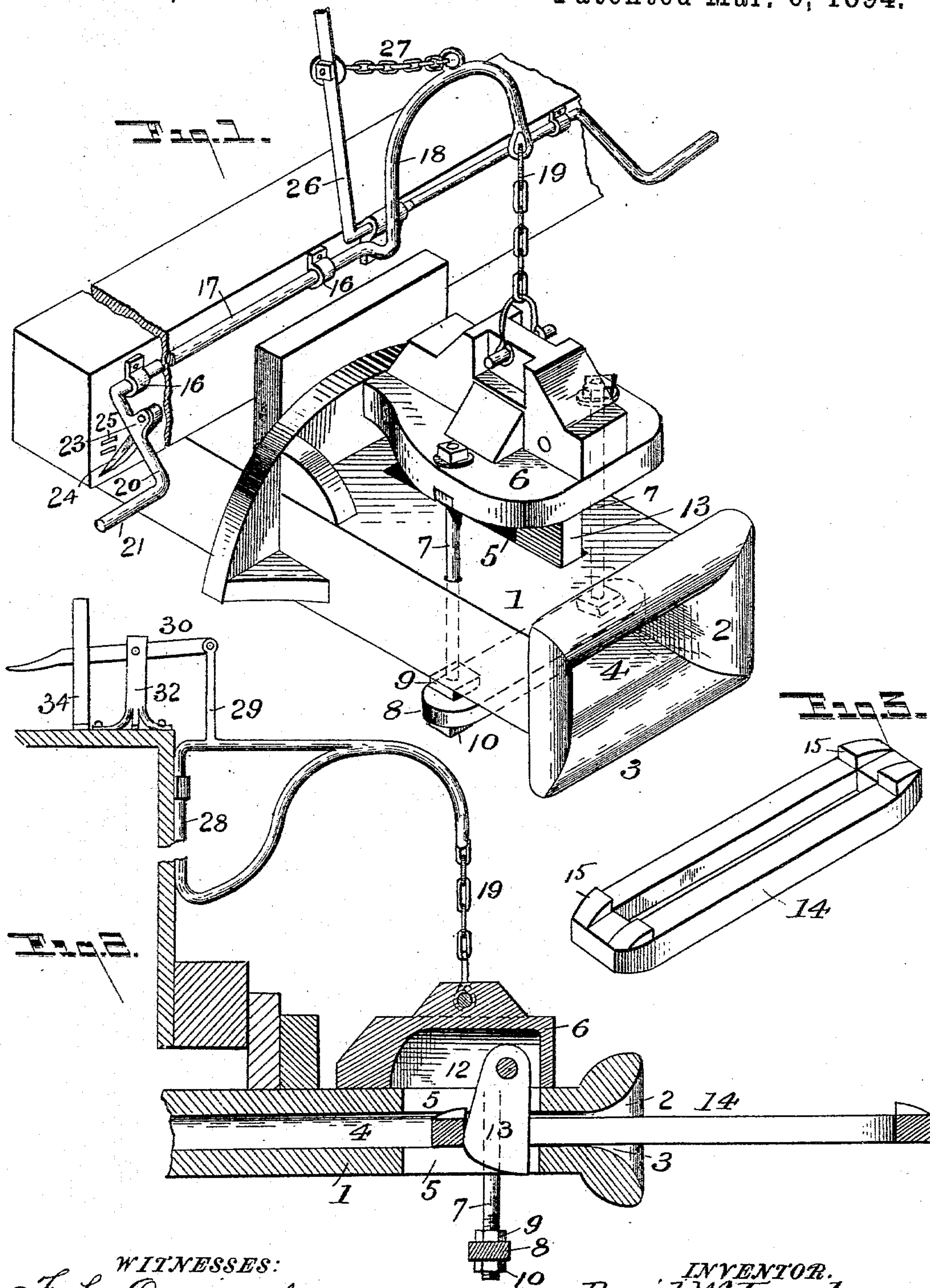


(No Model.)

D. W. LAWHON.
CAR COUPLING.

No. 516,099.

Patented Mar. 6, 1894.



WITNESSES:

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UNITED STATES PATENT OFFICE.

DAVID WEST LAWHON, OF BURNET, TEXAS, ASSIGNOR OF ONE-HALF TO
D. H. RISINGER, OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 516,099, dated March 6, 1894.

Application filed June 7 1893. Serial No. 476,841. (No model.)

To all whom it may concern:

Be it known that I, DAVID WEST LAWHON, a citizen of the United States, and a resident of Burnet, in the county of Burnet and State of Texas, 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
10 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
15 car couplings of that class or description in which the cars are automatically coupled on coming together, thus obviating the necessity of the brakeman or other persons going between the cars for the purpose of coupling
20 them.

The object of the invention is to provide an improved car coupler of the above character, which shall be simple and economical in construction and efficient in operation.

25 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 an ordinary
30 freight car with my improvements applied thereto. Fig. 2 is a central longitudinal section of the draw head. Fig. 3 is a detail view of the coupling link.

In the said drawings the reference numeral
35 1 designates an ordinary draw bar provided with a draw head or bumper 2, having the usual flaring mouth 3, and recess 4 to receive the link. The upper and lower sides of the draw head are formed with aligned rectangular openings 5. Located above the draw head
40 is a vertically movable block 6, provided at its front end with two guide rods 7, passing loosely through apertures in said head, and connected together at their lower ends by
45 means of a cross bar 8. At each end these bolts are screw threaded and provided with nuts 9 and 10, between which the said block and cross bar are clamped. In the under side of the block 6 is a slot or recess 12, aligned
50 with the openings 5, and in the front of this

slot is pivoted a coupling pin or arm 13, having its lower rear side curved or rounded as seen in Fig. 2.

The numeral 14 designates the coupling, formed like the ordinary links now in use, except that near each end, on its upper side it
55 is provided with two shoulders 15, which, when the link is inserted in the drawhead engage therewith and hold the link in a horizontal position. 60

The operation will be readily understood. When two cars approach each other the link of one car will enter the drawhead of the other and striking the coupling pin will turn on its pivot and allow the link to pass by. 65 The pin will then drop by gravity and engage with and hold the link. To uncouple the cars the block is elevated which will disengage the pin from the link. For operating the coupling block from the side of the car, I provide
70 the following means: Journaled in boxes 16, secured to the end of the car, is a transverse shaft 17, the inner end of which is bent or formed into a curved arm 18, which is connected to the coupling block by means of a
75 chain 19. The outer end of this shaft is bent laterally at a right angle forming an arm 20, and then outwardly forming a handle 21. The arm 20 is formed with a loop 23, in which is pivoted a dog 24, adapted to engage with
80 notches 25, in the end of the car when the block is elevated and thus hold the same in position. To operate the block from the platform a lever 26 is pivoted to the end of the car, provided intermediate of its ends with a
85 chain 27 which is connected with the curved arm 18. When this lever is operated the curved arm will be actuated to elevate the block. To elevate the block from the top of the car I provide a vertically sliding arm 28, 90 connected at its front end with the coupling block and at its rear end with a vertical rod 29 connected with a lever 30, pivoted in an upright 32, secured to the top of the car. The rear end of this lever passes through
95 guide bracket 34, also secured to the car. This construction is intended for freight cars, while the side and platform uncoupling devices may be applied to both freight and passenger cars. 100

Having thus described my invention, what I claim is—

1. In a car coupling, the combination with the drawhead having a recess, a flaring mouth and aligned horizontal openings in its top and bottom, of the vertically movable block having a horizontal slot in its underside, the pivoted coupling pin having its lower end curved or rounded, the guide rods passing through said head, the cross bar connecting the lower ends of the same, the clamping nuts and the coupling link formed with shoulders at each end; substantially as described.
2. In a car coupling the combination with the drawhead having a recess, a flaring mouth and aligned horizontal openings in its top and bottom, the vertically movable block and pivoted coupling pin, of the transverse shaft having curved arm connected with the block, the arm at the outer end formed with a loop

and the dog pivoted thereto, adapted to engage with notches in the end of the car; substantially as described.

3. In a car coupling, the combination with the drawhead having a recess, a flaring mouth and aligned horizontal openings in the top and bottom, the vertically movable block and pivoted coupling pin, of the transverse shaft having a curved arm connected with said block, the arm at the outer end provided with a pivoted dog, and the pivoted lever connected with said curved arm; substantially as described.

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

DAVID WEST LAWHON.

Witnesses:

J. P. BAUGH,
D. H. RISINGER.