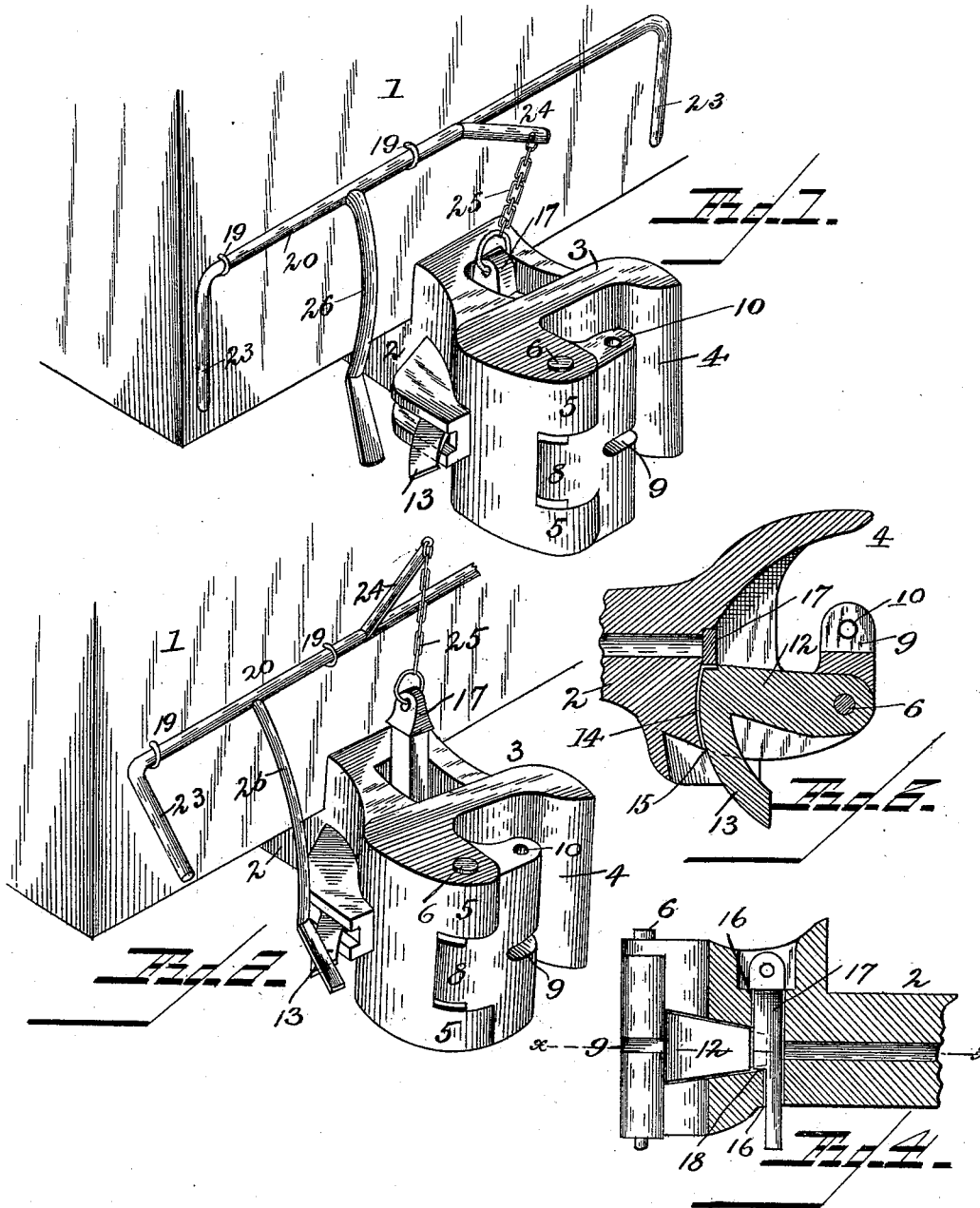


(No Model.)

W. W. CULBREATH.
CAR COUPLING.

No. 523,268.

Patented July 17, 1894.



WITNESSES:
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UNITED STATES PATENT OFFICE.

WALTER WELLINGTON CULBREATH, OF SELLERS, SOUTH CAROLINA, AS-
SIGNOR OF ONE-FOURTH TO JOHN RUSSELL FORE, OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 523,268, dated July 17, 1894.

Application filed March 13, 1894. Serial No. 503,474. (No model.)

To all whom it may concern:

Be it known that I, WALTER WELLINGTON CULBREATH, a citizen of the United States, and a resident of Sellers, in the county of Marion and State of South Carolina, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to improvements in car couplers of that class known as twin jaw couplers in which the cars are automatically coupled by coming together, thus obviating the necessity of the brakeman going between the platforms.

The object of the invention is to provide in a car coupler of the above character means by which the coupling pin is retained in an elevated position when disengaged from the coupling, whereby a great saving is effected in time and labor.

The invention consists in the novel construction and combination of parts hereinafter fully described and claimed.

In the accompanying drawings: Figure 1 is a perspective view of a portion of a car showing my improved coupler applied thereto, the parts being in the position they occupy when coupled. Fig. 2 is a similar view, showing the coupling pin uncoupled or elevated so that the jaws may be disengaged from each other by the movement of the car. Fig. 3 is a horizontal sectional view of the coupler, on the line $x-x$, Fig. 4. Fig. 4 is a central longitudinal section of the same.

In the said drawings the reference numeral 1 designates an ordinary freight car provided with a draw bar 2, secured thereto in any suitable manner.

The numeral 3 designates the draw head having a rigid curved jaw 4, against which the pivoted coupling jaw of an approaching car strikes, when the cars are coupled. The draw head is also formed with lugs 5, having apertures therein to receive the pivot pin 6, by means of which the movable coupling jaw is connected therewith. This coupling jaw is provided with a lug 8, having an aperture

registering with the apertures in the lugs 5, and is formed at its outer edge with a slot 9 and apertures 10, for coupling with an ordinary link and pin if desired. This movable jaw is also formed with a tail piece 12, and a segment or circle bar 13, made integral therewith.

The draw head is formed with a curved recess 14, in which the tail piece works and with an aperture 15 in the side communicating with the recess 14. The circle bar 13 projects through this aperture. The draw head is also provided with aligned vertical apertures 16, in which works the vertically movable coupling pin 17, having its lower part recessed or cut away forming a shoulder 18.

Pivotaly connected with the car 1 by means of staples 19 is a lever 20 which is transversely movable or slidable in said staples. At its outer ends this lever is formed with cranks 23, by which it is operated. It is also provided with an arm 24 connected by means of chain 25, with the coupling pin, and with an arm 26, having its free end bent at an angle and adapted to rest upon the end of the circle bar.

The operation is as follows: The couplers are secured to the cars in the ordinary manner, and when coupled occupy the position shown in Fig. 1, with the arm 26 of lever 20 underneath or below the end of the circle bar which projects through the aperture in the side of the drawhead. To uncouple the cars, the lever is shifted sidewise so that the arm 26 will clear the projecting end of the circle bar, and is then turned upwardly. By this movement the coupling pin is elevated by arm 24 and chain 25, so that its shoulder 18 will clear the end of the tail piece. The lever is then pushed inwardly so that its end will rest upon the end of the circle bar, as seen in Fig. 2. The coupling jaws are now unlocked and will remain so indefinitely. When, however, one of the cars begins to pull away from the other, the movable jaws will turn on their pivots, causing the tail piece and circle bar to be correspondingly moved, and the outer end of said circle bar to be withdrawn and the lever to drop down. The shoulder of the coupling pin will now rest on the circle bar, and as the cars come together to be again coupled the movable jaw of one coup-

ler will strike the tail piece of the other coupler, causing said tail piece to be moved backward until it passes the shoulder of the coupling pin when the latter will fall by gravity and lock the jaw. The end of the circle bar will also be projected through the aperture in the draw head, so that the arm of the lever can again engage therewith in uncoupling.

10 By the above construction there will be a great saving in time and labor in making of long trains, as it obviates the necessity of the brakeman returning after uncoupling to place the lever in position to allow the pin to fall
15 in coupling.

Having thus described my invention, what I claim is—

In a twin jaw car coupler, the combination

with the car, the recessed drawhead secured thereto formed with aligned vertical apertures, 20 a side aperture, and a rigid jaw, the pivoted jaw having a tail piece, and a circle bar projecting through said side aperture and the gravity coupling pin formed with a shoulder, of the transversely movable lever provided with 25 an arm connected by a chain with the coupling pin, and with an arm adapted to rest on the projecting end of the circle bar; substantially as specified.

In testimony that I claim the foregoing as 30 my own I have hereto affixed my signature in presence of two witnesses.

WALTER WELLINGTON CULBREATH.

Witnesses:

JOHN C. SELLERS,

S. B. CULBREATH.