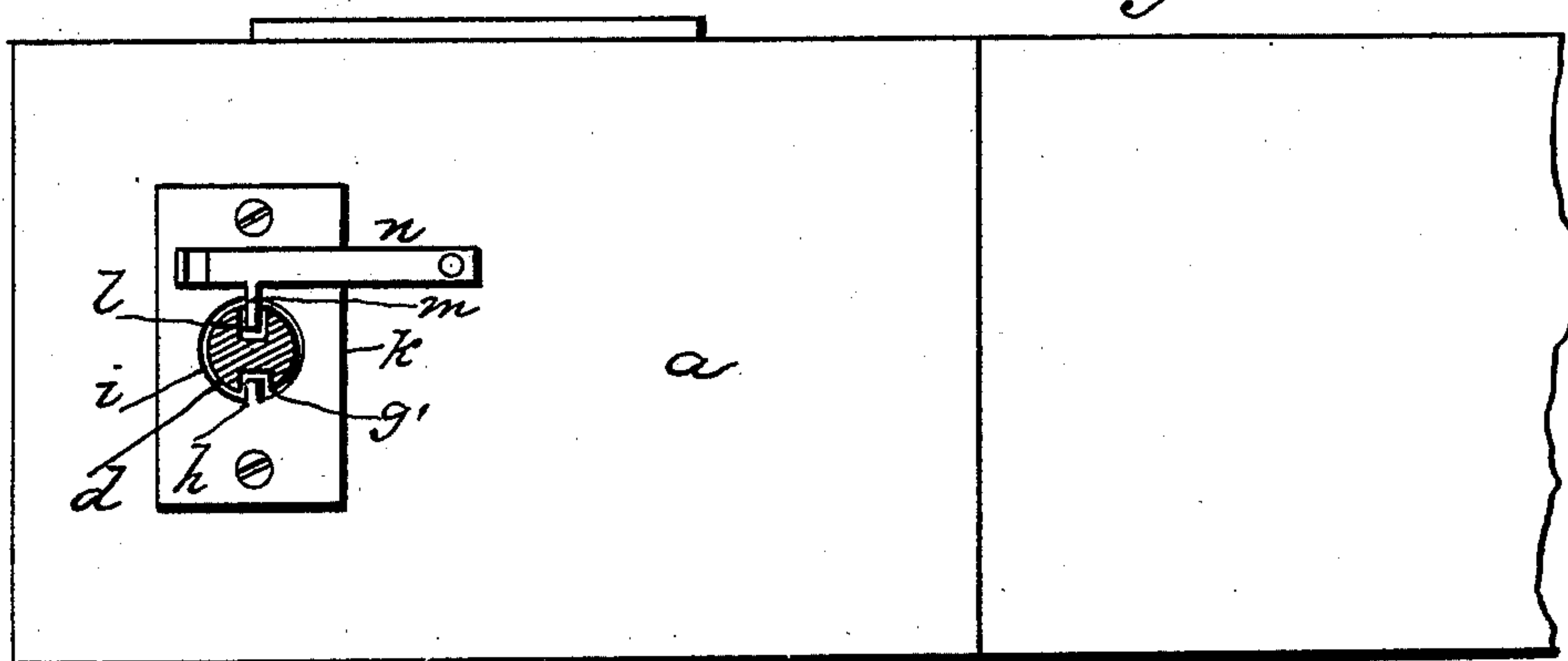
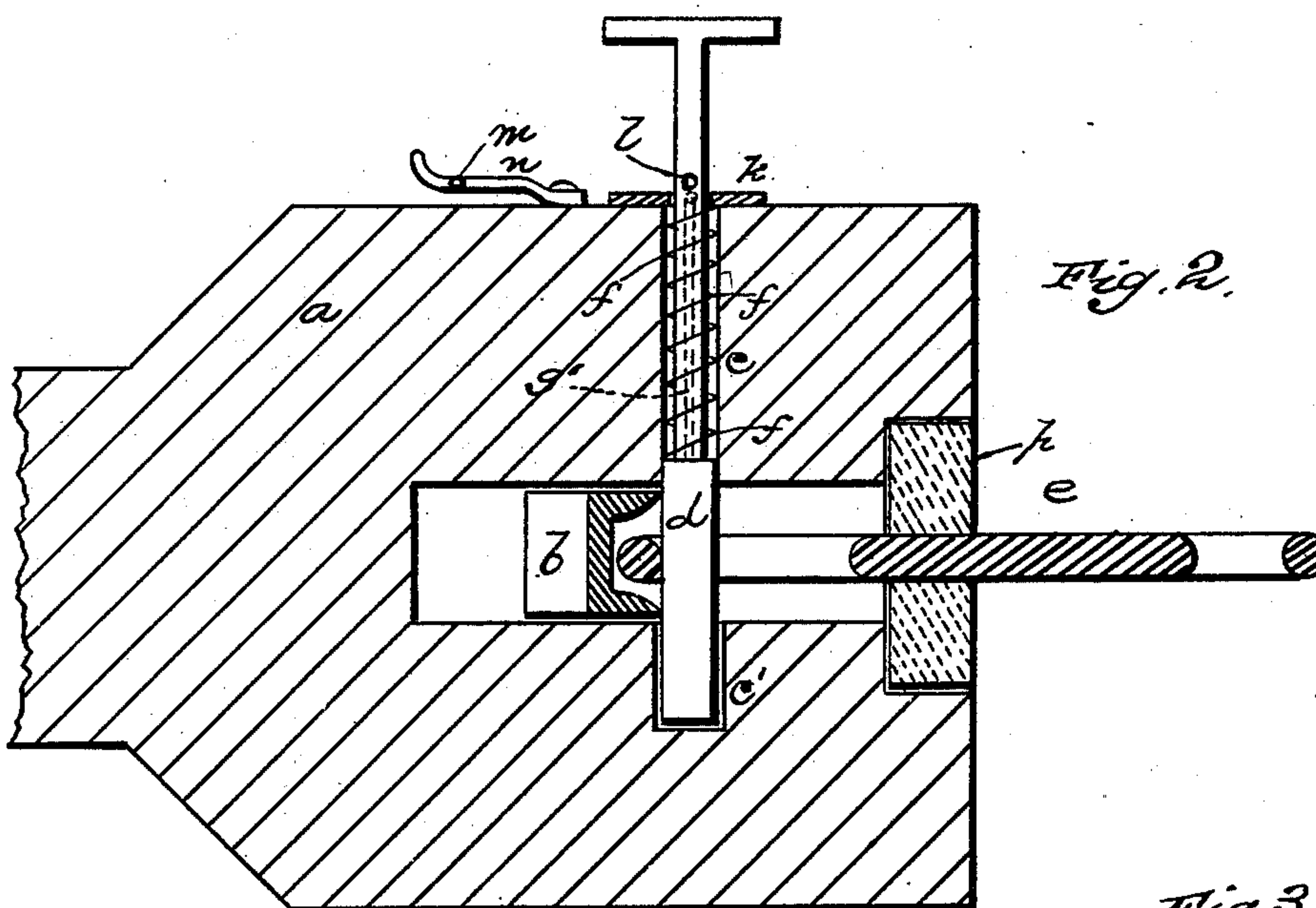
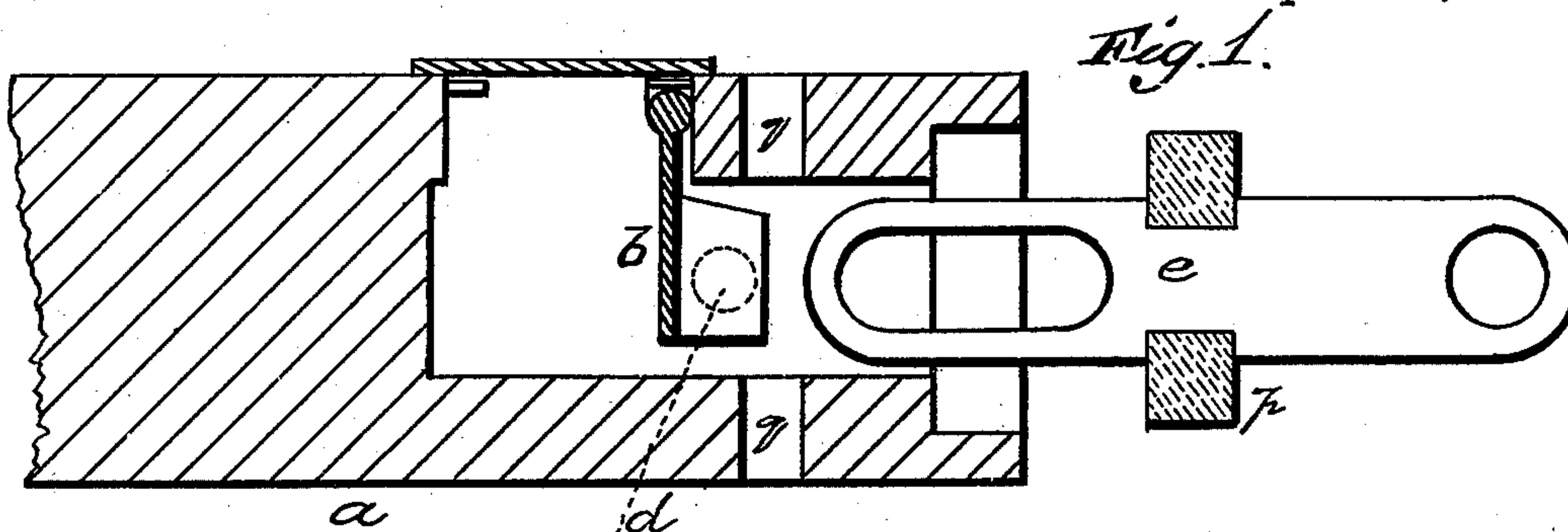


(No Model.)

J. F. RICE.  
CAR COUPLING.

No. 285,680.

Patented Sept. 25, 1883.



WITNESSES  
E.H. Bates.  
John T. Morrow

INVENTOR  
*Joel F. Rice,*  
 by *J. Anderson Smith*  
his ATTORNEYS

# UNITED STATES PATENT OFFICE.

JOEL FRANK RICE, OF LOUISIANA, MISSOURI, ASSIGNOR OF TWO-THIRDS  
TO W. H. MORROW AND JOE BLOCK, BOTH OF SAME PLACE.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 285,680, dated September 25, 1883.

Application filed August 9, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, JOEL F. RICE, a citizen of the United States of America, residing at Louisiana, in the county of Pike and State of Missouri, have invented certain new and useful Improvements in Car-Couplers; and I do declare the following to be a full, clear, and exact description of the invention, such as it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a vertical sectional view. Fig. 2 is a horizontal section, and Fig. 3 is a side view.

This invention has relation to car-couplings; and it consists in the construction and novel arrangement of parts, as will be hereinafter fully described, and particularly pointed out in the claims appended.

Referring by letter to the accompanying drawings, *a* designates the draw-head, which is provided with a hinged gravitating stop, *b*, having bearings in the side walls thereof. The stop *b*, when in its normal position in the draw-head, closes the lateral passage *c*, in which the coupling-pin *d* works, the latter having been drawn outward to its full extent, and the point of the coupling-pin *d* rests against the stop until the link *e*, entering the draw-head, carries the stop backward and upward, when the coupling-pin *d* is shot through the entering end of the link by the spiral spring *f*, which encircles it within the lateral passage *c*, and causes it to engage the seat *c'* in the wall of the draw-head opposite the passage *c*. The coupling-pin *d* is provided with a longitudinal groove, *g'*, in its under side, into which a pin, *h*, in the perforation *i* of the plate *k* projects, and prevents the coupling-pin *d* from turning in its seat. The coupling-pin *d* is also provided with a vertical hole, *l*, into which a pin, *m*, on

a pivoted arm, *n*, passes to hold the coupling-pin out of engagement with the link while the cars are being uncoupled, as at this time the link is apt to hold the hinged stop back from the passage *c* and permit the coupling-pin to enter the link.

The link *e* is preferably made flat and solid at its middle portion, which is provided with an encircling recess which engages a piece of rubber, *p*, for closing the draw-head.

Vertical openings *q q* are provided in the draw-head, so that the ordinary link and coupling-pin can be used with this draw-head, when the coupling-pin *d* is held by the pivoted arm *n*.

This device is cheap and simple, and is not likely to get out of order.

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

1. In a car-coupling, the draw-head *a*, provided with the hinged gravitating stop *b*, in combination with the longitudinally-grooved coupling-pin *d*, engaging the pin *h*, and operated in the passage *c* by the spiral spring *f*, substantially as specified.

2. In a car-coupling, the draw-head *a*, provided with the lateral passage *c*, in combination with longitudinally-grooved coupling-pin *d*, engaging the pin *h*, the spring *f*, and the pivoted arm *n*, provided with the pin *m*, to engage the vertical hole *l* in the coupling-pin, substantially as specified.

3. The combination, with the draw-head *a*, having a rectangular mouth, of the link provided with the centrally-located rubber piece *p*, for closing the draw-head, substantially as specified.

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

JOEL FRANK RICE.

Witnesses:

F. J. WISEMAN,  
A. McMOORE.