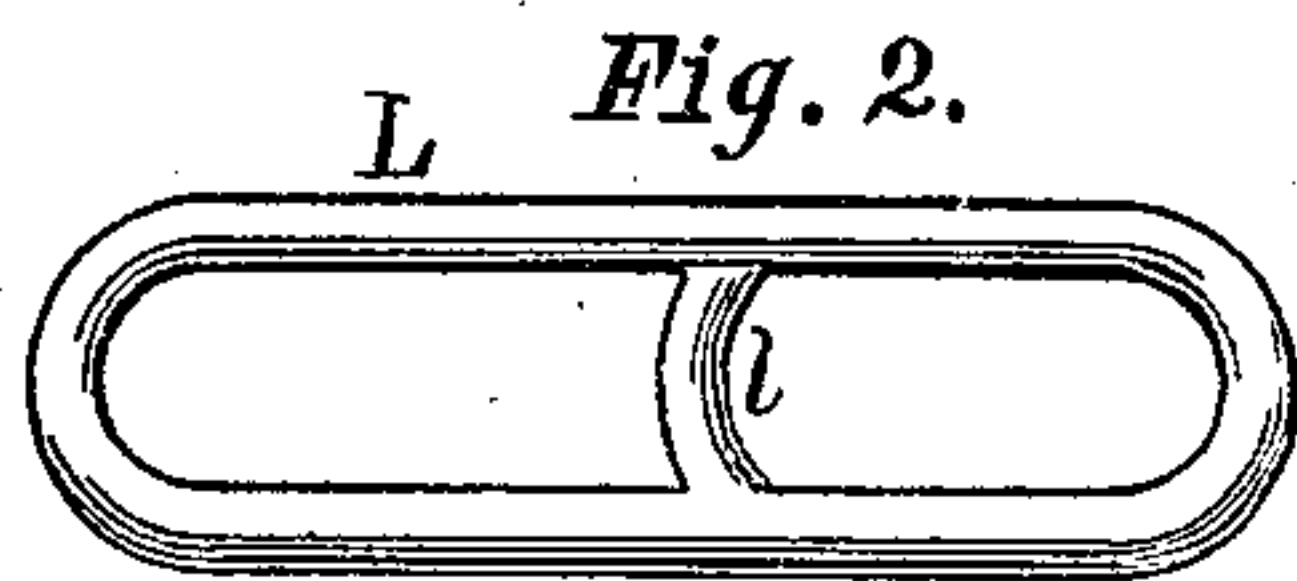
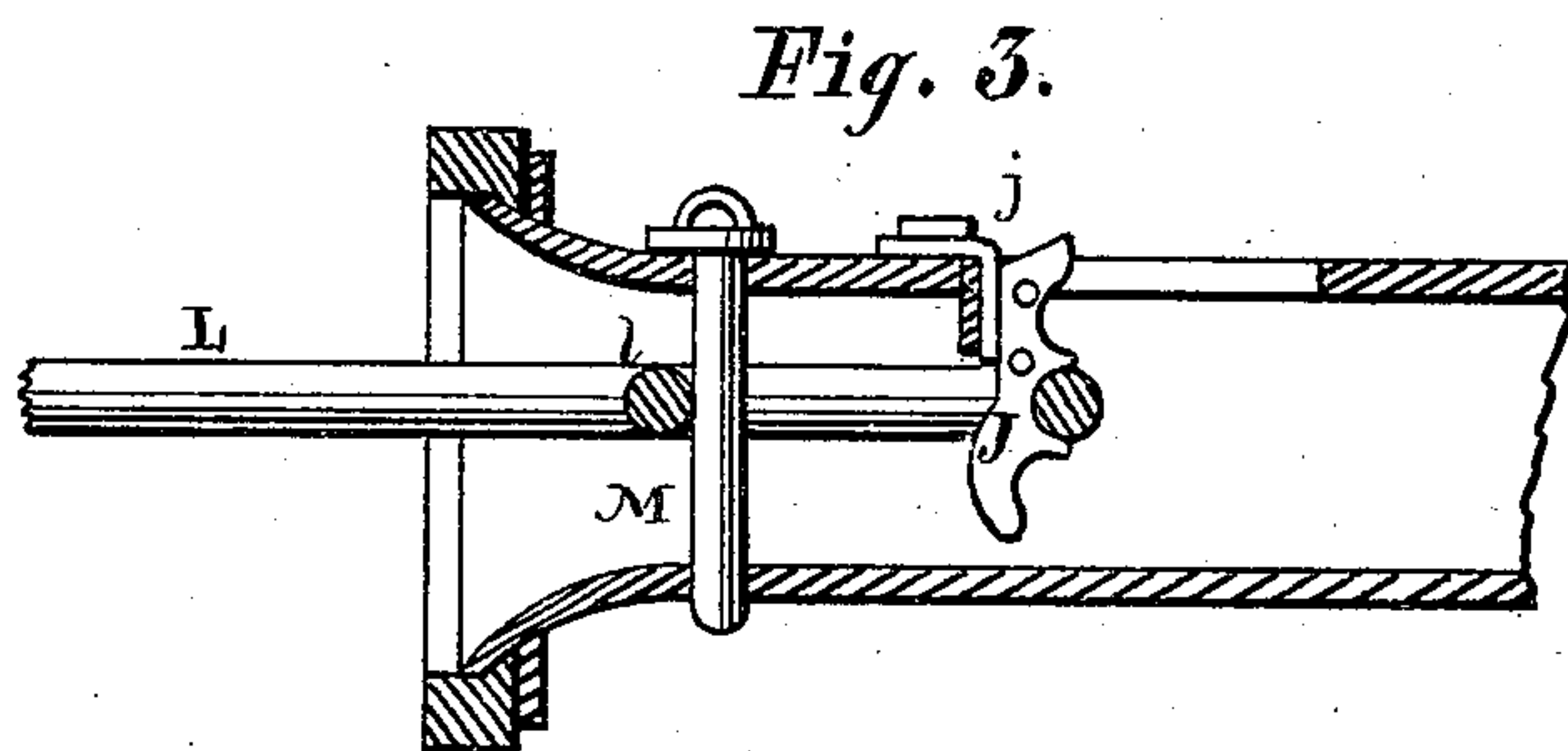
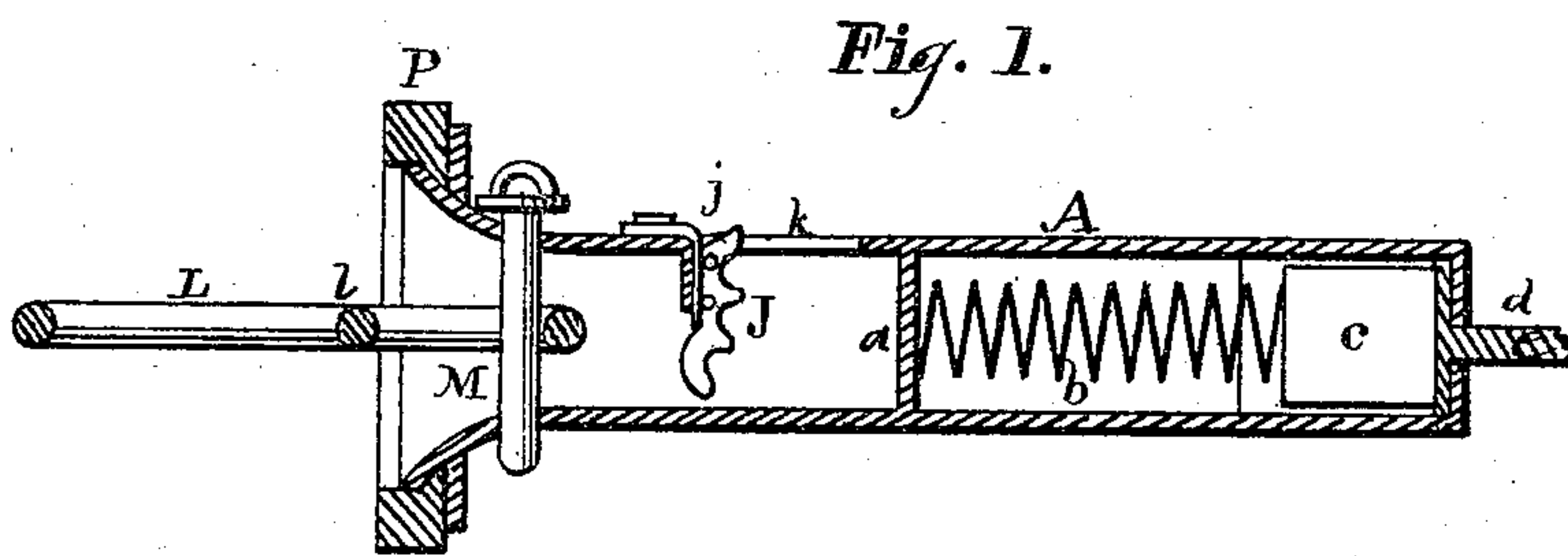


J. E. CISCO.  
Car-Couplings.

No. 148,414.

Patented March 10, 1874.



Witnesses,

E. A. Bates  
Chas. B. Steele

Inventor,

James E. Cisco  
Chapman & Co  
attys.

# UNITED STATES PATENT OFFICE.

JAMES E. CISCO, OF CONNEAUTVILLE, PENNSYLVANIA.

## IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **148,414**, dated March 10, 1874; application filed March 1, 1873.

*To all whom it may concern:*

Be it known that I, JAMES E. CISCO, of Conneautville, in the county of Crawford and State of Pennsylvania, have invented a new and valuable Improvement in Car-Coupling; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a longitudinal section of my improved car-coupling. Fig. 2 is a top view of the coupling-link. Fig. 3 is a vertical section, showing position of link.

My invention relates to certain improvements in car-couplings; and it consists in an elastic notched bar for holding the link in proper position to insure its entrance into the mouth of the opposite draw-head, and in the construction and arrangement of the parts hereinafter described and claimed.

In the drawing, A A represent the draw-bars of two opposite cars, one carrying a coupling-link and the other a pivoted coupling-pin. In each draw-bar, about midway of the length, is a partition, *a*, the draw-bars being hollow. In the rear of each partition is a coiled spring, *b*, behind which is a rubber block, *c*; between which and the rear end of the draw-bar is a follower or piston, *d*, having a rod, *e*, attached, which protrudes through the end and bears against a bar or suitable projection arranged underneath the car, which

arrangement lessens the force of the concussion when the cars are coupled. J represents a bar, in which is a series of notches, corresponding in form and size with the coupling-link L. The bar J is attached to one end of a bent flat spring, *j*, the other end of which is attached to the upper side of the draw-head, so that the bar J will hang down through a slot, *k*, in the position shown in Fig. 1. The link L (see Fig. 3) has a cross-piece, *l*, near its rear end, which bears against the bolt M, and the notched bar J is brought forward, so as to engage with the rear end of the link, by which means the link is held in such a position as to insure its entrance into the opposite draw-head as the cars come together. As soon as the coupling is effected the reaction disengages the link from the bar J, and the bar resumes its former position. For the purpose of lessening the force of the concussion, in addition to the coiled and rubber springs *b c*, the mouth of the draw-head is surrounded by a rubber facing or cushion, P.

What I claim as new, and desire to secure by Letters Patent, is—

The elastic notched bar J, in combination with the link, as shown and described, for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JAMES E. CISCO.

Witnesses:

JOSEPH N. CLARK,  
A. J. HARPER.