

Inventor

John B. Hughes

By his Attorney P. Byrne

# UNITED STATES PATENT OFFICE.

JOHN BELL HUGHES, OF JASPER, ALABAMA.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 496,939, dated May 9, 1893.

Application filed March 2, 1893. Serial No. 464,466. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN BELL HUGHES, a citizen of the United States, residing at Jasper, in the county of Walker and State of Alabama, have invented certain new and useful Improvements in Car-Couplers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in that class of car couplers, in which a link and pin are used to connect the draw heads together; and the objects of my improvements are, first, to construct a coupler of that kind, that will be strong and durable, not likely to get out of order, and one in which all the parts are so plain and simple, that it can be cheaply manufactured; second, to make a coupler of the above described kind, which will be automatic in its action, and to uncouple, it will not be necessary to go between the cars to draw the pin, my device being so arranged, that the pin can be drawn from either side, or the top of the car, and the pin left in the proper position, to recouple the cars again without further arrangement, it only being necessary at any time, to push two cars together with a link in one draw head, to make the coupling. I attain these objects by the novel combination and arrangement of the parts, illustrated in the accompanying drawings, in which,—

Figure 1, is an end view of part of a car, and shows the draw head in position, the pin being withdrawn and held in position for recoupling. Fig. 2, is a sectional horizontal view of the draw head, and shows the link and pin in position when coupled. Fig. 3, is a perspective detail view of the pin support, and the link presser pawl.

Similar letters refer to similar parts throughout the several views.

The draw head A, is made of cast iron, steel, or other metallic substance in the usual manner, and on the outside conforms to the form of the standard draw head, and will fit any of the standard cars, and it is secured to the car, by any of the usual methods, generally used to secure such draw heads. The inside is cored to the shape shown in the drawings, to provide a chamber to insert the pin support B, and

the link presser pawl C, which are placed in the inside of the draw head, and more fully described hereinafter.

The pin support B, is made of cast iron, steel, or other suitable metallic substance. It is cored hollow as shown, and has an opening formed in the top, for the spring D secured on the link presser pawl C, to work through; the said pin support has formed on its back end a round tail piece, on which is placed a coil spring E, the end of the said spring resting against a shoulder formed by the end of the chamber, forces the pin support forward, when the pin is withdrawn, pushing the link out, and the support remains under the pin hole the point of the pin resting on it, until a link is inserted and pushes the pin support back. When the hole is uncovered the pin falls to place and engages the link.

In the draw head A on the upper side of the bell shaped mouth, is formed a recess, in which is placed the link presser pawl C, secured to the head by a pin F passing through the jaw; on the tail end of the presser pawl, is secured a flat curved spring D, the end of the said spring, resting against the upper side of the draw head chamber, presses the tail of the pawl on the link H, holding the link in a horizontal position.

The pin I is of the usual form, made of iron, or steel, as may be desired, with an eye formed on the upper end, to which is attached the chain J attached at its other end to an eye formed on the crank end of the lifting rod K. The said rod extends upward to the top of the car, and is secured to the car end by eye bolts, one of which is shown at L which prevents the rod from pulling the pin higher than necessary, to allow the pin support to slide under it. The lifting rod K, has a handle M formed on its upper end, by which the pin can be withdrawn.

On the lifting rod K, near its lower end, is placed a pivot pin N extending on both sides of the lifting rod, to which are secured the hand levers O, O', pivoted at their centers, by the pivots P, P' secured to the end of the car, the levers having handles Q, Q' formed at their outer ends, and slots R, R' formed on the inner ends, to work on the pivot pin N secured in the lifting rod K.

The operation will be readily understood by

those versed in the business. If the cars are coupled, the coupling pin can be readily withdrawn from the link, on either side, or the top of the car without going between. When  
5 the pin is drawn up, the pin support slides under the hole, and retains the pin in a vertical position in the draw head. The link pressure pawl in the opposite draw head, pressing on the link retains it in a horizontal position,  
10 and it is obvious that to recouple the cars, it will only be necessary to push them together, and they will recouple.

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

1. In a car coupler, the combination of the draw head having a link and pin, with a pin support sliding in a chamber formed in the inside of the draw head, the said pin support,  
20 having a tail piece with coiled spring on it, the end of the spring resting against a shoulder, formed by the back end of the chamber, a link presser pawl, secured in a recess formed in the upper side of the bell shaped mouth,  
25 and pivoted on a pin passing through the jaw, a flat curved spring, secured to the end of a presser pawl inserted in the end of the

pin support, the said spring passing through an opening formed in the upper side of the pin support, the end of the spring resting against  
30 the upper side of the draw head chamber, substantially as shown and for the purpose described.

2. In a car coupler, a draw head having a chamber formed in the inside, a pin support  
35 having a tail piece with a coiled spring on it inserted in the chamber, a link presser pawl having a flat curved spring on its end, secured in the upper jaw of the bell shaped mouth, and pivoted on a pin passing through the jaw,  
40 the tail end of the pawl inserted in the mouth of the pin support, the spring passing through an opening formed in the upper side of the pin support in combination, with the link H,  
45 the pin I, the chain J, the hand levers O, O' and the lifting rod K, all substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN BELL HUGHES.

Witnesses:

ERASTUS S. MCINTYRE,  
CHARLES W. STUBBLEFIELD.