No. 638,658. Patented Dec. 5, 1899.

C. C. BABB.

CAR COUPLING.

(Application filed Mar. 31, 1899.)

(No Model.)

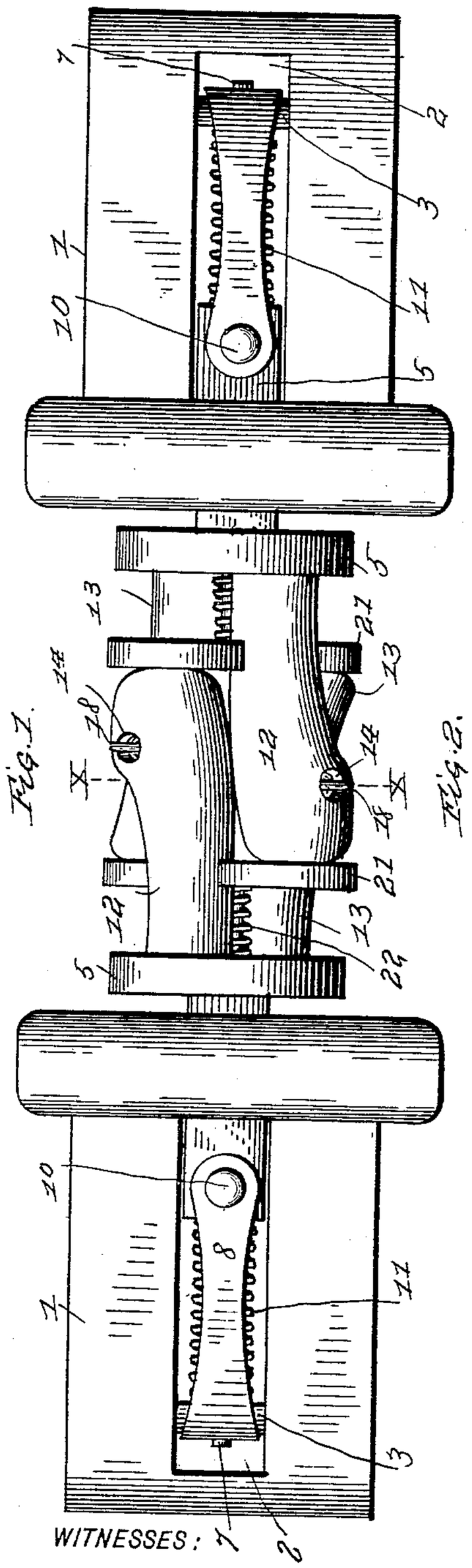

Fig. 1.

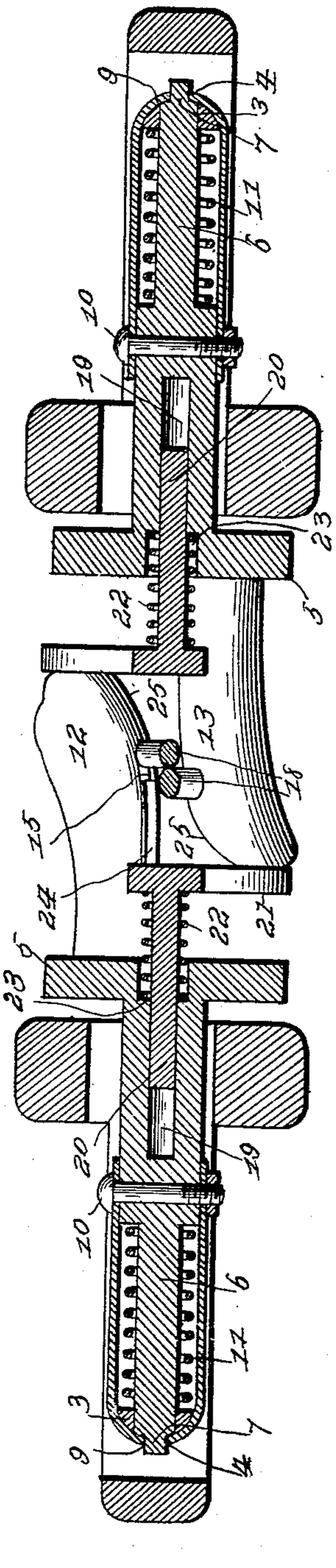

Fig. 2.

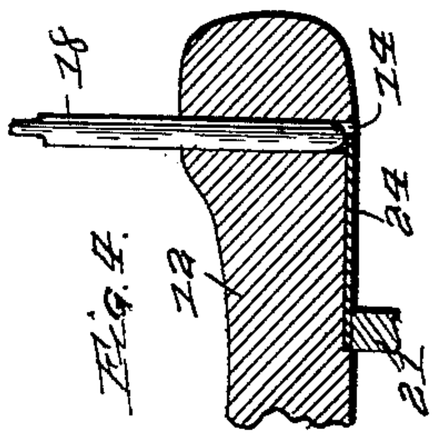

Fig. 4.

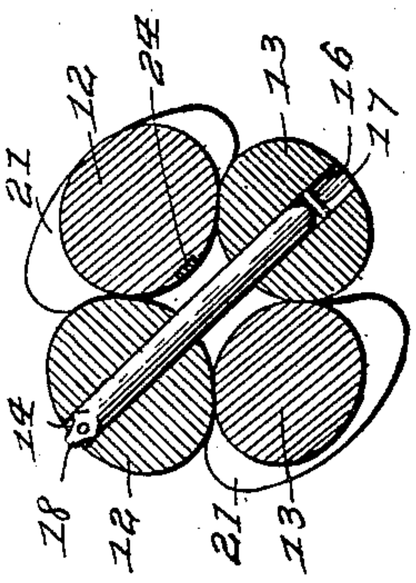

Fig. 3.

WITNESSES: 1 2

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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 638,658, dated December 5, 1899.

Application filed March 31, 1899. Serial No. 711,298. (No model.)

To all whom it may concern:

Be it known that I, CHRISTOPHER COLUMBUS BABB, a citizen of the United States, and a resident of Dallas, in the county of Paulding, in the State of Georgia, have invented certain new and useful Improvements in Car-Couplers, of which the following is a specification.

In the drawings, Figure 1 is a top plan view of my improved coupler. Fig. 2 is a central vertical section of the same on the line *x x*. Fig. 3 is a cross-sectional view on the line *x x*, Fig. 1. Fig. 4 is a detail sectional view.

The object of my invention is to produce a simple coupler that may be as easily coupled on a sharp angle as in a direct line; and it consists of forward forked ends adjusted at an angle to each other, each end of the forward ends being beveled, whereby the coupling-heads adjust themselves to each other when the cars are out of a direct line.

Further, my invention consists of a bumper or buffer located between the forked ends of the couplers, carrying a rod or bar adapted to hold the coupling-pin elevated when uncoupled and adapted when struck by the opposite coupler to automatically release the coupling-pin and permit it to drop into coupled position.

Further, my invention consists in providing another buffer between the draw-head and the draw-bar; and my invention further consists in the parts and combination of parts, as will be hereinafter more fully set forth.

1 is the draw-head of my improved coupler, having a recess or opening 2, and 3 is a bar or rod secured in said recess near the rear end thereof and extending entirely across the same and provided with an opening 4.

5 is the draw-bar, terminating in a reduced shank 6, from which projects a still further-reduced portion 7, adapted to extend through and work in the opening 4 in the rod or bar 3, secured in a recess 2 of the draw-head.

8 is a strap or yoke having an opening 9, which registers with the opening 4 in the bar 3 when in position, through which the reduced portion 7 of the draw-bar is adapted to pass. The forward ends of the yoke are secured to the draw-bar by means of the bolt 10, as clearly shown in Fig. 2.

11 is a coil-spring secured around the reduced portion 6 of the draw-bar.

12 and 13 are twin coupling-jaws integral with and extending forwardly from the draw-bar 5 and positioned at an angle to each other. The jaw 12 is provided with a pin-opening 14, extending entirely through its forward end, and a groove 15, formed in the lower face of said jaw and extending from the pin-opening 14 to the head of the draw-bar 5. The lower jaw 13 is also provided with a pin-opening 16, across which is secured a stop 17. (See Fig. 3.) From Fig. 3 it will be readily seen that the pin openings or holes 14 and 16 are cut or formed diagonally through the coupling-jaws.

18 is the coupling-pin.

19 is a recess formed in the forward end of the draw-bar, in which the stem 20 of the bumper or buffer 21 is adapted to slide back and forth.

22 is a coil-spring secured around the stem of the bumper, one end of said spring bearing against the bumper, while the other end of said spring is seated against the shoulder 23, formed in the head of the draw-bar.

It will be observed that the bumper 21 comprises a body contracted in its center, whereby it may readily slide between coupling-jaws, while the ends of the bumper are flared and extend a distance from the center of the draw-bar equal to that of the ends of the twin coupling-jaws, as clearly shown in Fig. 3.

24 is a rod or pin-support secured to the buffer 21 and extending forwardly from the same beyond the pin-support 14 in the coupling-jaw 12, said rod or pin-support working in the groove 15 in the coupling-jaw 12. This rod or pin-support when the coupler is uncoupled projects in the path of the pin 18 and holds it in an elevated position ready for coupling.

As will be clearly seen in Fig. 2, the forward ends of the forked coupling-jaws are beveled, as at 25.

The operation is as follows: The coupling-pin in one of the draw-bars being in coupled position and the pin in the other draw-bar being held in elevated position by means of the rod or pin-support 24, the coupling is effected by means of the forward ends of the twin

jaws of the opposite coupler striking the buffer 21, thereby forcing it, with the pin-support 24, backward, thereby releasing the elevated coupling-pin and permitting it to drop down by gravity back of the other coupling-pin, thereby coupling two couplers together. The pins are prevented from passing entirely through the pin-openings 16 in the lower coupling-jaws by means of stops 17, which extend across the path of said pins.

The angle in which the several coupling-jaws are formed or positioned with relation to each other is clearly shown in Fig. 3.

What I claim, and desire to secure by Letters Patent, is—

1. In a car-coupler, the combination with the draw-bar, of twin jaws extending forwardly from the same provided with pin-openings formed obliquely through the same and a buffer mounted between said jaws.

2. In a car-coupler, the combination with the draw-head having a recess and a bar extending across said recess, of a draw-bar comprising a shank, twin coupling-jaws formed at an angle to each other and having a pin opening or hole formed obliquely through said jaws and a yoke or clevis extending around the bar in the recess of the draw-head and connected at its forward ends to the shank of the draw-bar, a buffer-spring coiled around the shank of the draw-bar and a buffer secured between the twin coupling-jaws.

3. In a car-coupler, the combination with a draw-bar, forwardly-extending twin coupling-jaws, set at an angle to each other, pin-openings formed obliquely through said jaws, of a buffer mounted between said jaws, and a pin-support or rod secured to said buffer adapted to extend across said pin-openings.

4. In a car-coupler, the combination with a draw-head having a recess, a bar extending across said recess, and provided with a central opening, of a draw-bar comprising a shank, twin coupling-jaws formed at an angle to each other, pin-openings formed obliquely through said jaws, and a yoke or clevis extending around the bar in the recess of the draw-head and connected at its forward ends to the shank of the draw-bar, a buffer-spring coiled around the shank of the draw-bar, a recess formed in the forward end of the draw-bar, a buffer comprising a stem, a body secured at right angles to said stem contracted in its center and having flared ends, the stem of the buffer adapted to work in the recess in the draw-bar, a coil-spring secured around the stem of the buffer and bearing upon the head of the draw-bar, a pin-support extending across the pin-opening secured to and carried by said buffer, all arranged and operating substantially as described.

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Witnesses:
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