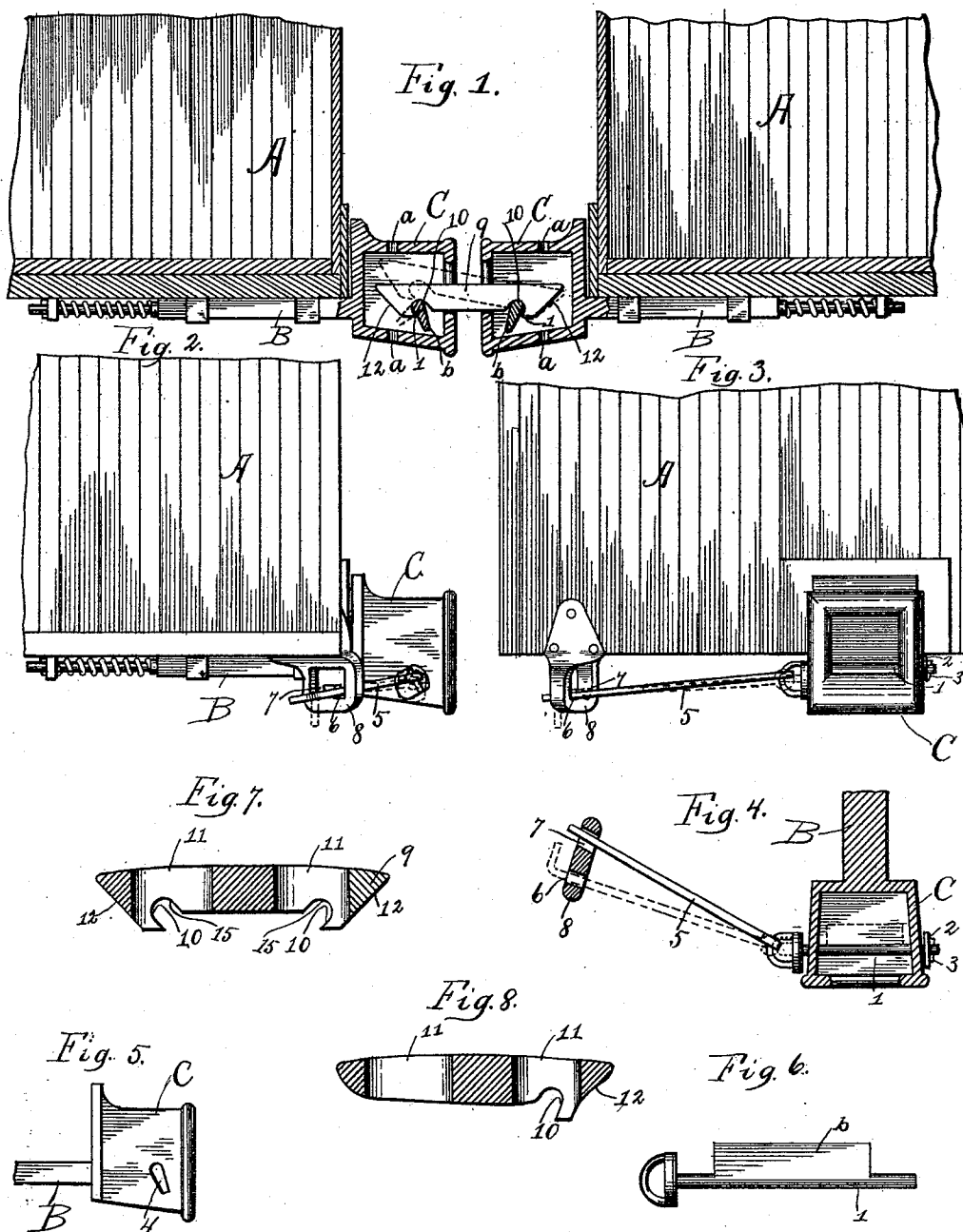


(No Model.)

J. G. WILLIAMS.
CAR COUPLING.

No. 498,343.

Patented May 30, 1893.



Witnesses
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UNITED STATES PATENT OFFICE,

JOHN G. WILLIAMS, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO MARY M. WILLIAMS AND FRANK F. WILLIAMS, OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 498,343, dated May 30, 1893.

Application filed August 2, 1892. Serial No. 441,979. (No model.)

To all whom it may concern:

Be it known that I, JOHN G. WILLIAMS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, 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.

This invention relates to a novel construction in car couplers, the object being to provide a device of this kind that will be simple and durable in construction and efficient in operation.

The invention consists in the features of construction and combinations of parts herein-after fully described and specifically claimed.

In the accompanying drawings illustrating my invention,—Figure 1 is a vertical longitudinal section of the adjacent ends of two cars provided with couplers constructed in accordance with my invention and coupled together, the couplers being in section on the line 1—1 of Fig. 3. Fig. 2 is a side elevation of the coupler. Fig. 3 is a front elevation of the same. Fig. 4 is a section of the line 4—4 of Fig. 3. Fig. 5 is a side elevation of the coupler head. Fig. 6 is a detail view of the coupling pin or latch. Fig. 7 is a sectional view of a link constructed in accordance with my invention. Fig. 8 is a sectional view of a modified form of the link.

Referring now to said drawings, A indicates the end of a car provided with a coupler which is attached in the usual manner by means of the draw-bar B.

C indicates a coupler head of ordinary construction provided with a transverse, horizontally arranged coupling pin or latch 1 pivoted in bearings in the side walls of the coupler head. Said coupler head is also provided with two holes or openings *a* through which an ordinary coupling pin may be passed and the cars coupled in the ordinary manner. The coupling pin or latch 1 is inserted in the coupler head C through a slot 4 in one side thereof and is held in place by a washer 2 and key 3 fitted in one end of the coupling pin or latch 1. Said coupling pin or latch 1 is provided with a downwardly projecting wing *b*

and a turning device for throwing the same rearwardly, for the purpose of uncoupling the cars.

Obviously, various devices for turning the coupling pin or latch 1 on its pivot could be used, but I prefer to use the one shown in the drawings which consists of a rod 5 attached by an eye on one end thereof to said coupling pin. Said rod 5 has flat sides and is adapted to fit snugly in a notch 6 which prevents it from turning. Said notch 6 is formed in the lower end of a loop which is also provided with a larger notch 7 which gives the rod 5 sufficient room to turn. Said loop 8 is fastened to the car in the manner shown in Figs. 2 and 3.

When it is desired to lock the coupler in any desired position, rod 5 is turned until the desired position is obtained when it is inserted in notch 6 which serves to hold it in this position until released.

The coupling link 9 is provided with downwardly projecting hooks 10 adapted to engage the coupling pin or latch 1 as shown in Fig. 1. The downwardly projecting hooks 10 extend down below the lower face of the link while between the hooks 10 and the body of the link is an upwardly extending recess 15 so that the lower face of the link is located below the line of bearing between the link and the pin 1 of the draw-head. In this way it will be seen that the recess 15 receives the pin and that when in this position the lower face of the body portion of the link rests on the lower edge of the opening in the end of the draw-head, so that the link will be supported from one end or when in engagement with one draw-head only. Said coupling link 9 is further provided with upright openings or slots 11 adjacent its ends through which an ordinary coupling pin is adapted to pass, and inclined lower faces 12 at its ends which are adapted to ride over the lower edge of the opening in the coupler head and also over the coupling pin or latch 1 and engage the same.

The operation of my invention is as follows: When two cars are brought together, to be coupled, the coupling link 11 hangs by one hook 10 to the coupling pin or latch 1, and the lower face rests upon the lower edge of the opening in the coupler head, whereby it is

held in an almost horizontal position, and when the free end of the link comes in contact with the lower edge of the opening in the opposite coupler head, it will first ride over the same and then over the coupling link or latch 1 until the hook 10 has passed the same, when it will fall and engage it thereby coupling the cars.

When it is desired to uncouple the cars the rod 5 is turned so as to throw the wing or projection on the coupling pin or latch 1 to a rearwardly inclined position, thereby providing an inclined plane over which the hook 10 will ride when any strain is put upon it, so that the cars will be uncoupled.

I claim as my invention—

1. A car coupler comprising a draw-head provided with a transverse, horizontally arranged, pivoted latch or coupling pin, an operating rod connected with said latch or coupling pin for turning the same on its pivot, and a notched holding plate to receive said rod.

2. A car coupler comprising a draw-head provided with a transverse, horizontally ar-

anged, pivoted latch or coupling pin, an operating rod connected with said latch or coupling pin for turning the same on its pivot, and a holding plate provided with a plurality of notches to receive said operating rod.

3. A car coupler comprising a draw-head provided with a transverse, horizontally arranged, pivoted latch or an operating rod connected with said latch or coupling pin for turning the same on its pivot, and a holding plate having a small notch 6 and a large notch 7 to receive said operating rod.

4. A coupling link provided at its ends with hooks 10 projecting downwardly below the lower face of the body portion of the link, and recesses in the rear of said hooks extending upwardly above the lower face of said link, substantially as described.

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

JOHN G. WILLIAMS.

Witnesses:

HARRY COBB KENNEDY,
C. F. CONN.