

(No Model.)

H. T. MOORE.
CAR COUPLING.

No. 584,045.

Patented June 8, 1897.

Fig. 1.

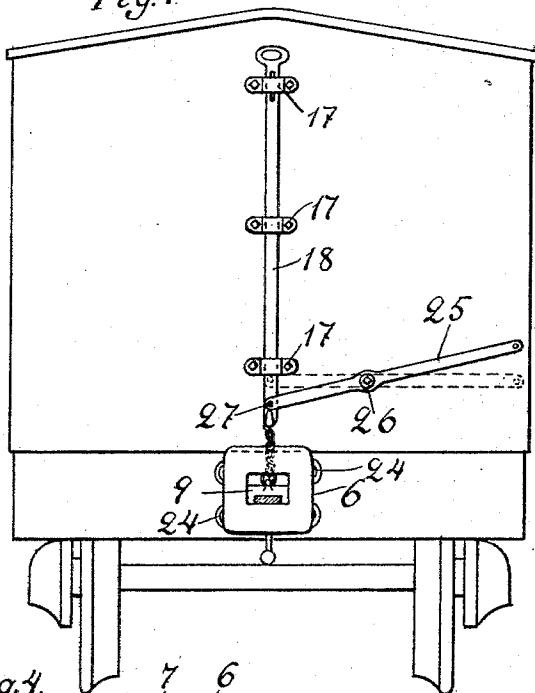


Fig. 2.

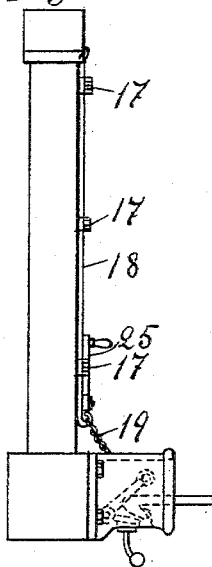


Fig. 4.

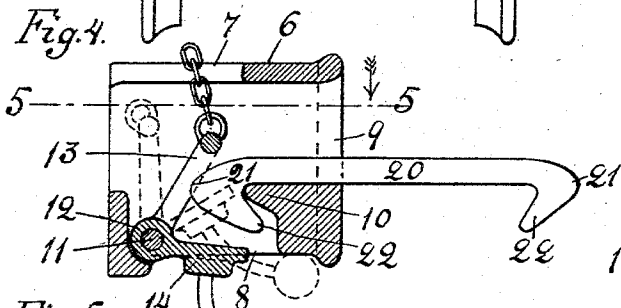


Fig. 3.

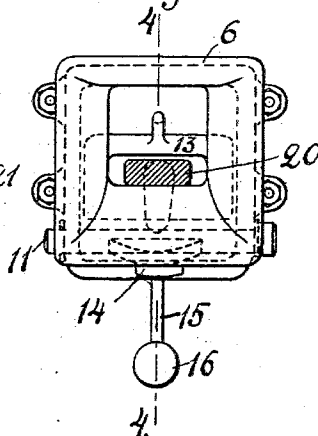
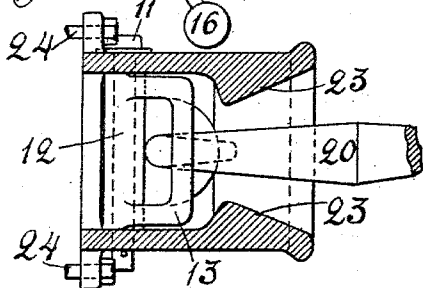


Fig. 5.



WITNESSES

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UNITED STATES PATENT OFFICE.

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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 584,045, dated June 8, 1897.

Application filed October 28, 1896. Serial No. 610,388. (No model.)

To all whom it may concern:

Be it known that I, HERBERT THORNDYKE MOORE, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Car-Couplers, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to automatic car-couplers; and the object thereof is to provide an improved device of this class which is simple in construction and operation and by means of which separate cars may be automatically coupled and uncoupled when necessary either from the side or top of the cars.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which similar numerals of reference designate the same parts wherever found throughout the several views, and in which—

Figure 1 is an end view of a car provided with my improved automatic coupler; Fig. 2, a side view of the end of the car-body; Fig. 3, a view of the outer end of the coupler detached; Fig. 4, a partial section on the line 4 4 of Fig. 3, and Fig. 5 a partial section on the line 5 5 of Fig. 4.

In the practice of my invention I provide an automatic coupler which consists of a coupler-head composed of a casing 6, which is preferably rectangular in cross-section and in the top of which is formed a longitudinal slot 7 and the bottom of which is open, as shown at 8, and the outer end of said casing or coupler-head is also provided with an opening 9, the bottom of which is provided with a backwardly-directed cross flange or projection 10.

Arranged transversely of the rear of the opening 8 on the bottom of the casing or coupler-head is a shaft 11, on which is mounted a sleeve 12, which is provided with an upwardly and forwardly directed link 13, and said sleeve is also provided with a forwardly-directed plate 14, which normally rests in the opening 8 in the bottom of the coupler-head or casing, and secured thereto is a downwardly and forwardly directed arm 15, which is provided at

its end with a weight 16, and the said sleeve 12 is free to turn on the shaft 11.

Mounted in suitable keepers 17, which are secured to the end of the car, as shown in Fig. 1, is a vertically-movable bar 18, with the lower end of which is connected a chain 19, which passes through the opening 7 in the top of the coupler-head or casing 6 and is connected with the link 13, and I also provide a coupling-bar 20, each end of which is provided with a beveled or sliding pointed head 21 and with a downwardly and inwardly directed hook 22, and the operation will be readily understood from the foregoing description when taken in connection with the accompanying drawings and the following statement thereof.

The side walls of the opening 9 in the outer end of the coupler-head or casing are inclined inwardly and backwardly, as shown at 23 in Fig. 5, and the coupler-head or casing is adapted to be secured to the end of the car by bolts 24, or in any desired manner, and it will be understood that one of these coupler-heads or casings is connected with each end of each car, and each of the cars carries one of the coupler-bars 20, and in practice all that is necessary in order to couple the cars is to pass the end or head 21 of the coupler-bar in through the opening 9 in the outer end of the coupler head or casing 6, and in this operation the pointed or beveled ends 21 of the coupler-bar pass beneath the upper cross-bar of the link 13 and raise said link until the hook 22 at the end of the coupler-bar drops beneath the backwardly-directed flange 10 formed in the coupler-head or casing, as shown in Fig. 4, after which the link 13 drops thereon and securely holds the coupler-bar in place, the plate 14 and the arm 15, together with the weight 16, facilitating this operation and serving to securely hold the coupler-bar in place. It will also be understood that this operation is automatic, the coupler-bar 21 being carried by the coupler-head or casing 6, and when the cars are run together in the usual manner the operation of coupling the same will be performed as described.

The cars may be uncoupled from the top thereof by means of the bar 18, or from the side by means of a lever 25, which is pivoted

to the end of the car at 26 and to the lower end of the bar 18, as shown at 27, and in this operation all that is necessary is to raise the link 13, when it, together with the plate 14 and the arm 15 and the weight 16, will assume the position shown in dotted lines in Fig. 4, and the plate 14 will raise the head or end of the coupler-bar and disconnect it from the flange 10, when the cars may be uncoupled, as will be readily understood.

The lower side of the flange 10 is inclined downwardly, as clearly shown in Fig. 4, in order to facilitate this operation, and it will thus be seen that I accomplish the object of my invention by means of a device which is simple in construction and operation, and one which is comparatively inexpensive, while being well adapted to accomplish the result for which it is intended.

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

1. In an automatic coupler for cars, the combination with a coupler-head or casing, which is provided with an opening in the top and bottom thereof, and with an opening in the outer end through which the coupler-bar is passed, and at the bottom of which is a backwardly-directed flange or projection, of a shaft mounted transversely of the lower rear portion of the coupler-head or casing, a sleeve mounted on said shaft and adapted to turn thereon, said sleeve being provided with an upwardly and forwardly directed link and with an outwardly-directed plate or projection having a depending weighted arm which passes through the opening in the bottom of the coupler-head, and a coupler-bar which is provided at each end with a downwardly and

inwardly directed hook which is adapted to operate in connection with said flange or projection at the bottom of the opening in the outer end of the coupler-head or casing, substantially as shown and described.

2. In an automatic coupler for cars, the combination with a coupler-head or casing which is provided with an opening in the top and bottom thereof, and with an opening in the outer end through which the coupler-bar is passed, and at the bottom of which is a backwardly-directed flange or projection of a shaft mounted transversely of the lower rear portion of the coupler-head or casing, and provided with an upwardly and forwardly directed link, and with an outwardly-directed plate or projection having a depending weighted arm which passes through the opening in the bottom of the coupler-head, and a coupler-bar which is provided at each end with a downwardly and inwardly directed hook which is adapted to operate in connection with said flange or projection, at the bottom of the opening in the outer end of the coupler-head or casing, and means for operating said link, to uncouple the cars, consisting of a chain or similar device secured thereto, and passing through the opening in the coupler-head or casing, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 24th day of October, 1896.

HERBERT THORNDYKE MOORE.

Witnesses:

JOHN BUCKLER,
THOS. ARCHIBALD ACTON.