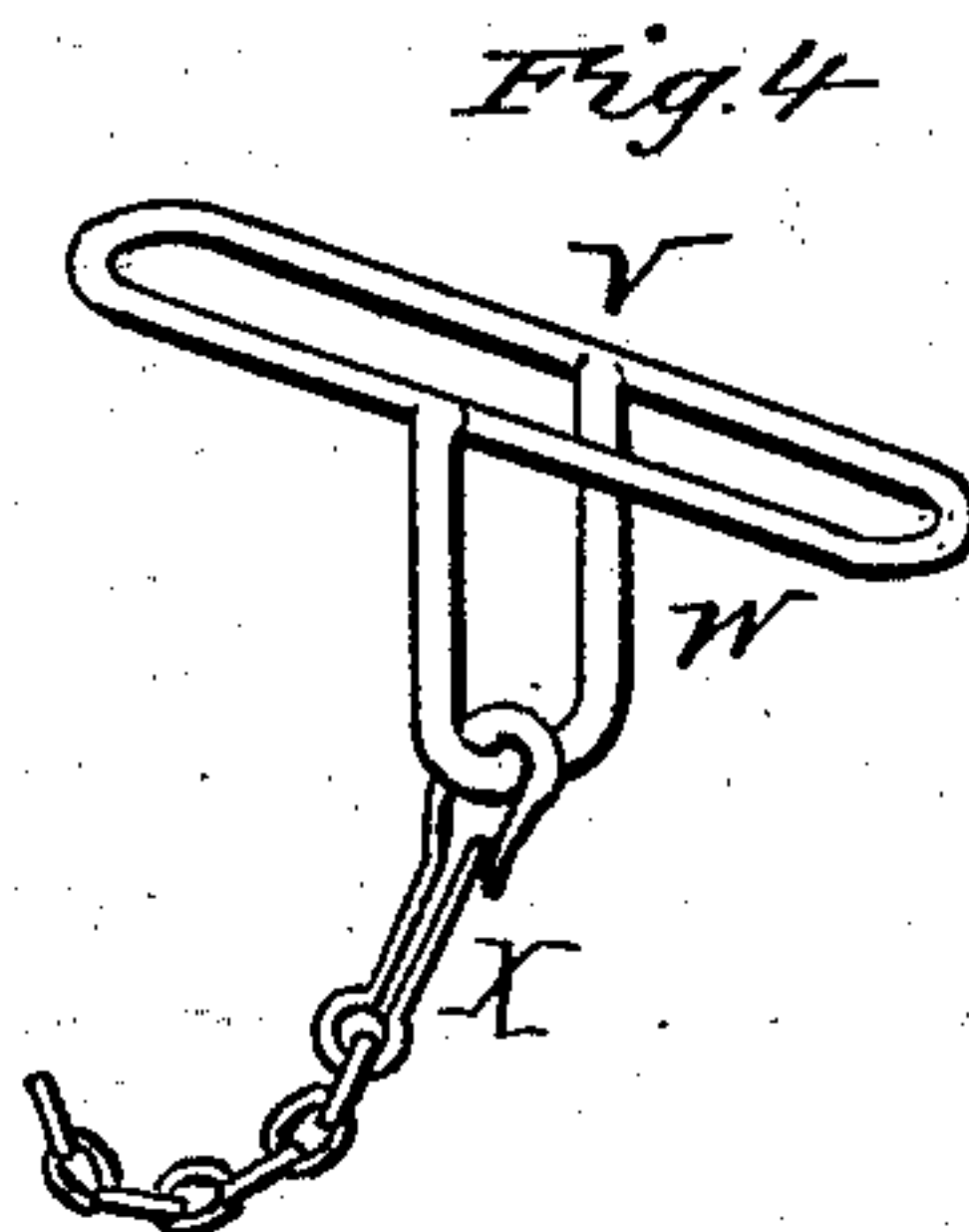
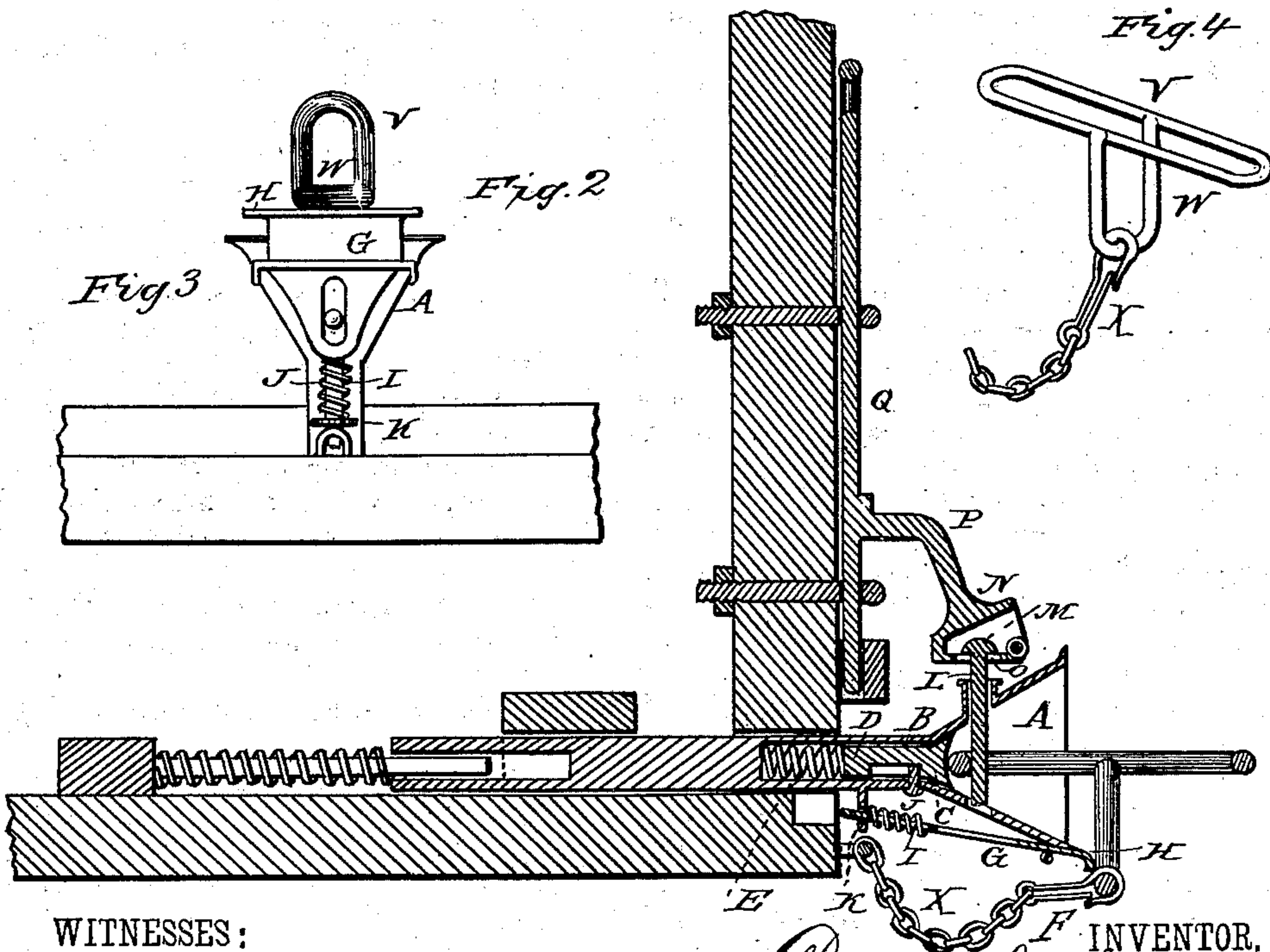
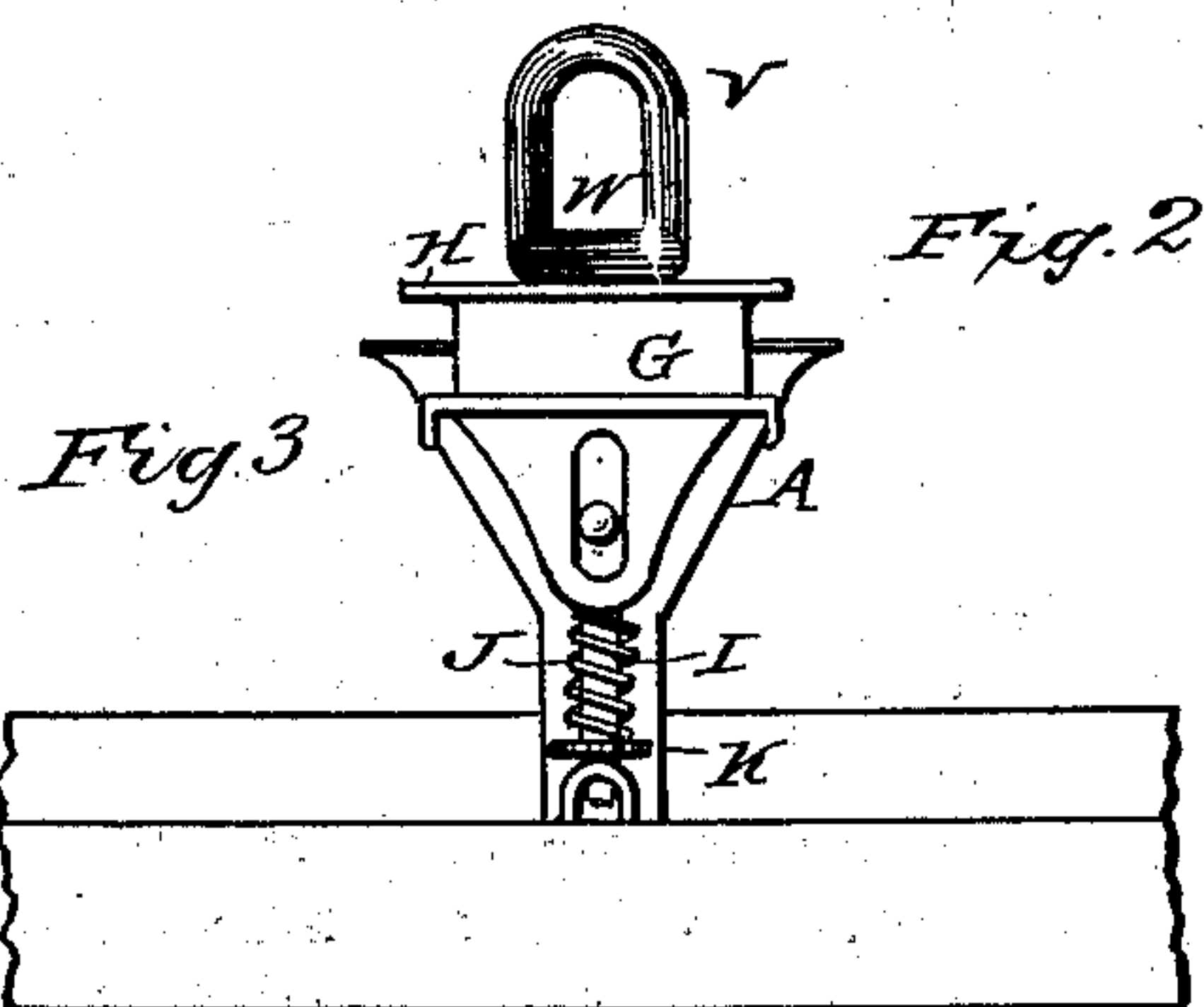
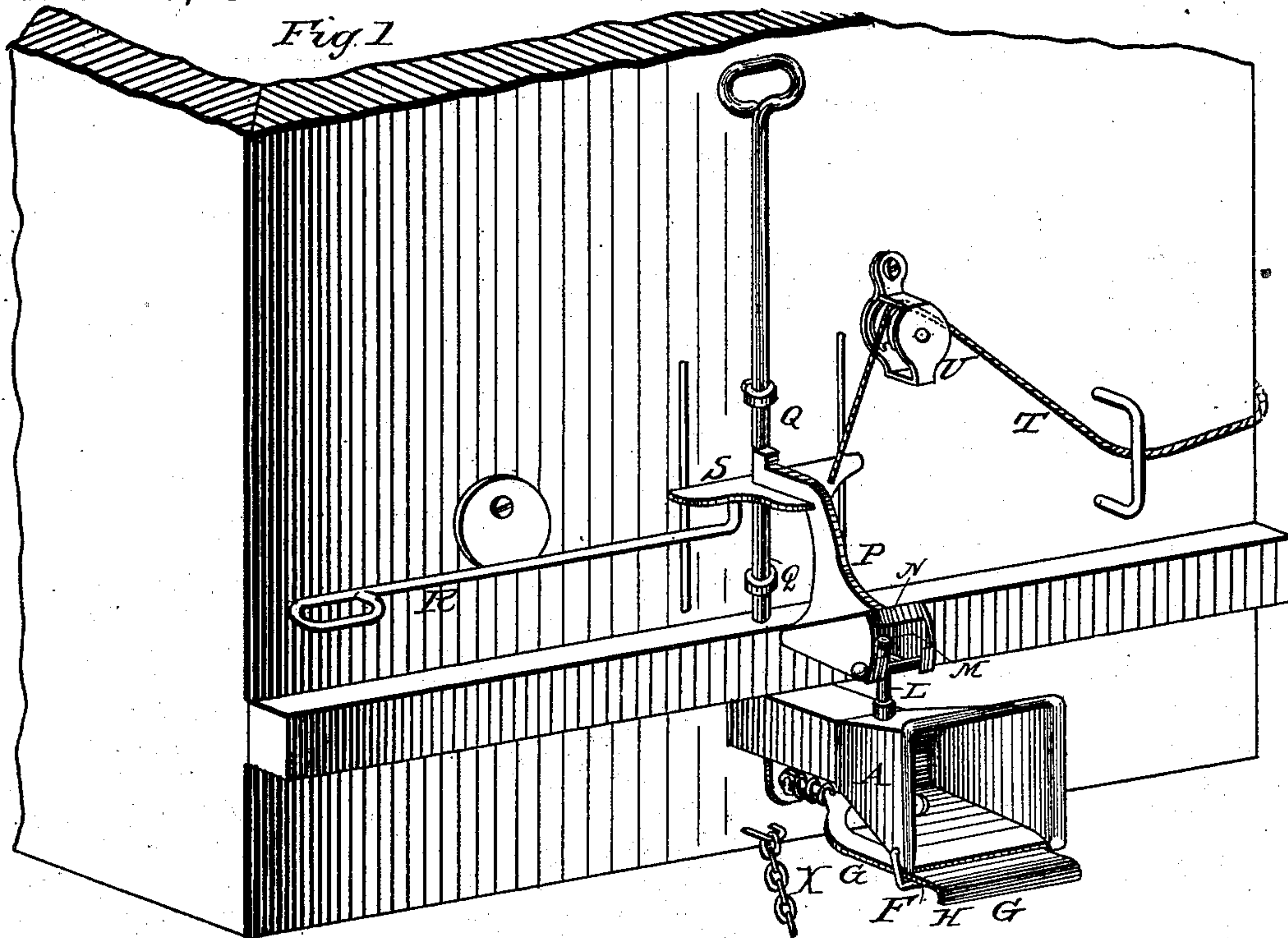


(No Model.)

D. E. SOUTHWICK.  
CAR COUPLING.

No. 280,254.

Patented June 26, 1883.



WITNESSES:

*Ad. G. Dieterich*  
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INVENTOR.  
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By *A. Peterson & Co.*  
ATTORNEYS



# UNITED STATES PATENT OFFICE.

DAVID E. SOUTHWICK, OF OGDENSBURG, NEW YORK.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 280,254, dated June 26, 1883.

Application filed January 8, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, DAVID E. SOUTHWICK, of Ogdensburg, in the county of St. Lawrence and State of New York, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of part of the end of a railway-car provided with my improved coupling. Fig. 2 is a longitudinal vertical section of the draw-head and link. Fig. 3 is a bottom view of the draw-head, and Fig. 4 is a perspective view of the link.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to automatic car-couplings; and it consists in the improved construction of the same, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter A indicates the draw-head, which is fixed upon a draw-bar of the usual construction. The draw-head is of the usual construction, but has a central recess, B, in which slides a recessed head, C, having a stem, D, and bearing with its inner end against a spiral spring, E, wrapped around the stem. The lower wall of the flaring draw-head is provided with a bearing, F, in which slides the outer wide end of a slotted plate, G, the outer edge of which is bent down, forming a lip, H. The inner end of plate G forms a stem, I, around which is placed a spiral spring, J, bearing with one end against the wider part of plate G, and with the other end against a bearing, K, in which stem I slides.

L is the coupling-pin, which passes through holes in the upper and lower side of the draw-head and through the slot in plate G. The round head M of this bolt is held fast by a box, N, having a slot, O, in its under side, and an inclined top, so that the head of the bolt may slide forward and backward, according to the draft exercised upon it, while the inclined top will guide it directly vertical when it is dropped. This head is fastened upon an arm, P, fastened to a rod, Q, which slides in bearings upon the end of the car, and is provided

with a handle at its upper end, so that it may be operated from the top of the car. The rod Q, and consequently the coupling-pin, may also be raised from the side of the car, either by a lever, R, pivoted upon the end of the car and bearing with one end under a cross-plate, S, fastened upon rod Q for holding bolt-head in position, or by a cord or chain, T, fastened to rod Q, and carried over a pulley, U, and out to the side.

V is the link, which is of the usual construction, but is provided at the middle of its sides with an arched handle, W, by which the link may be placed in and withdrawn without danger for the hands, and which bears against the lip H of plate G, serving to hold the link in position for entering the opposite draw-head, while at the same time plate G will, by being provided with spring J, allow the link to move upward, downward, or sidewise while the train is running. The lower end of the coupling-pin will rest upon the top of the recessed head C, and when the link enters the draw-head, pushing the head back, the pin will fall, while the spring E will push the head C forward when the pin is raised. For further security the link may be fastened to the car by a chain, X, fastened to the arch W and to the car.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The combination of the draw-head A, having central recess, B, and bearings F and K, recessed head C, having stem D and spring E, slotted plate G, having down-turned lip H, stem I, and spring J, and coupling-pin L, substantially as and for the purpose shown and set forth.

2. The combination of the draw-head A, having spring-bolt C D, coupling-pin L, having head M, and rod Q, having plate S, and arm P, provided with box N, having slotted under side and inclined top, and means for operating it, substantially as shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

DAVID E. SOUTHWICK.

Witnesses:

A. N. PARTRIDGE,  
JOHN F. CADY.