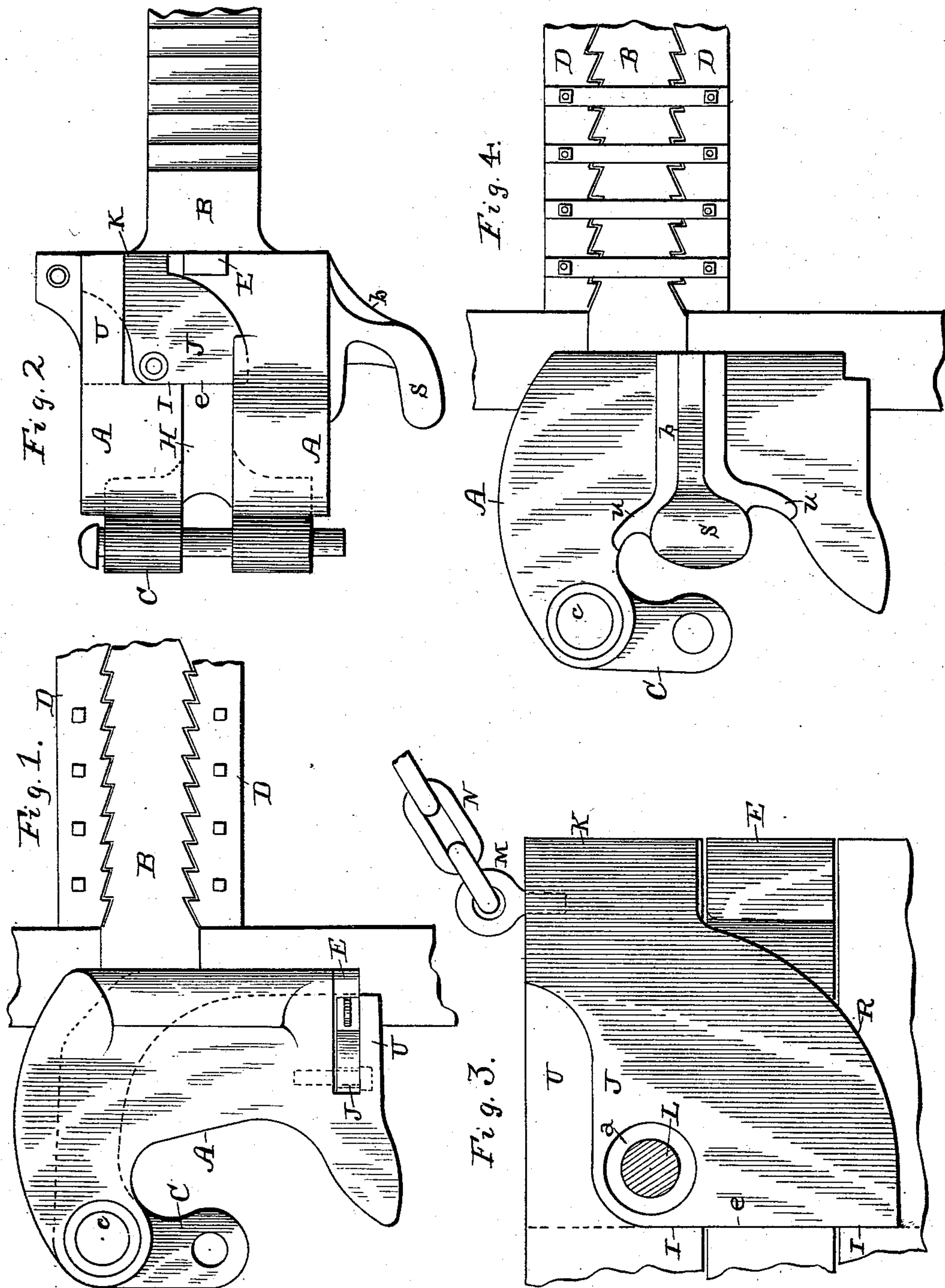


(No Model.)

J. R. MAGEE.  
CAR COUPLING.

No. 534,565.

Patented Feb. 19, 1895.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

JOHN R. MAGEE, OF RICHMOND, VIRGINIA, ASSIGNOR OF FIVE-EIGHTHS TO  
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## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 534,565, dated February 19, 1895.

Application filed August 17, 1894. Serial No. 520,613. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN R. MAGEE, of Richmond, in the county of Henrico and State of Virginia, have invented certain new and  
5 useful Improvements in Automatic Car-Couplings, &c.; 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 pertains to make  
10 and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improvements in automatic car couplings; and it consists in  
15 the particular construction and arrangement of parts which will be fully described hereinafter and especially pointed out in the claims.

The primary object of my invention is to provide a car coupling of the Janney type,  
20 the draw head having a horizontal opening in which it is pivoted and swings, one end of the said jaw extending through the draw head, and the draw head provided with a vertical shoulder in front of the rear extending  
25 end of the jaw, behind which a latch is pivoted, whereby the shoulder receives the strain and pull of the train in contradistinction of having the strain and pull sustained by the pin of the said latch.

30 The further object of my invention is to provide the draw bar with notches which engage notches in the plates secured to the car truck, whereby the drawhead is prevented from being withdrawn.

35 Another object of my invention is to provide a peculiarly shaped shelf under the opening in which the jaw of the adjacent coupling extends, whereby when a jaw or coupling is pulled out the same will not drop down  
40 between the cars, thus preventing any danger of derailing the train by the falling of a jaw or coupler.

In the accompanying drawings:—Figure 1 is a top plan view of a coupler embodying  
45 my invention complete. Fig. 2 is a side elevation of the same. Fig. 3 is an enlarged detailed side view of the latch and its shoulder. Fig. 4 is an inverted plan view of the coupler showing the particular form of shelf.

50 A indicates a draw head having an inwardly extending draw bar B provided with notches on its edges, which notches are engaged by

notch plates D at opposite sides of the draw bar, whereby the draw bar is prevented from being withdrawn.

55 The coupling A is provided with a longitudinal slot H in which the coupling jaw C is pivoted at the point *c*. This coupling jaw is essentially L-shaped in plan view, the longer end E extending through the opposite side of  
60 the draw head A as clearly illustrated in Fig. 1. A latch J is pivoted upon a pivotal pin L, and is provided with a vertical shoulder *e* which rests against a vertical shoulder I formed upon  
65 the draw head A. This latch J has its rear side provided with the curved portion R, which curved portion is formed on the arc of a circle with the center of the pivotal pin L as its  
70 center, and the projecting end E has its upper forward corner engage this curved portion as clearly shown. This opening *a* in this  
75 latch J through which the pivotal pin L passes, is larger than the pin whereby when the projecting end C of the jaw is forced forward by the pulling of the train the latch is forced  
80 against the shoulder I, so that all strain is taken from the pivotal pin L as will be readily understood. Above this pivotal pin is a  
85 lug U, behind which the latch passes when it is raised. The upper rear end K of this latch is elongated to give it additional weight  
so that it will readily drop behind the end E of the jaw when coupling the train, and to  
this portion K an eye M is attached to which  
85 a chain N is connected by means of which the latch is raised in any desired manner.

From the above description it will be seen that I have produced a coupling which is automatic in its action, and in which all of the strain upon the pivotal pin of the latch is re-  
90 lieved, the same being received edgewise on the latch and against a shoulder of the draw bar. This produces a very strong and simple construction, and the projecting end G of the  
95 jaw engaging the circular portion R of the latch, causes it to force the vertical shoulder *e* in the latch against the vertical shoulder I of the draw bar.

At the under side of the draw head I have formed a peculiar shelf or support S for the  
100 jaw of the draw head, whereby the jaw if it should be pulled from the adjacent draw head is supported, and whereby also if the entire draw head should be broken or withdrawn it



will likewise be supported and prevented from falling between the cars and causing a derailment of the train. By reference to Fig. 4 it will be seen that this shelf is provided with a longitudinal rearwardly extending rib *b*, and with laterally extending ribs *u*, whereby the shelf is especially strengthened so that there is no danger of it becoming broken.

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

1. An automatic car coupling comprising a draw head having a horizontal slot with an open end, a jaw pivoted therein at one side and having its rear end extending through the said open end of the draw head, and a latch pivoted against the outer vertical wall of and longitudinal the draw-head and in front of the said extending end of the jaw and adapted to engage the same, substantially as described.

2. An automatic car coupling comprising a draw-head provided with a horizontal slot having an open end, a jaw pivoted within the slot and having its rear end extending through the said open end of the slot, the draw bar having a shoulder formed in the outer face of its outer vertical wall in front of the rear end of the jaw, and a latch pivoted against the outer face of the vertical wall of and longitudinal the draw-head and in rear of said shoulder and adapted to engage the same and also to engage the rear end of the jaw, substantially as described.

3. An automatic car coupling comprising a draw head provided with a horizontal slot with an open end, a jaw pivoted within the slot and having its rear end adapted to extend therethrough, the said draw head having a shoulder formed in the outer face of its outer vertical wall in front of the rear end of the jaw, a latch pivoted against the outer face of the vertical wall of and longitudinal the draw-head and at its upper forward end above the said slot and having a shoulder adapted to

engage the shoulder of the draw head and its rear edge adapted to engage the rear end of the jaw, substantially as specified.

4. An automatic car coupling comprising a draw head having a horizontal slot with an open end, an upright shoulder formed in the outer face of and in front of the rear end of the said open-ended slot, and a latch pivoted against the outer face of the vertical wall of and longitudinal the draw head and at its upper forward corner and adapted to engage the said upright shoulder, the said latch having a rear curved edge adapted to engage the extending end of the jaw, substantially as described.

5. A car coupling comprising a draw head having a horizontal slot with an external open end, an upright shoulder in front of the rear end of the open-ended slot, rearwardly extending lug above the said shoulder, and a latch pivoted against the outer face of the vertical wall of and extending longitudinal the draw-head in the rear of and adapted to engage the shoulder, its rear edge adapted to engage the rear end of the jaw, and its upper end adapted to pass behind the said lug when raised, substantially as set forth.

6. An automatic car coupling having a draw head provided with a horizontal slot with an open end, and a latch pivoted at its upper forward corner against the outer face of the vertical wall of and extending longitudinal the draw-head and in front of the rear open end, the said latch having a rearwardly extending portion at its upper rear corner and a curved portion beneath and extending forward of said rearwardly extending portion, substantially as described.

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

JOHN R. MAGEE.

Witnesses:

JOHN W. WINFEW,  
J. LEWIS WOODSON.