

(No Model.)

W. WRIGHT.

CAR COUPLING.

No. 365,035.

Patented June 14, 1887.

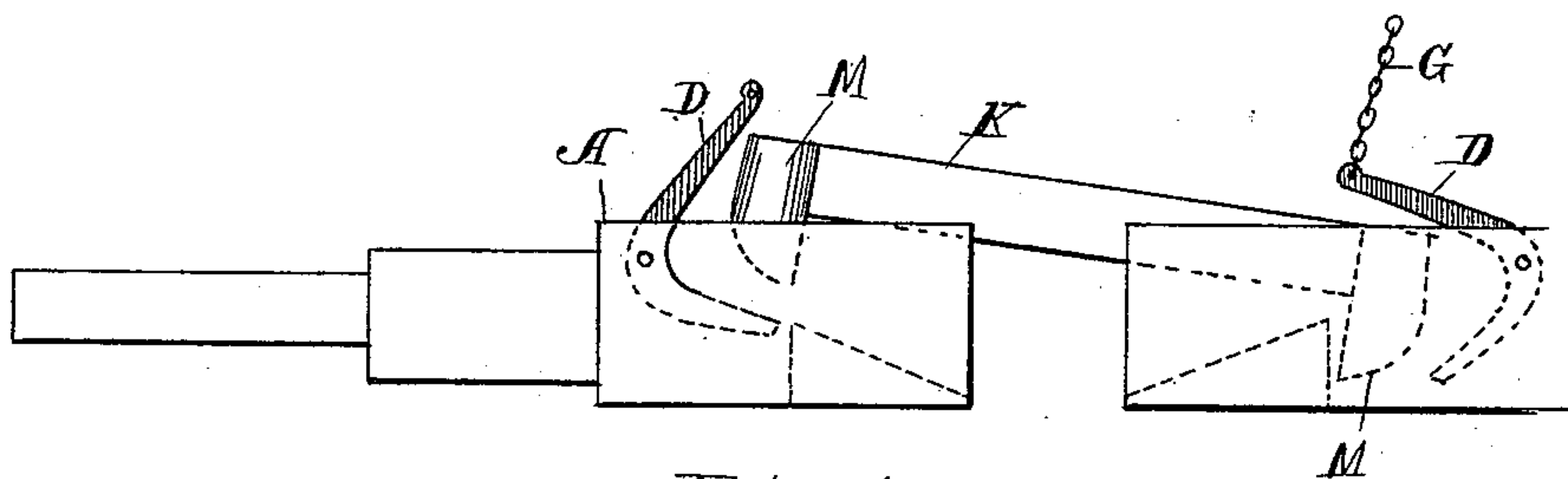


Fig. 1.

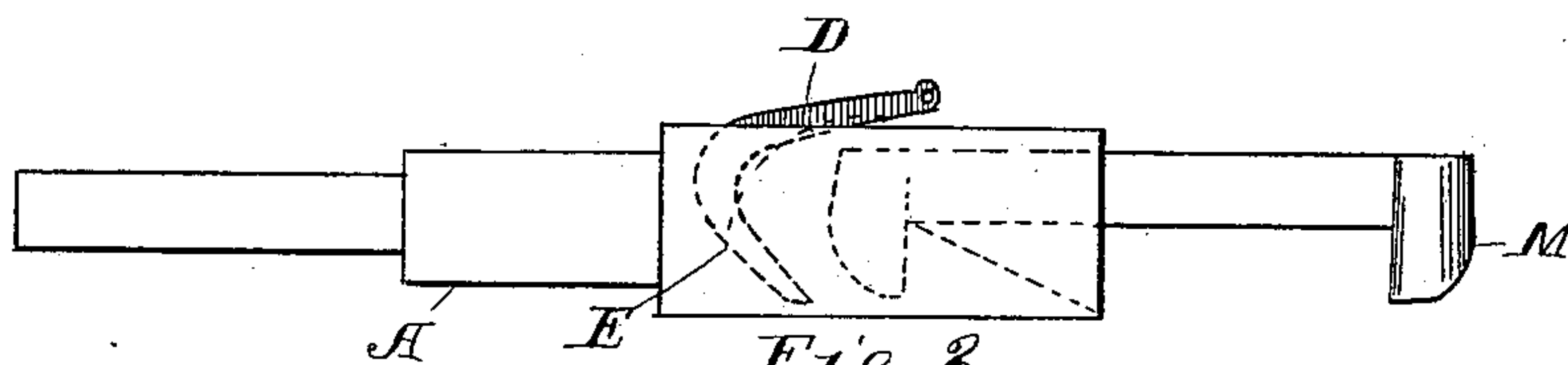


Fig. 2.

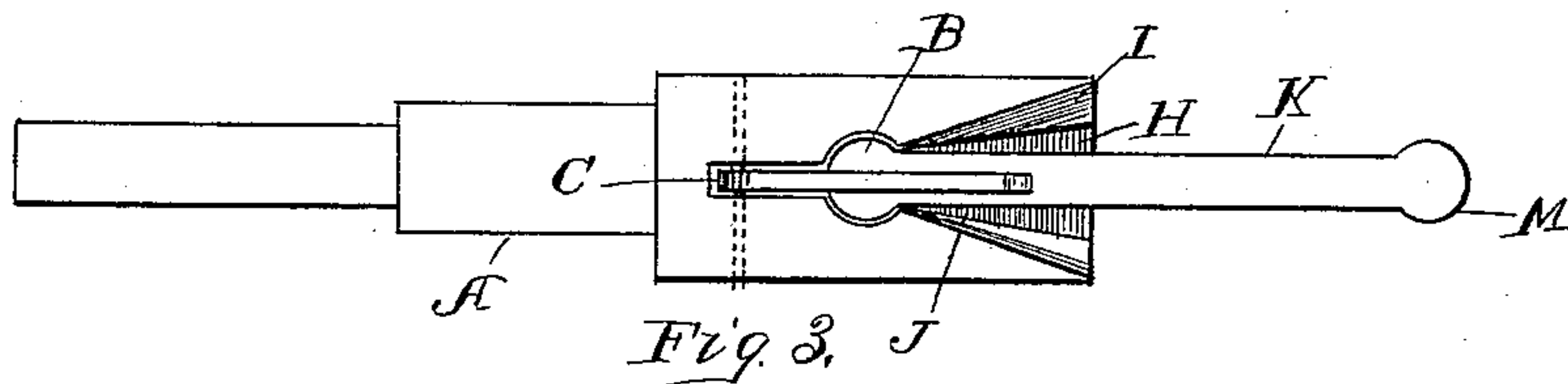


Fig. 3.

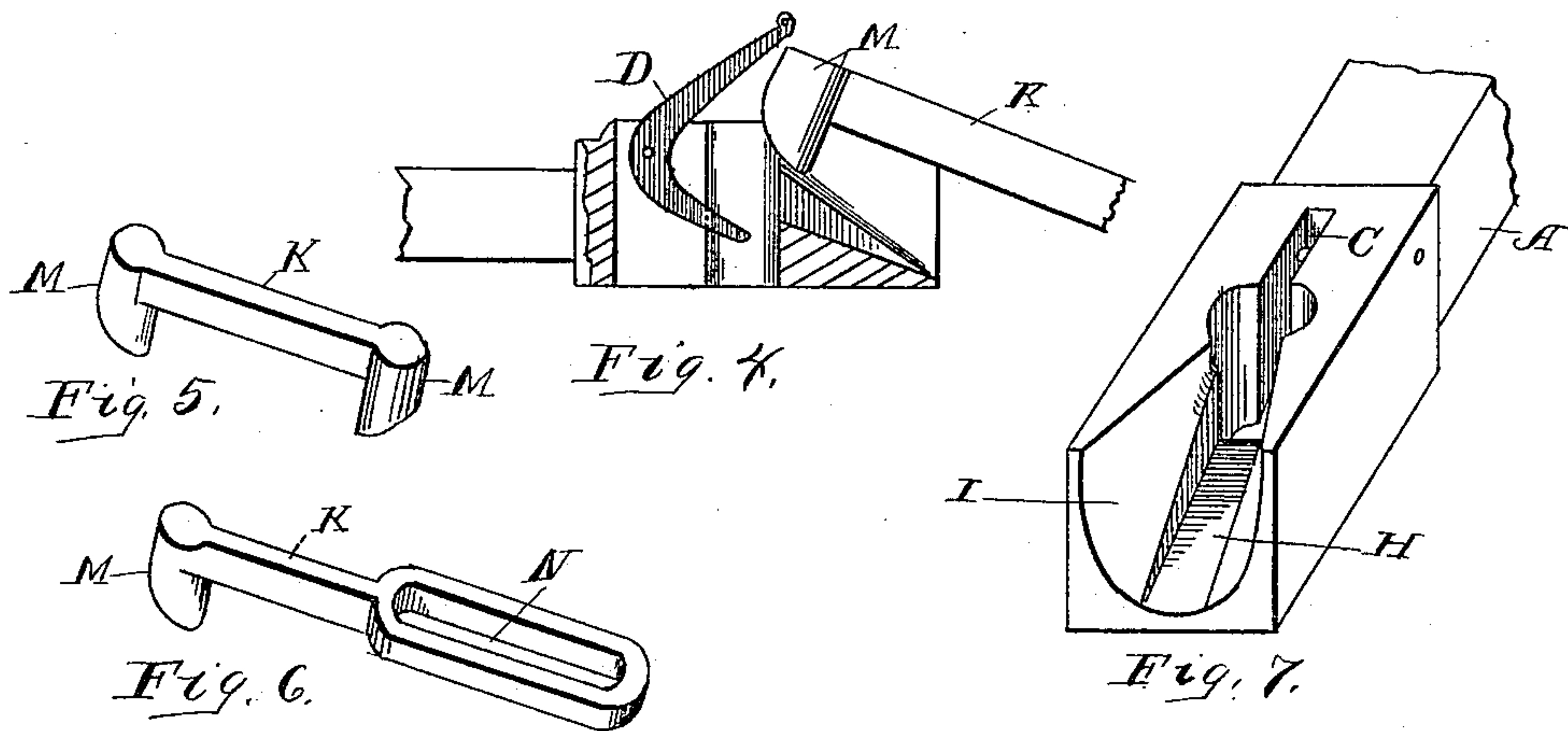


Fig. 5.

Fig. 6.

Fig. 7.

WITNESSES:

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# UNITED STATES PATENT OFFICE.

WILLIAM WRIGHT, OF WILLINK, NEW YORK.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 365,035, dated June 14, 1887.

Application filed November 5, 1886. Serial No. 218,061. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM WRIGHT, of Willink, in the county of Erie and State of New York, have invented a new and useful  
5 Improvement in Car-Couplers, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a side view of a pair of draw-bars with my improved coupler thereon; Fig.  
10 2, a side view of one of the couplers with the link in position; Fig. 3, a plan view of the same; Fig. 4, a longitudinal vertical central section of one of the couplers; Figs. 5 and 6, perspective views of two forms of links that  
15 may be used with the device, and Fig. 7 a perspective view of the forward end of the draw-bar.

My invention relates to an improvement in car-couplers; and it consists in a draw-head  
20 having centrally a vertical opening and rearwardly therefrom a vertical slot, within which I journal a curved lever so disposed as to raise the link from the vertical opening, while forwardly over this opening is an inclined plane  
25 so disposed that the link, which is of peculiar construction, may slide up and engage with the vertical opening, all of which will now be set forth in detail.

In the accompanying drawings, A represents  
30 a draw-bar, provided centrally with a vertical opening, B, and rearwardly from this opening B is a vertical recess, C, within which I journal a lever, D, the lower end, E, of which curves forwardly, so that when the main or upper  
35 part F of the arm assumes a vertical position it will extend forward into the opening B, as shown by dotted lines, Fig. 1; but when, as shown in Fig. 2, the upper part of the lever is pulled forward the curved part E will be  
40 withdrawn into the vertical recess C of the draw-bar. To the upper end of this lever D a cord or suitable device may be attached for operating, as will readily be noticed.

Forwardly from the vertical opening B is  
45 an inclined plane, H, extending from the forward end, I, of the coupler and leading up to the top of the coupler. At the forward end, H, of this device is a rearwardly-inclined plane, I', extending up nearly to the top of the  
50 opening B, where it connects with the said opening. Centrally this inclined plane has a

depression, J, where it connects with the opening B, the use of which will hereinafter be more fully described.

To use this coupler, a special link is necessary, which is shown in perspective in Fig. 5. This consists in a straight bar, K, and is provided at each end with a vertical cylindrical-shaped bulb, L, the lower forward side of each of these bulbs being cut off at an angle, as  
60 shown at M. In operating this link K in connection with the coupler the angled side M of the link slides up the inclined plane I at the forward part of the coupler until the head or enlarged part L drops into the opening B centrally in the draw-bar, and in order that this  
65 may be accomplished the inclined recess J forwardly from the opening B is cut away to receive the shank K of the link. The opening J at the forward part of the coupler is designed  
70 to be narrower at the forward part of the coupler, in order that when the link connects with the draw-bar the angled part M will slide up the said inclined plane I and prevent the head L from entering the recess J, but at the  
75 same time to permit of the shank or bar K dropping into the said recess when the head L connects with the opening B.

In order that the link K may be firmly held on the walls of the opening B of the coupler,  
80 the forward side of the opening B is cut away slightly, so as to form an angle underneath; and the lower parts of the heads L of the link are also inclined inwardly, so as to be slightly  
85 hook-shaped.

Although the link shown in Fig. 5 is the only shape designed to be used with this form of coupler, yet it occasionally happens that it is desired to couple a car having the ordinary  
90 coupler. In order that this may be accomplished, I provide a link (shown in Fig. 6) provided with an enlarged head, L, and shank K, but with one end provided with an ordinary link, loop, or extension, N.  
95

The operation of my device is as follows: In coupling, the angled part M of the head L slides up the inclined plane I at the forward part of the coupler until the hooked part of the head drops into the opening B. Before  
100 the link K connects with the opening B the lever D may either be in the position as shown



in Figs. 1 or 2; and when in the position as shown in Fig. 2, as the head of the link slides up the inclined plane the forward part of the head L, which is also somewhat inclined for the purpose of engaging with the under forward side of the arm of the lever D, as shown in Fig. 4, causes the end F, to which the cord or chain G is attached, to tilt rearwardly, bringing the lower hooked end, E, to the upper part of the opening B, and the moment that the head L drops into the said opening B the weight of the said link will again tip the lever D into the position as shown in Fig. 2. When, however, it is desired to couple the link, the end F of the lever is raised by means of the cord or chain G into the position as shown in Fig. 1, and the end E of the lever engages with the lower part of the head and raises it from the opening B. The inclined plane I and slot or opening J at the forward part of the coupler is designed to be of such a width forwardly that the forward end of the link may extend at any angle therein, and thus not interfere with the movement of the car.

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

1. In a car-coupler, the central opening having forwardly an inclined plane and centrally therein a vertical recess and rearwardly a vertical wall, within which a curved lever is hinged for detaching the link from the coupler, substantially as herein set forth and described. 30

2. The combination of the coupler A, having forwardly an inclined plane, I, and a recess, J, with the wall C, rearwardly having therein the curved lever D, and the chain or cord G, for operating substantially as herein set forth. 35

3. The combination of the coupler A, opening B, slot C, and curved lever D, inclined plane I, and recess J with the link K, substantially as herein set forth and described. 40

In testimony that I claim the foregoing I have hereunto set my hand this 3d day of July, 1886, in the presence of witnesses.

WILLIAM WRIGHT.

Witnesses:

CHAS. E. LAMB,  
HIRAM WEBSTER.