(No Model.)

T. DIEMER.

CAR COUPLING.

No. 342,825. Patented June 1, 1886.

Fig. 3.

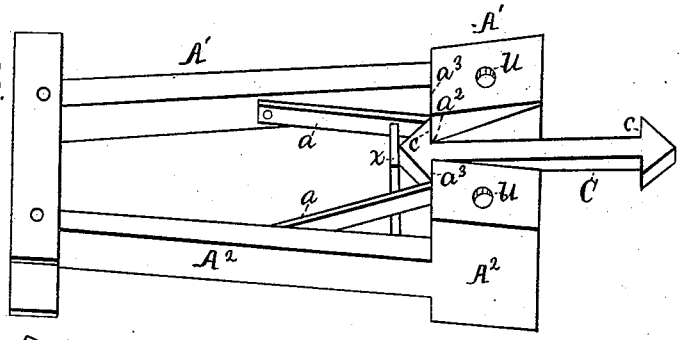


Fig. 2.

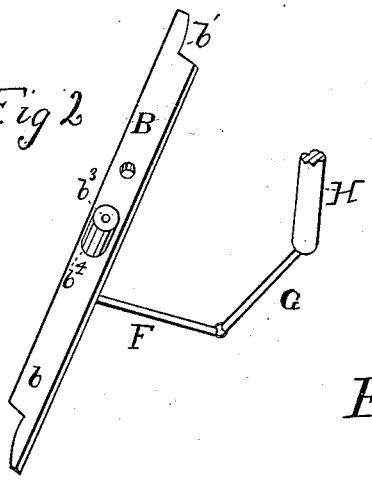
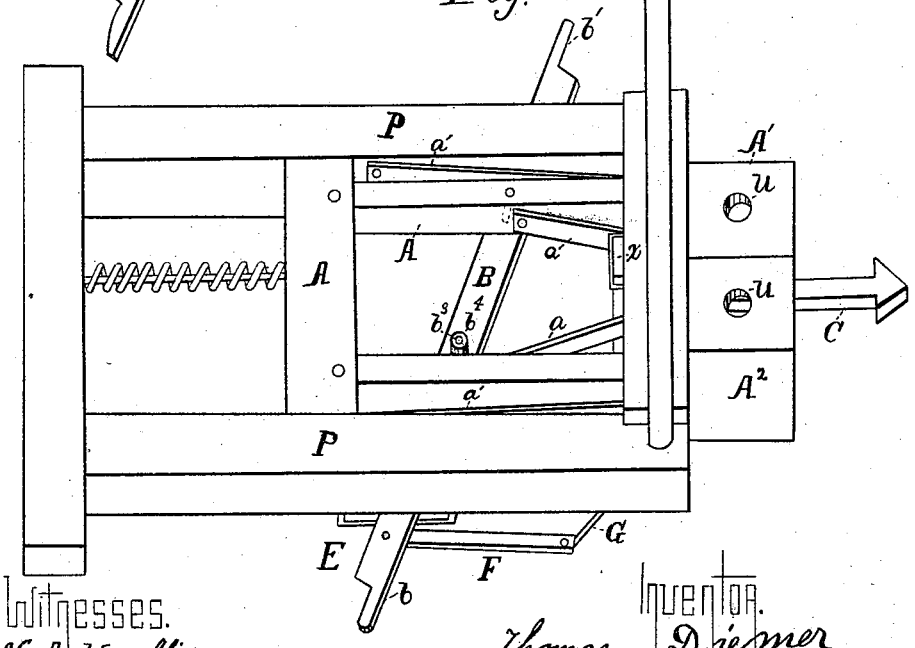


Fig. 1.



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THOMAS DIEMER, OF SPRINGFIELD, MISSOURI.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 342,825, dated June 1, 1886.

Application filed March 26, 1886. Serial No. 196,615. (No model.)

To all whom it may concern:

Be it known that I, THOMAS DIEMER, a citizen of the United States, residing at Springfield, in the county of Greene and State of Missouri, have invented certain new and useful Improvements in Car-Couplings; 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.

My invention relates to improvements in car-couplings, the object of which is to provide a cheap, simple, durable, and convenient device for coupling and uncoupling cars, without going in between them, from either side of the car or from its top. These objects I attain by means of the device illustrated in the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a view in elevation of the device with the body of the car removed. Fig. 2 is a detail of the levers. Fig. 3 is a detail of the draw-head.

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

P is a common car-frame for holding a draw-head, and is provided with springs a' a', attached to its sides. Said springs are for the purpose of holding the draw-head firmly in place, and to hold its jaws A′ A^2 together.

A is a draw-head composed of two jaws, A′ A^2. Said draw-head has its jaws beveled outward and forward from a point, a^2, so that when the pin C strikes in it it will spread the jaws apart, (as the head of pin C is spear-shaped,) and the jaws of the draw-head are held together by means of springs a' a'. After the shoulders of the connecting-pin C have passed the shoulders a^3 of the draw-head the springs a' a' throw the jaws together again, and thus hold the pin C firmly in place.

a a are springs attached to the inside of jaws A′ A^2, and extend forward to a point near the shoulders a^3 a^3, and are for the purpose of holding the head of pin C directly in the middle of the draw-head, so that when the jaws are spread apart, as hereinafter shown, head C will not catch against the shoulders a^3 a^3 of the jaws as the pin is drawn out.

B is a lever, made of any suitable material, and is preferably pivoted to one of the jaws of the draw-head, back of the point where the pin C passes, but may be pivoted in the center of the jaws by any suitable means. Said lever extends out beyond the sides of the car, and is provided with an arm, b', upon which is placed a suitable roller, b^4. Said roller is for the purpose of rolling upon the inside of the jaw opposite the point where the lever is pivoted to the opposite jaw; but when the lever B is pivoted in the middle of the jaws the lever is provided with two arms and two rollers. When the rollers do not touch the jaws, the jaws are together; but when it is desired to uncouple the cars the jaws A′ A^2 are thrown apart by means of the lever B. As the end b is drawn forward or the end b' thrown backward to form a right angle with the jaws, the roller b^4 operates against the jaws opposite the pivot, and thus presses the jaws apart, which uncouples the cars. The ends b and b' of lever B may be attached to the sides or frame-work of the car by any suitable means, as by means of staples E.

F is a rod or arm, which connects the lever B, near its end b, with the rod G, which is connected with the shaft H.

H is a shaft, which extends from the bottom of the car to the top, and has a suitable cross-piece or wheel at its upper end for turning the shaft, and by so doing the lever G draws forward on the rod e, and thus draws the end b of lever B forward, and thus throws the jaws apart.

X is a stay-piece, which is placed at any suitable distance back of the shoulder of the draw-head, and is for the purpose of preventing the pin C from being driven too far into the draw-head, so that it will not press the jaws apart; but when the head of the pin C strikes against the piece X it stops the pin and compels it to press the jaws of the draw-head in the other car apart, and then the car is coupled. When it is desired to use the head shown for hitching onto a common link, it may be done by means of a pin passing down through holes U. Thus a car may be coupled or uncoupled without going in between the cars, and from either side or the top of the car.

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

1. For a car, the combination, with a draw-head composed of two jaws, A′ A^2, provided with springs a a, shoulders a^3 a^3, bevels a^2, and

holes U, of side springs, a' a', and a spear-shaped connecting-pin, C, substantially as shown and described.

2. For a car, the combination, with a draw-head composed of two jaws, A′ A^2, provided with springs a a, shoulders a^3 a^3, bevels a^2, and holes U, of side springs, a' a', a spear-shaped connecting-pin, C, and stay-piece X, substantially as and for the purpose set forth.

3. For a car, the combination, with a draw-head composed of two jaws, A′ A^2, provided with springs a a, shoulders a^3 a^3, bevels a^2, and holes U, of side springs, a' a', a spear-shaped connecting-pin, C, stay-piece X, and lever B, extending to the sides of the car, having an arm, b^3, which is provided with a roller, b^4, for opening the said jaws, substantially as and for the purpose set forth.

4. For a car, the combination, with a draw-head composed of two jaws, A′ A^2, provided with springs a a, shoulders a^3 a^3, bevels a^2, and holes U, of side springs, a' a', a spear-shaped connecting-pin, C, stay-piece X, lever B, extending to the sides of the car, having an arm, b^3, which is provided with a roller, b^4, for operating the said jaws, with a shaft, H, extending to the top of the car and provided with a wheel or cross-piece for operating the same, and a suitable arm, G, which is connected near one end of the lever B by means of a connecting-rod, F, substantially as shown and described.

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

THOMAS DIEMER.

Witnesses:

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