

No. 614,489.

Patented Nov. 22, 1898.

H. C. MUDDIMAN.
CAR COUPLING.

(Application filed Mar. 11, 1898.)

(No Model.)

Fig. I.

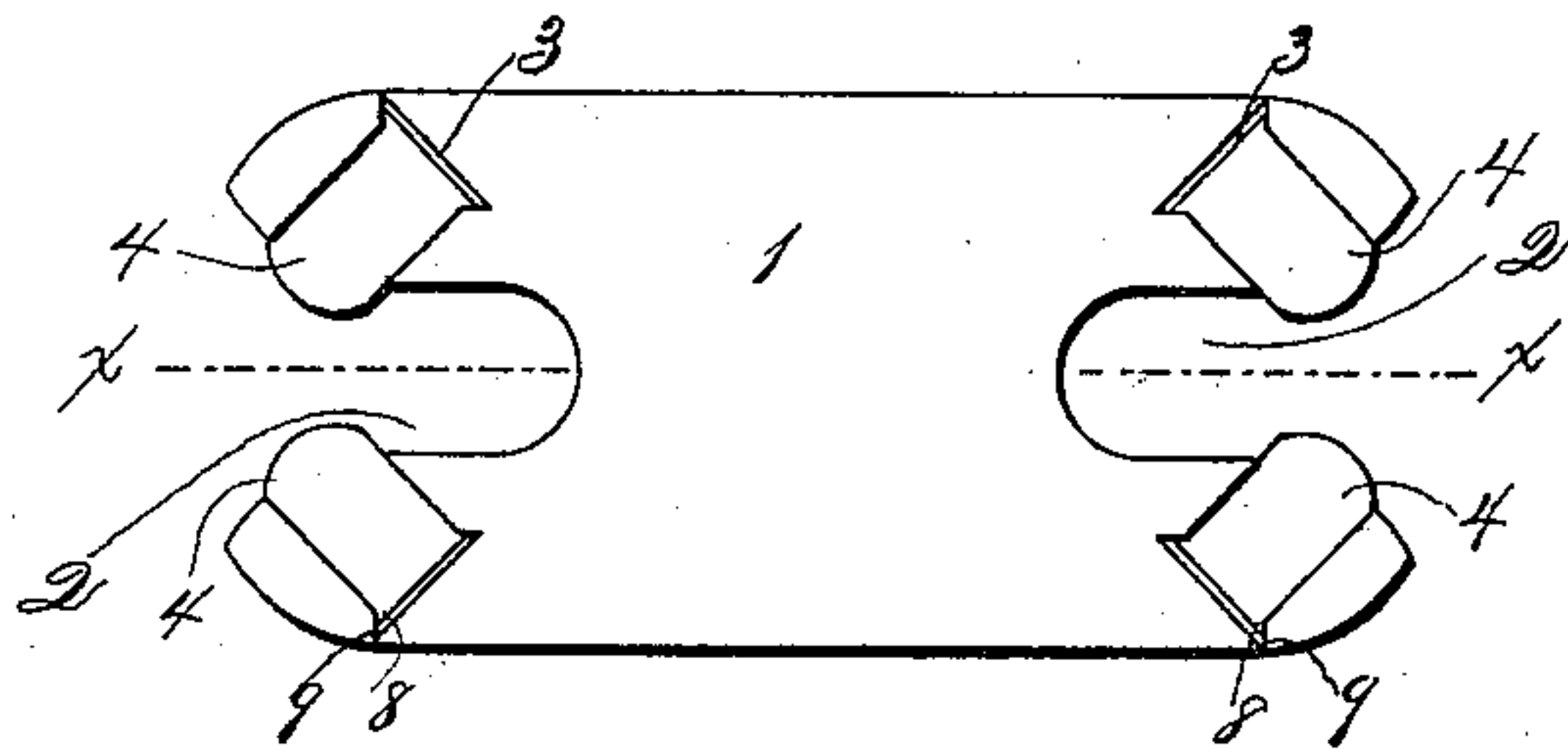


Fig. II.

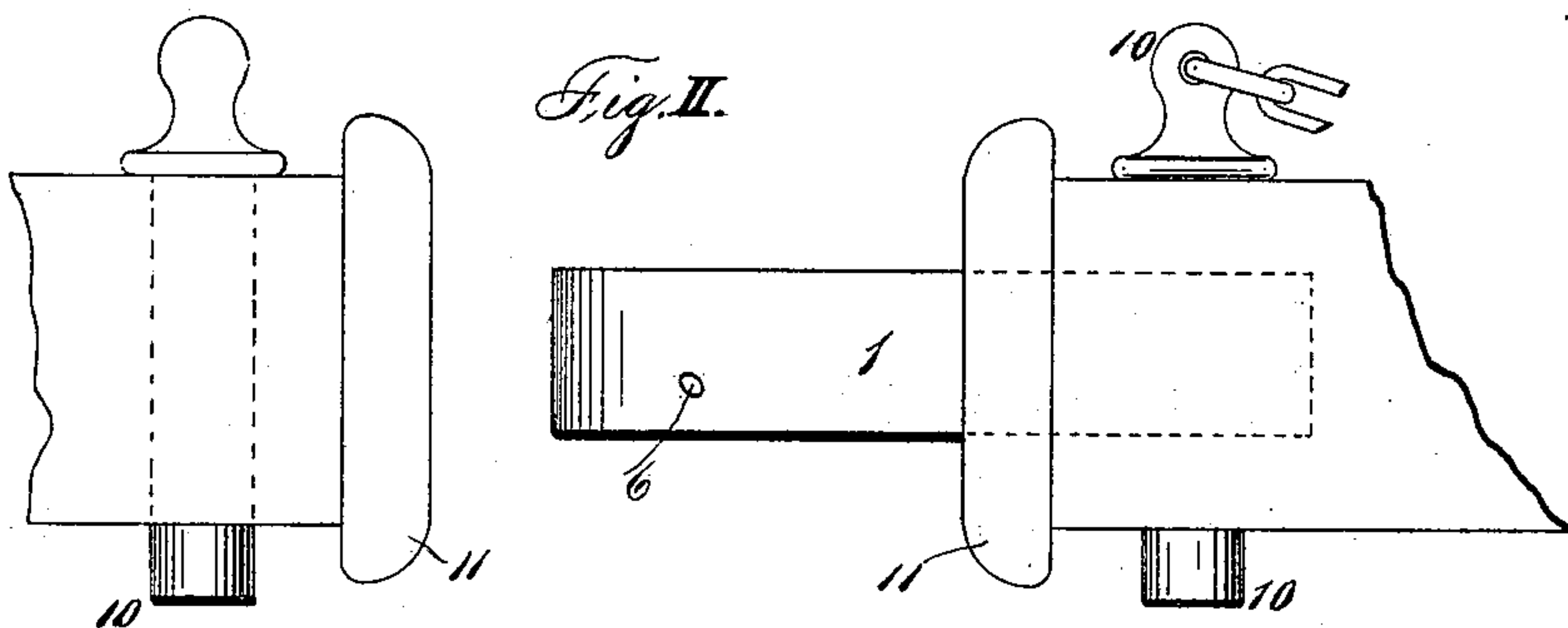


Fig. III.

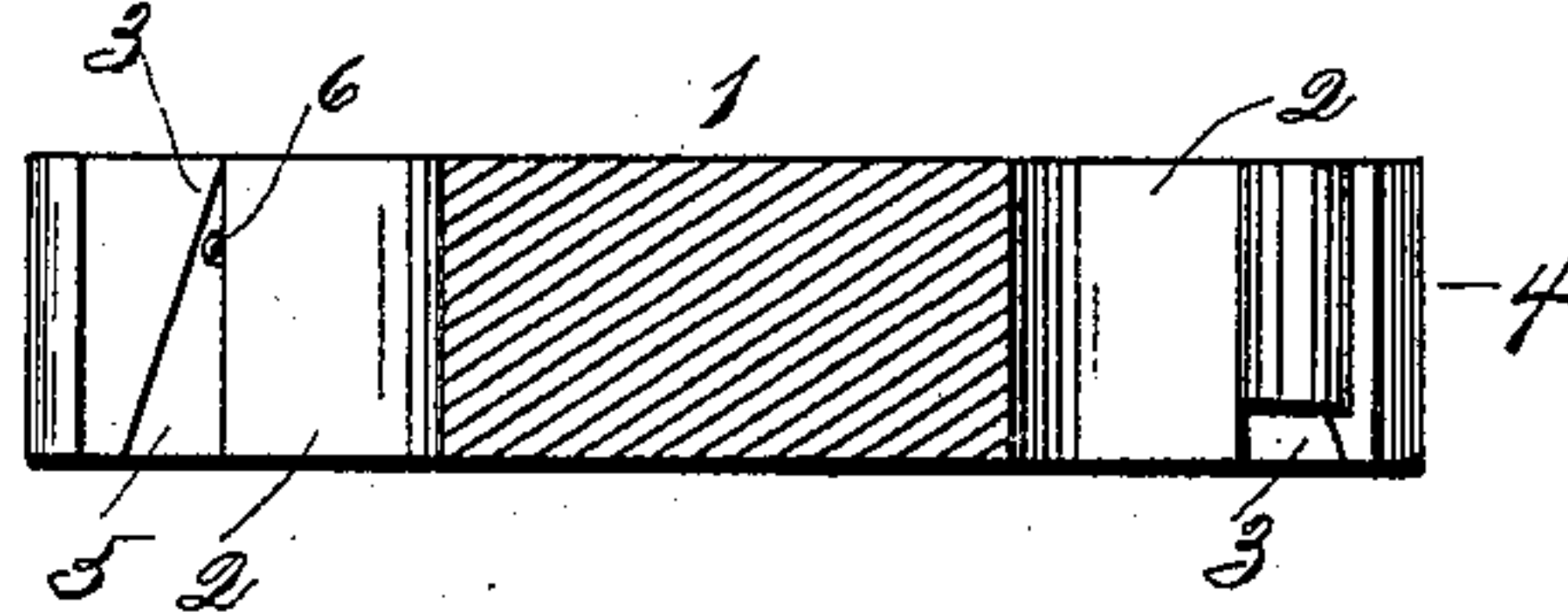


Fig. IV.

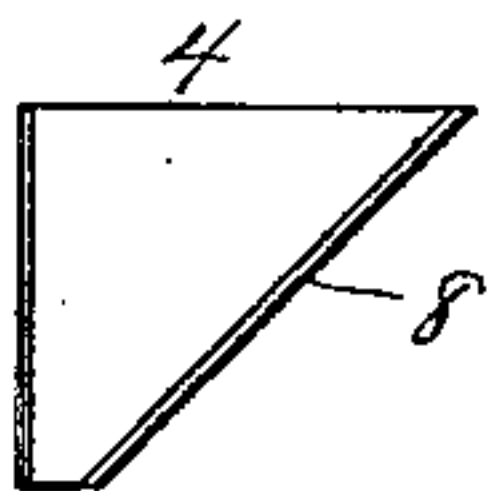
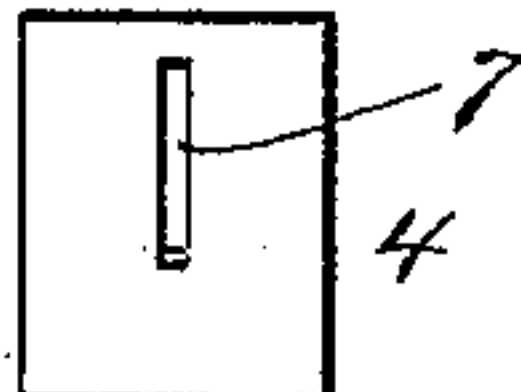


Fig. V.



WITNESSES:

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HENRY C. MUDDIMAN, OF MANASSAS, VIRGINIA, ASSIGNOR OF ONE-HALF
TO JOHN A. NICOL, OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 614,489, dated November 22, 1898.

Application filed March 11, 1898. Serial No. 673,520. (No model.)

To all whom it may concern:

Be it known that I, HENRY C. MUDDIMAN, a citizen of the United States, residing at Manassas, in the county of Prince William and State of Virginia, have invented certain new and useful Improvements in Car-Couplers; and I do 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to automatic car-couplers; and it consists in a link of peculiar construction used in connection with the coupling-pin in the draw-head.

The invention is effective, inexpensive, and of easy construction.

The accompanying drawings illustrate the device, in which—

Figure I is a plan of the invention. Fig. II is a side elevation of the same in operative position. Fig. III is a vertical section on the line *xx* of Fig. I, with one detent elevated and one removed. Fig. IV is a side and Fig. V is a rear elevation of a detent enlarged.

Like characters of reference denote corresponding parts in the different views.

1 indicates a block, plate, or link, preferably oblong and rounded at its ends. 2 2 are vertical main recesses in its ends, each having one or more vertical oblique branch recesses 3 3, having their rear surfaces 5 inclined downward and forward. Each branch recess is adapted to receive and loosely hold a gravity-detent 4, roughly triangular in side contour. The detent is held in its recess partly by a horizontal retaining-pin 6 in the link, which engages a slot 7 in the detent and allows the latter to have a limited vertical and rearward movement, and partly by the lateral flanges 8 8 on its rear inclined surface, which engage lateral grooves 9 9 in the branch recesses of the link. The height of the detents is less than the thickness of the link, and each detent is set normally so that it cannot rise above or sink below the horizontal surfaces of the link. The coupling-pin 10 is attached to the draw-head in any preferred

manner and stands vertically when in operative position.

In operation, the link or coupler being already in position on one car with its end presented to the coupling-pin on another car, when the cars come together the pin 10 enters the main recess 2, strikes the rounded fronts of the detents and causes them to recede upward and backward, and passes beyond them into the extremity of the recess 2, whereupon they immediately fall or slide by gravity before the pin and prevents its forward movement. The detents firmly resist any pressure from the inside or rear, such pressure tending to draw them down and to jam them against the sides of the recesses. The coupling-pin can be removed by lifting vertically.

I do not limit myself to the use of this link as a car-coupler nor to furnishing both ends with the attaching devices, for the link might be rigidly attached to an object at one end; nor do I restrict myself to the use of two detents in each end of the link, for one will often serve the purpose and more than two might be advantageous under certain conditions.

What I claim, and desire to secure, is—

1. A link, having a vertically-recessed end, and oblique, lateral, branch recesses with inclined rear surfaces; angular, gravity-detents, movably fitting said branch recesses, and normally projecting into the main recesses, and adapted to recede from front pressure, to fall when released, and to resist rear pressure; as herein set forth.

2. A link, having a vertically-recessed end and oblique, lateral branch recesses, with inclined backs, adapted to hold angular, gravity-detents; gravity-detents projecting into the main recess, and having a slot to receive a horizontal pin in the link, and adapted to recede from front pressure, and to fall when released, to prevent the forward exit of the coupling-pin; as described.

3. In a coupling-link, a detent, of less vertical measure than the link, and roughly triangular in side contour, and having a rounded front, and adapted to loosely fit into a branch recess which branches obliquely from the main recess of the link, into which it normally projects, and having a slot to engage a

retaining-pin and lateral flanges on its rear surface, to engage grooves in the link, as described.

4. An automatic car-coupler, formed of a
5 link having vertical, longitudinal, main recesses; vertical, oblique, branch recesses with inclined rear surfaces; and angular, gravity-detents, movably occupying said branch recesses and normally projecting into the main

recesses; all being adapted to engage and to hold vertical coupling-pins on car draw-heads, as herein set forth.

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

HENRY C. MUDDIMAN.

Witnesses:

F. H. RITTENOUR,
J. ROSS COLHOUN.