

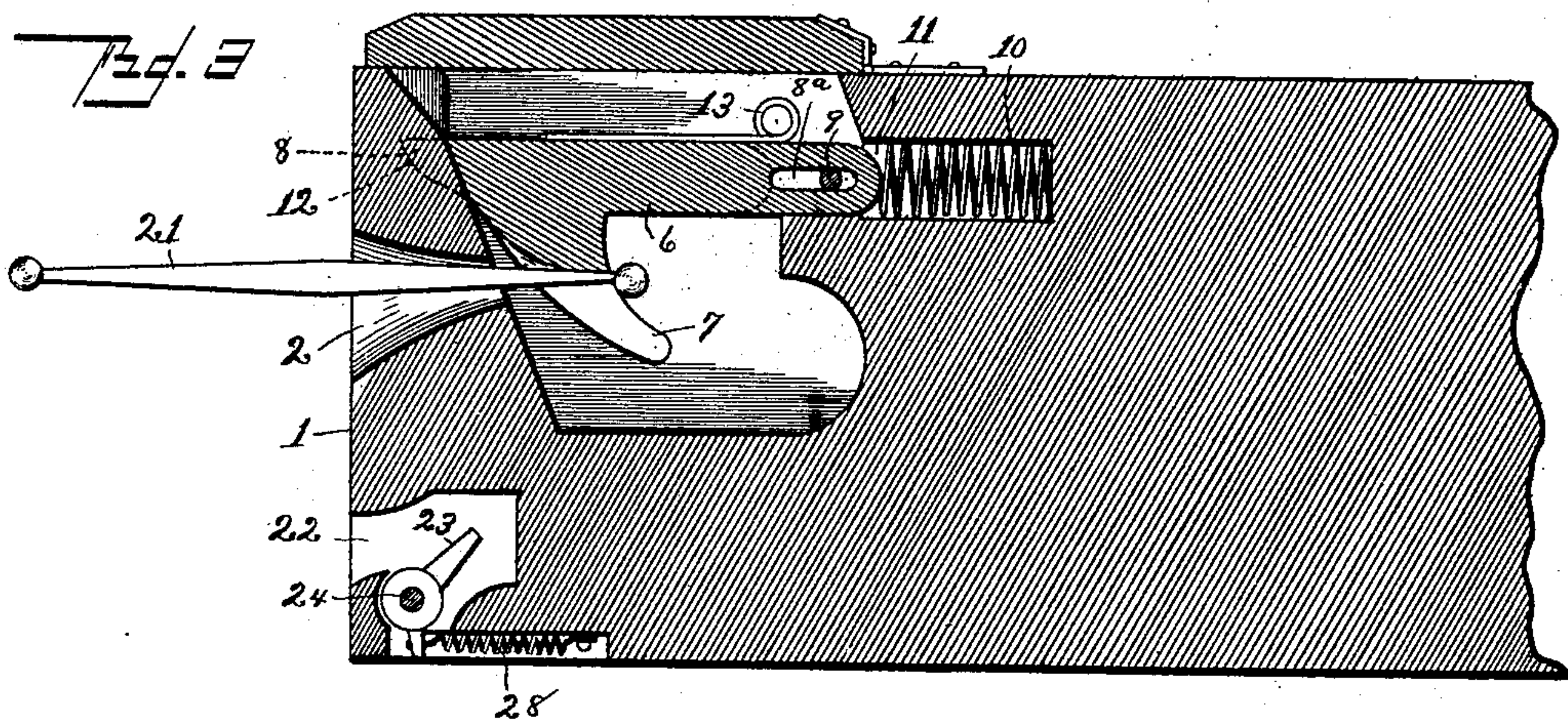
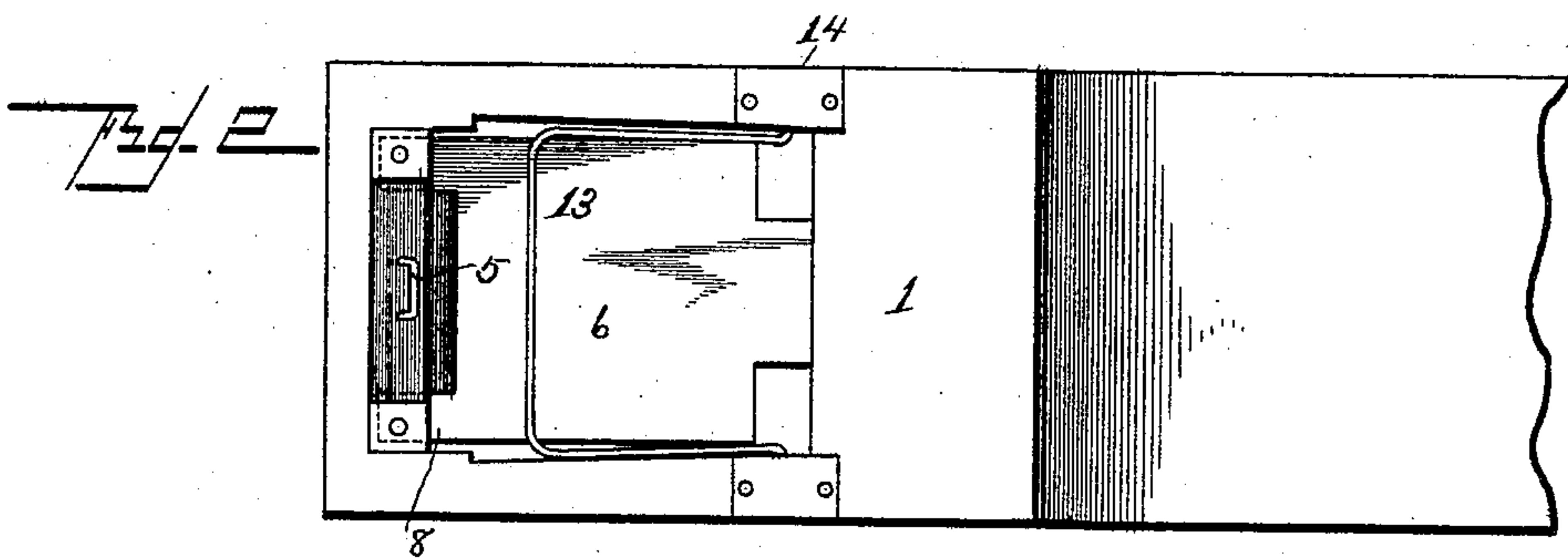
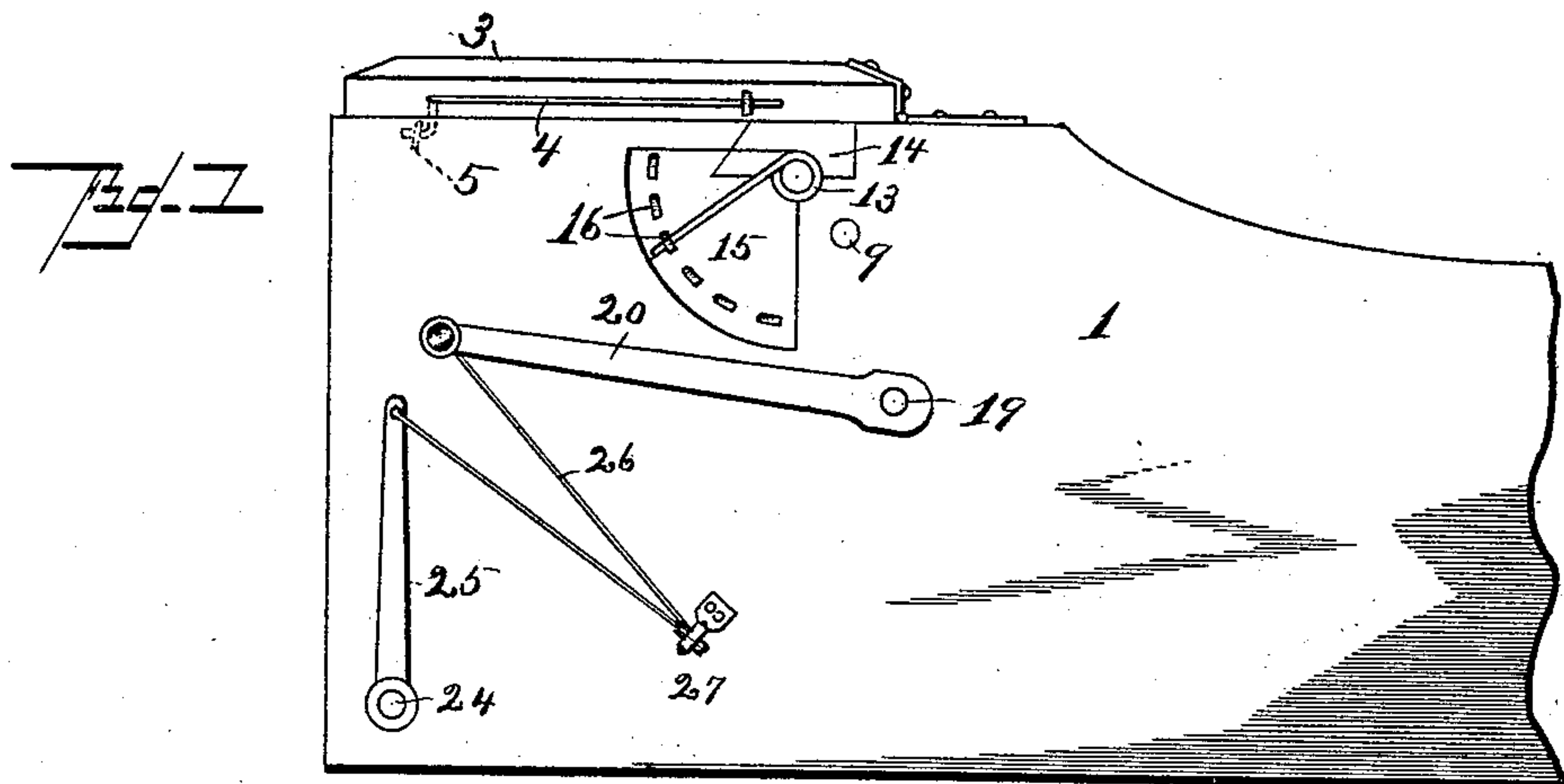
(No Model.)

2 Sheets—Sheet 1.

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CAR COUPLING.

No. 495,874.

Patented Apr. 18, 1893.



Witnesses  
*E. J. Myers*  
*E. G. Julian*

J. C. Bishop  
Inventor

*By Hapkins & Atkins*

Attorneys

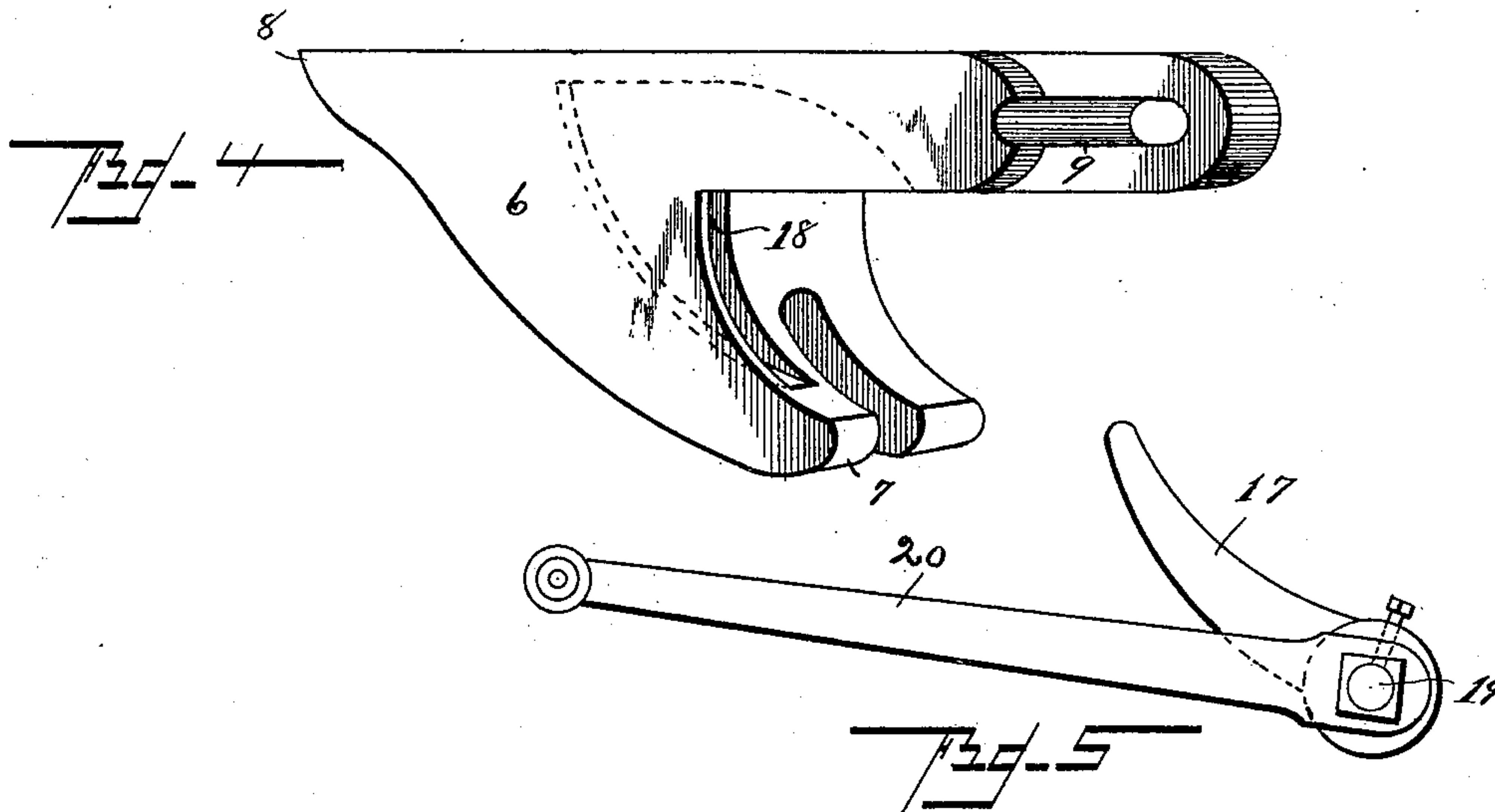
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# UNITED STATES PATENT OFFICE.

JAMES C. BISHOP, OF MARBLE FALLS, TEXAS.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 495,874, dated April 18, 1893.

Application filed September 1, 1892. Serial No. 444,754. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES C. BISHOP, of Marble Falls, county of Burnet, and State of Texas, have invented certain new and useful  
5 Improvements in Car-Couplers, of which the following is a specification, reference being had to the accompanying drawings.

The object of my invention is to produce an improved car coupler which is durable and  
10 efficient, and which may be operated at a distance from the draw-head—that is, to one side of the car, whereby greater safety to operators may be secured.

In the accompanying drawings, Figure 1 is  
15 a side elevation of a draw-head, provided with my coupler. Fig. 2 is a top plan view of the same, showing the interior of the coupler. Fig. 3 is a central vertical longitudinal section of the same. Fig. 4 is a view of the  
20 link-jaw detached. Fig. 5 is a detached view of a portion of the coupling device.

Referring to the figures on the drawings, 1 indicates a draw-head, which is closed in its front end, and provided with a link opening 2.  
25 3 indicates a covering for the coupler, and which, if preferred, may be hinged thereto, provided with a latch 4, which is adapted to engage with a staple 5 in the draw-head, and by which it may be firmly secured in place.

30 6 indicates a link-jaw, which is preferably provided with a claw 7 on its under part, and with projections 8 on one end thereof. At its opposite end it is provided with an elongated pivot-slot 8<sup>a</sup>. It is adapted to be se-  
35 cured in place by a pin 9 passing transversely through the sides of the draw-head, and through the elongated pivot-slot.

10 indicates a spring seated in a recess 11 behind the jaw, when in place, and adapted  
40 to urge the jaw toward the front end of the draw-head, in which position the projections 8 engage with notches 12 in the forward end of the draw-head.

13 indicates a spring seated in bearings 14  
45 in opposite sides of the draw-head, and tending to depress the jaw. The ends of the spring project outside of the draw-head, and are bent so as to extend in the same direction. 15 indicates recesses in the sides of  
50 the draw-head adapted to receive the ends of the spring, and are provided with catches 16, by which the tension of the springs may be reg-

ulated. The springs are preferably made of spring steel, and shaped as illustrated in the drawings.

17 indicates a lever adapted to engage with  
55 a recess 18 in the side of the jaw and raise it. It is provided with a shaft 19 and a crank 20, by which the jaw may be lifted against the force of the spring 13. The action of the  
60 lever is to draw the jaw backward against the force of the spring 10 to release the projections, and afterward to turn the jaw upon its pivot. The pivot-slot of the jaw permits the longitudinal movement of the jaw for its  
65 initial release.

21 indicates a link which is adapted to enter the opening in the forward end of the draw-head, and to force its way into the claw  
70 of the jaw which yields for the purpose of admitting it, and then returns so as to securely grip the bulbous head, which is the form preferred of the link. It should be observed that in forcing its way into place, the link drives  
75 the jaw back against the spring 10. The spring 13 at the same time prevents the rotary movement of the jaw upon its pivot, so that when the head of the link has passed  
80 the claw, the springs force the jaw back into its normal position. The crank may be carried to one side of the car and not fastened directly upon the draw-head, as illustrated.

The mechanism, as illustrated, is sufficient for the purposes of draw-heads of cars hav-  
85 ing draw-heads constructed according to my invention. But for reception of ordinary links, I prefer to employ another link-opening 22, within which is carried a pin 23 that oscillates upon the shaft 24 carried in the  
90 draw-head and provided with a lever 25, which may be operated by a flexible connection 26 fastened at one end to the crank 20, and, passing around a pulley 27, is fastened at the  
95 other end to the lever 25. The shaft 24 is provided with a spring 28 to hold the pin in the elevated position to receive a link.

What I claim is—

1. In a car coupler, the combination with the drawhead, having a closed end, a link opening through the same, of a jaw having  
100 an elongated slot engaging a pivot pin secured to the sides of said drawhead and springs located at the rear and top portion of the jaw for pressing it forward and downward, and a



lever for pressing said jaw upward to disengage it from the link, substantially as specified.

2. The combination with the draw-head, closed at its end and provided with a link opening and recess as described, and the spring actuated jaw, and lever for operating it against the pressure of the springs, of the cover, pivoted to the opening in upper part of the draw-head, and means for locking the same, substantially as specified.

3. In a car-coupler, the combination with a draw-head, of a loosely pivoted jaw adapted to engage with the draw-head, a spring adapted to move it longitudinally to hold it in engagement, and a spring tending to rotate it upon its pivot to hold it in fixed position, substantially as set forth.

4. In a car-coupler, the combination with a drawhead and pivoted jaw therein, of a spring

adapted to exert a rotatory tendency upon the jaw, said spring being carried in the draw-head, and having ends projecting outside of the draw-head and catchers in proximity to the projecting ends for engaging the same, whereby the tension of the springs may be regulated, substantially as set forth.

5. In a car-coupler, the combination with a draw-head and main coupler, of an auxiliary coupling device located in the draw-head, and consisting of a spring-actuated rock-shaft, and a pin carried thereon, substantially as and for the purpose specified.

In testimony of all which I have hereunto subscribed my name.

JAMES C. BISHOP.

Witnesses:

J. K. DAUGHERTY,  
WADE BORDEN.