

(No Model.)

T. GASKINS.
CAR COUPLING.

No. 546,144.

Patented Sept. 10, 1895.

Fig. 1.

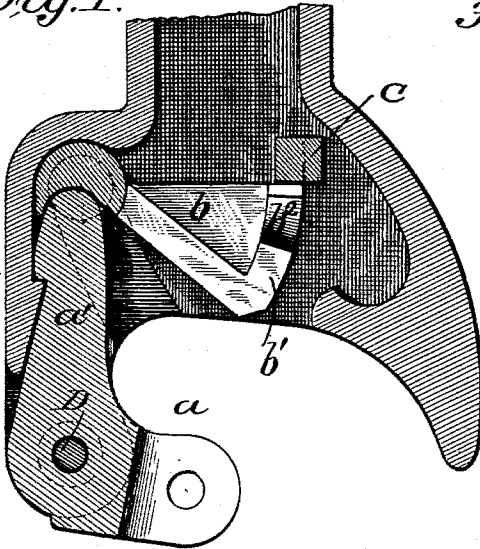


Fig. 2.

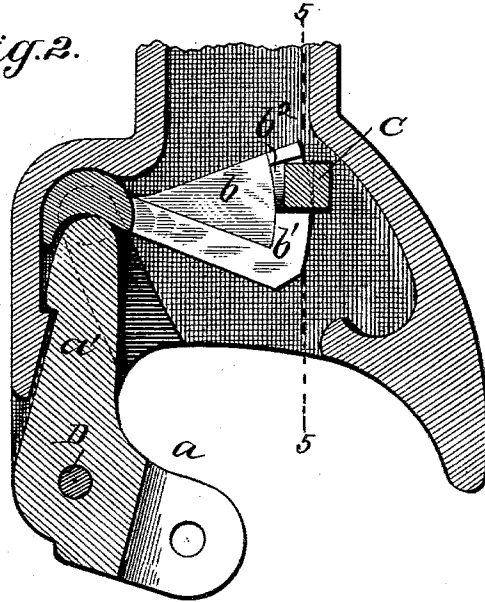


Fig. 3.

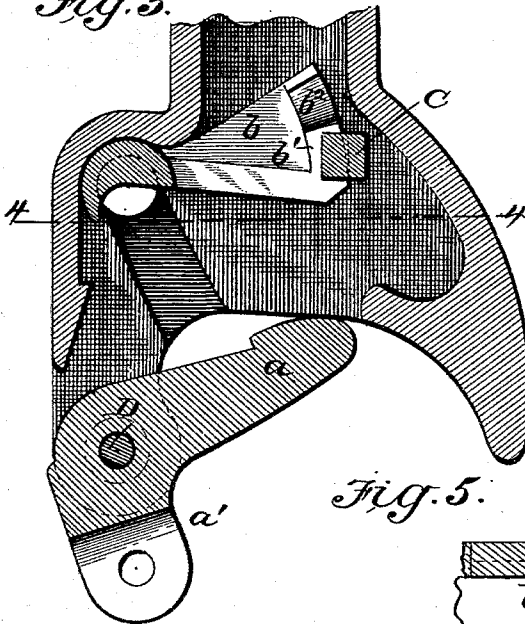


Fig. 4.

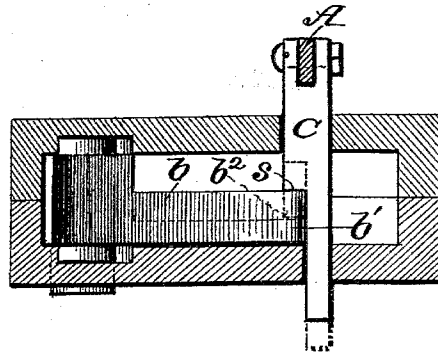


Fig. 5.

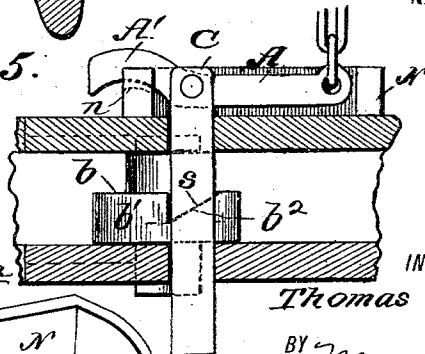
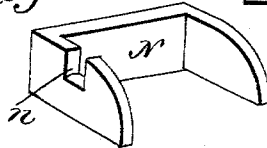


Fig. 5a



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THOMAS GASKINS, OF ARCADIA, FLORIDA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 546,144, dated September 10, 1895.

Application filed June 26, 1895. Serial No. 554,112. (No model.)

To all whom it may concern:

Be it known that I, THOMAS GASKINS, of Arcadia, in the county of De Soto and State of Florida, have invented a new and useful Improvement in Car-Couplings, of which the following is a specification.

My invention is in the nature of an improvement upon the car-coupling for which Letters Patent were granted me March 19, 1895, Nos. 536,139 and 536,075; and it consists in the improved construction of the locking-lever and the pin with which it engages, whereby the couplings are made to operate to lock or couple the cars when the train is standing on a curve as well as when in a straight line. In the patents referred to—No. 536,075, for instance—there are only two distinct positions for the locking-lever in relation to the pin. One is the locked position and the other the unlocked position. In my present invention I construct the locking-lever and pin so that they will lock at an intermediate position before the knuckle has reached the limit of its closing movement, so that when standing on a curve, which precludes the locking-lever from reaching the limit of its closing movement, the cars may still be coupled with safety and certainty, as hereinafter more fully described.

Figure 1 is a horizontal section of the draw-head, showing the parts in their locked position when the cars are in a straight line. Fig. 2 is a similar view with the parts locked in an intermediate position when the cars are standing on a curve. Fig. 3 is a similar view showing the open position of the parts. Fig. 4 is a cross-section on line 4 4 of Fig. 3, and Fig. 5 is a section on line 2 2 of Fig. 2. Fig. 5* is a detail in perspective of the box on the top of draw-head.

For the most part the features of this coupling are constructed and arranged just as they are in my Patent No. 536,075, the locking-lever *b* and pin *C* only being changed—that is to say, the knuckle *a* swings about its vertical axis *D*, and its rear end *a'* engages a seat near the axial center of the locking-lever *b*, and when the free or swinging end of the lever *b* is held in its forward position by the pin *C* the knuckle is locked and the cars coupled, and when the end of said lever passes farther to the rear, as is permitted by the lifting of the

shoulder *s* of the pin, as in Fig. 4, the knuckle may open, as in Fig. 3.

In constructing the locking-lever *b* in accordance with my present invention I form it with a curved segmental end *b'*, in which is a notch *b²*, having its rear side inclined, and the shoulder *s* of the vertically-adjustable pin is made inclined to correspond with this notch. Now when the cars are coupled on a straight line, as in Fig. 1, the shoulder of the pin occupies a position behind the rear side of the curved segment *b'*. When the cars are coupled on a curve and the knuckle cannot go to its full movement, as in Fig. 2, the inclined shoulder *s* of the pin drops in the notch *b²* of the curved segment and locks the lever, and when the knuckle is open, as in Fig. 3, the pin *C* is lifted, so that its shoulder rests upon the forward part of the curved segment.

For operating the pin *C* a lever *A* is fulcrumed to it and has its rear end connected by a chain with mechanism lifting it, while the forward end *A'* of the lever is made with a hook-shaped neck and rests in a slot *n* on one edge of the box *N* on the top of the draw-head. This construction and arrangement of parts give a greater leverage in working the pin.

The box *N* is merely a rectangular flange, as seen in Fig. 5*, formed on the top of the draw-bar and inclosing the lever *A* on three sides, so as to house and protect it against abrasion and breakage, and the notch *n* in the side of said box forms the fulcrum for said lever and holds it always in proper position.

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

1. A car coupling comprising a knuckle, a locking lever, a pin holding the locking lever to position, said locking lever having an intermediate locking position between its normal locking position and its open position, substantially as and for the purpose described.

2. A car coupling having a knuckle, a locking lever, and a pin engaging with the locking lever, said locking lever being formed with a segmental head having an intermediate notch between its front and rear sides for engagement with the pin to couple the cars when standing on a curve substantially as and for the purpose described.

3. The locking lever *b* having segmental

head b' with notch b^2 having inclined side; in combination with the locking pin C having an inclined shoulder s and the coupling knuckle substantially as and for the purpose described.

5 4. The combination with the vertically adjustable pin C; and the draw bar having a notched box or housing N, of the pin lever A fulcrumed to the pin in the middle, and having one end bent to form a curved neck adapted to bear on the inclosing box, and the other end provided with means for operating it substantially as shown and described.

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Witnesses:

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