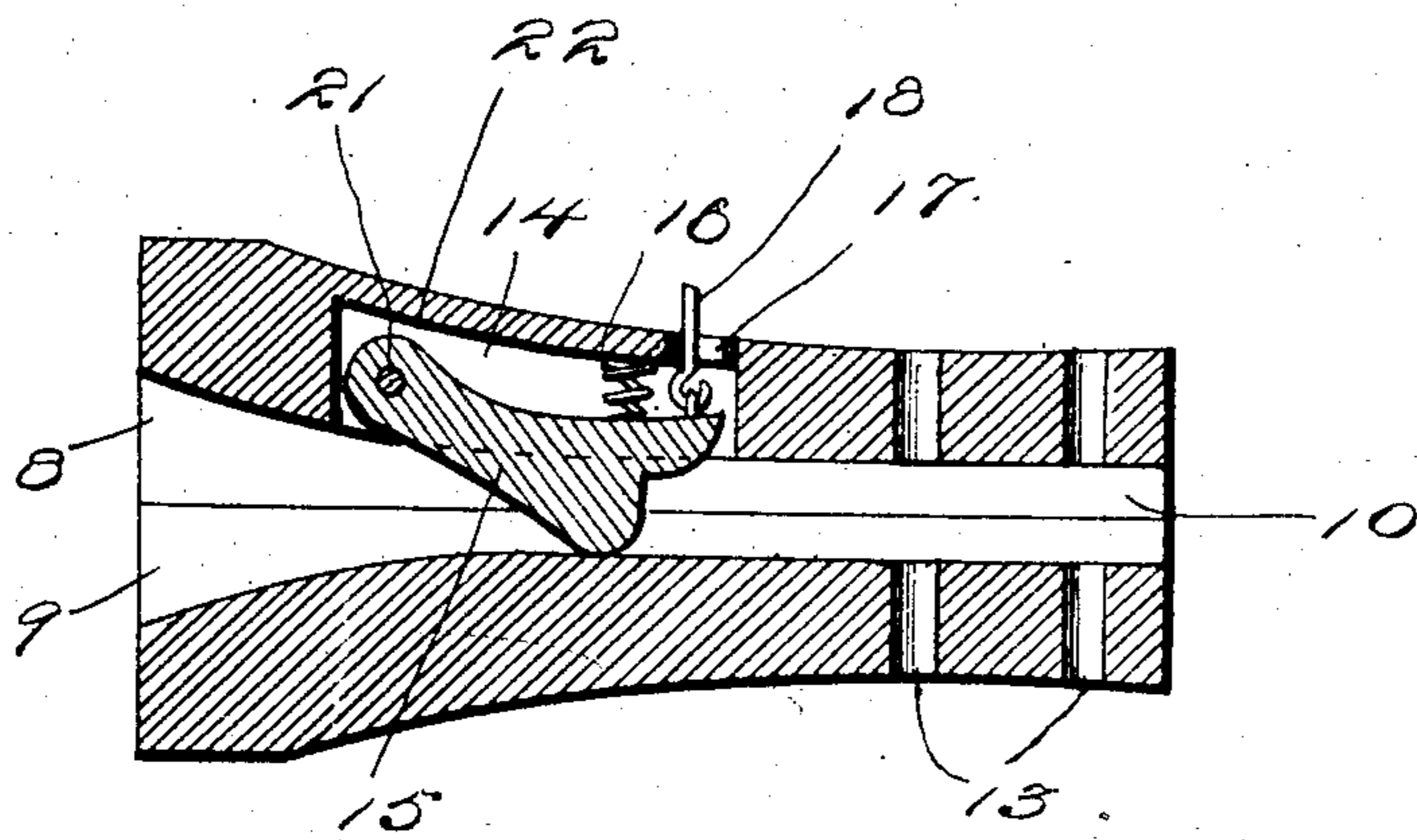
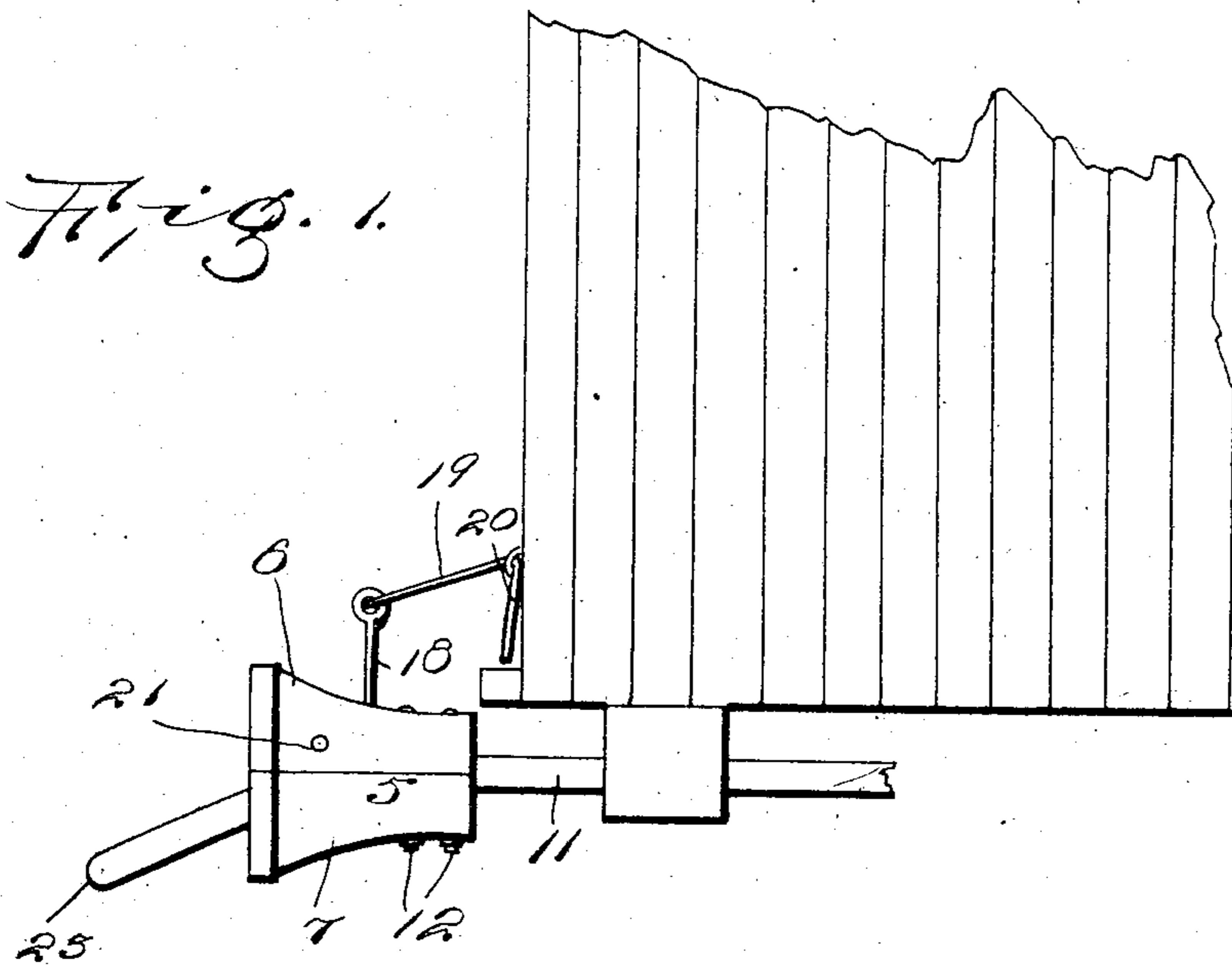


No. 786,169.

PATENTED MAR. 28, 1905.

S. R. SMITH.  
CAR COUPLING.

APPLICATION FILED JULY 25, 1904.



*Fig. 2.*

Witnesses  
*John T. Moulton.*  
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# UNITED STATES PATENT OFFICE.

SIM R. SMITH, OF ASHVILLE, ALABAMA

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 786,169, dated March 28, 1905.

Application filed July 25, 1904. Serial No. 218,082.

*To all whom it may concern:*

Be it known that I, SIM R. SMITH, a citizen of the United States, residing at Ashville, in the county of St. Clair, State of Alabama, 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 car-couplers, and has for its object to provide a coupler which will operate automatically and which may be operated to uncouple the cars without the necessity of passing between the cars.

A further object is to provide a coupler which will be simple of construction and which will be so arranged that the parts subjected to wear may be removed for the substitution of new parts therefor.

Other objects and advantages will be apparent from the following description, and it will be understood that modifications of the specific construction shown may be made and any suitable materials may be used without departing from the spirit of the invention.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a side elevation of the present invention and showing the draw-bar to which it is attached. Fig. 2 is a longitudinal section of Fig. 1.

Referring now to the drawings, the present invention comprises a head 5, including two sections 6 and 7, having coinciding recesses 8 and 9 in their meeting faces, which extend from end to end thereof to form a passage 10 through the head, and in the rearward end of this passage there is engaged a draw-bar 11 of the car to which the coupler is attached, the draw-bar being held in such position by bolts 12, which are passed through alining passages 13 in the sections 6 and 7 and the draw-bar 11, these bolts serving also to hold the two sections together.

At the forward end of the head 5 the passage 10 is flared, and in the section 6 of the head there is formed a recess 14, which communicates with the passage 10. Pivoted in

the recess 14 is a latch 15, which is movable into the recess, but is held normally projected therefrom and in engagement with the section 7 by means of a helical spring 16, which is secured at one end to the latch and bears at its remaining end against the inner wall of the recess 14. Formed through this inner wall of the recess 14 and communicating with the outer face of the section 6 is a perforation 17, through which passes a rod 18, engaged with the free rearward end of the latch 15, this latch being pivoted at its forward end, as shown, and this rod 18 is pivoted at its outer end to a crank 19, journaled upon the end of the car and provided with hand-levers 20 at its ends, which lie at the sides of the car. By means of the hand-lever the crank 19 is operable to move the latch 15 out of engagement with the section 7 through the medium of the rod 18, and it will be understood that this operation may be performed without passing between the cars.

The pin 21, upon which the latch 15 is pivoted, is removably engaged in a passage 22, formed through the section 6 of the head, and when it is desired to remove the latch this pin may be removed from the passage, and the bolts 12 may be removed from the perforations 13 to permit the sections 6 and 7 to be separated, so that the latch 15 may be removed from the recess 14.

In connection with the coupler just described there is employed the usual link 23, which may be disposed with its end in the open end of the passage 10, which is flared, as mentioned above, to facilitate the introduction of the link thereinto, and this link may have its end engaged with the latch 15 to move the latter upon its pivot out of engagement with the section 7 until the end of the link has passed beyond the latch, when the latter will be moved by the spring 16 again into engagement with the section 7 to prevent withdrawal of the link. When it is desired to remove the link from the coupler, the crank 19 is operated as described above.

What is claimed is—

1. The combination with a draw-bar, of a car-coupler comprising two separable sections having coinciding recesses in their meeting

faces, one of said sections having a recess communicating with its first-mentioned recess, a latch removably pivoted in the second-named recess and movable thereinto, said latch being  
5 arranged for engagement by a link disposed in the first-named recesses, means for holding the latch yieldably in position to engage the link, and means for holding the two sections together, and for holding the coupler to the  
10 draw-bar.

2. As an article of manufacture, a car-coupler comprising two sections, each of said sections having a longitudinal recess in one of its faces extending from end to end thereof, one  
15 of said sections having a longitudinal recess communicating with the horizontal wall of its first-named recess, said sections being disposed one against the other and with their first-named recesses in communication with

each other, a latch disposed in the second-named recess, a spring disposed between the latch and horizontal wall of the second-named recess to hold the latch yieldably in position to engage a link disposed in the first-named recesses, and a link connected with the latch  
25 and passed through one of the sections and arranged for movement to move the latch against the action of the spring, said sections having alining vertical passages therethrough for the reception of bolts to hold the two sections together, and to hold the sections in engagement with a draw-bar.

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

SIM R. SMITH.

Witnesses:

DAVID WOOD,

PICKENS PEARSON.