

No. 629,173.

Patented July 18, 1899.

W. REESE.  
CAR COUPLING.

(Application filed Mar. 4, 1899.)

(No Model.)

Fig. 2.

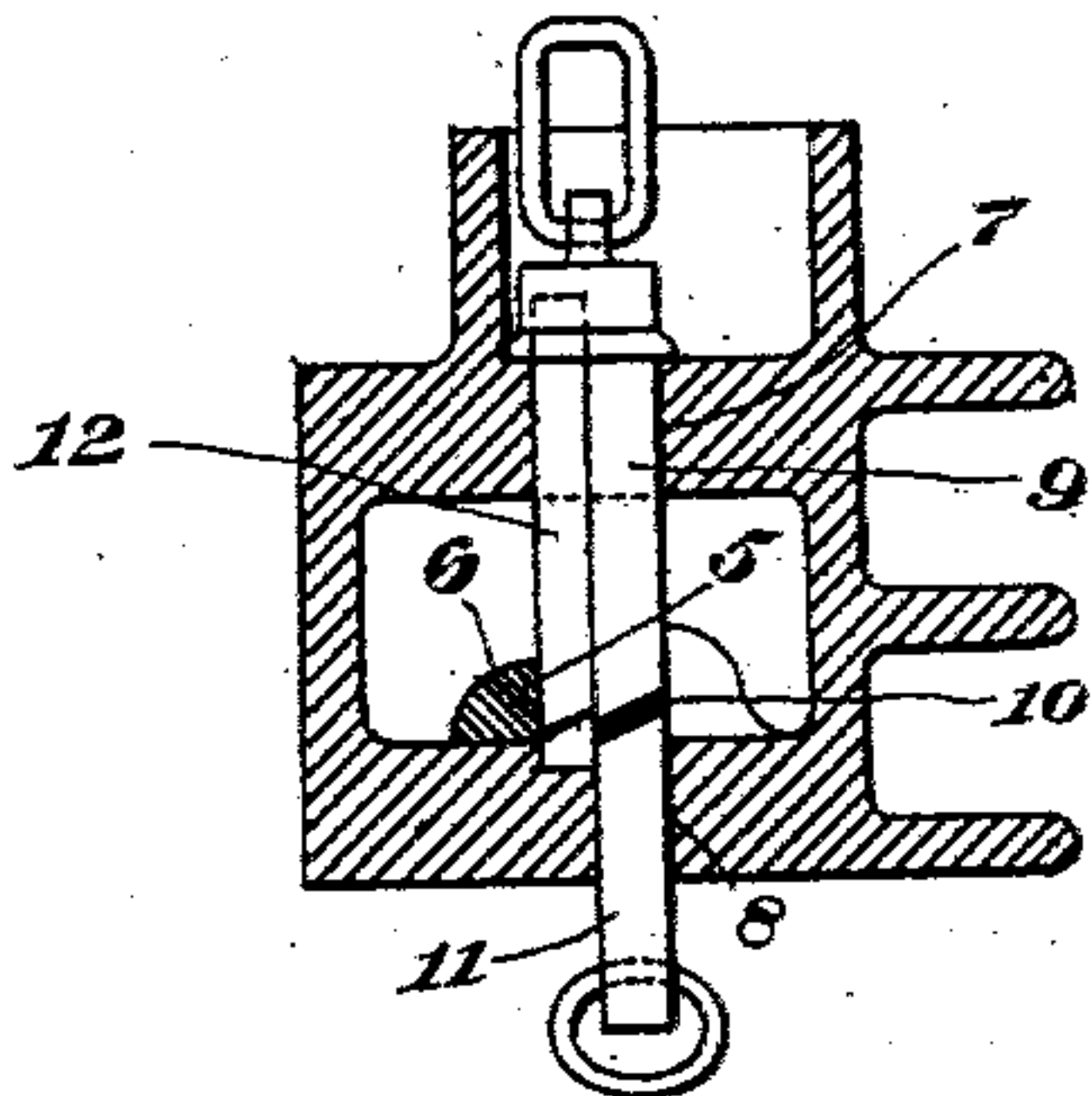


Fig. 1.

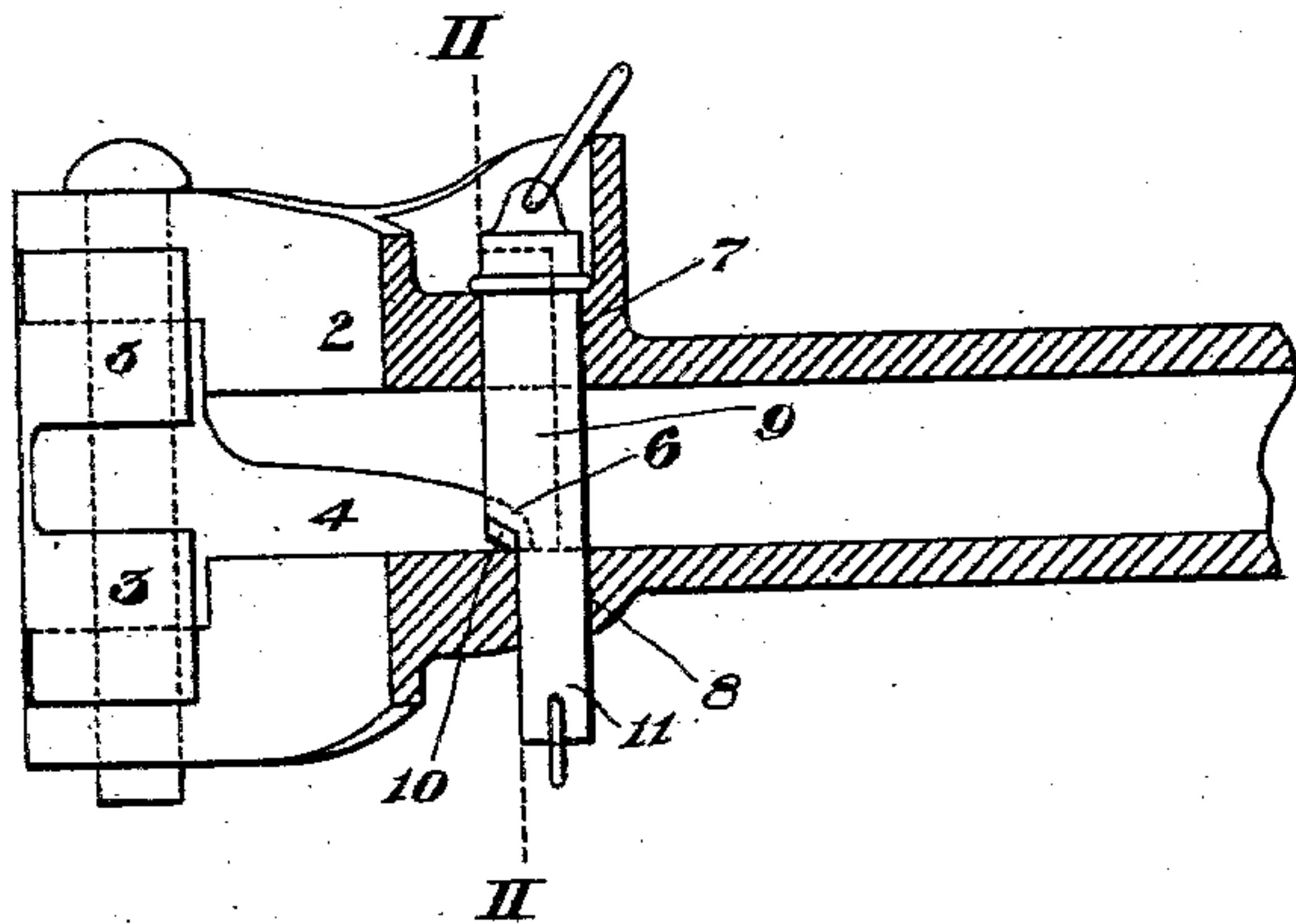


Fig. 3.

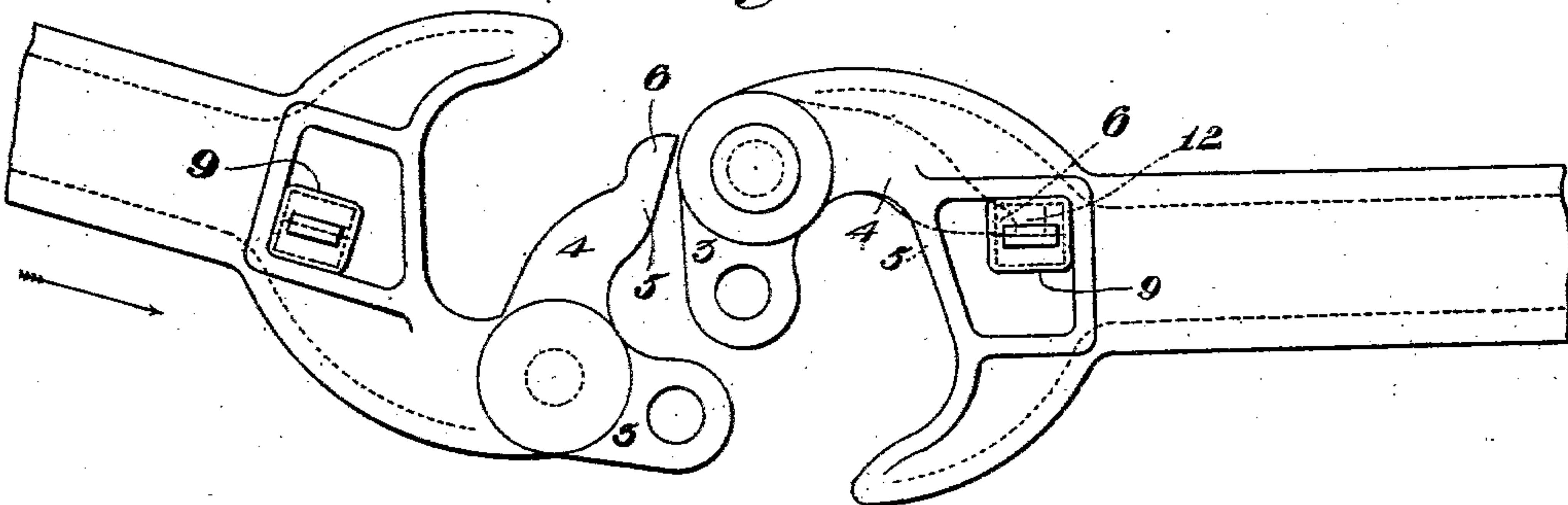


Fig. 5.

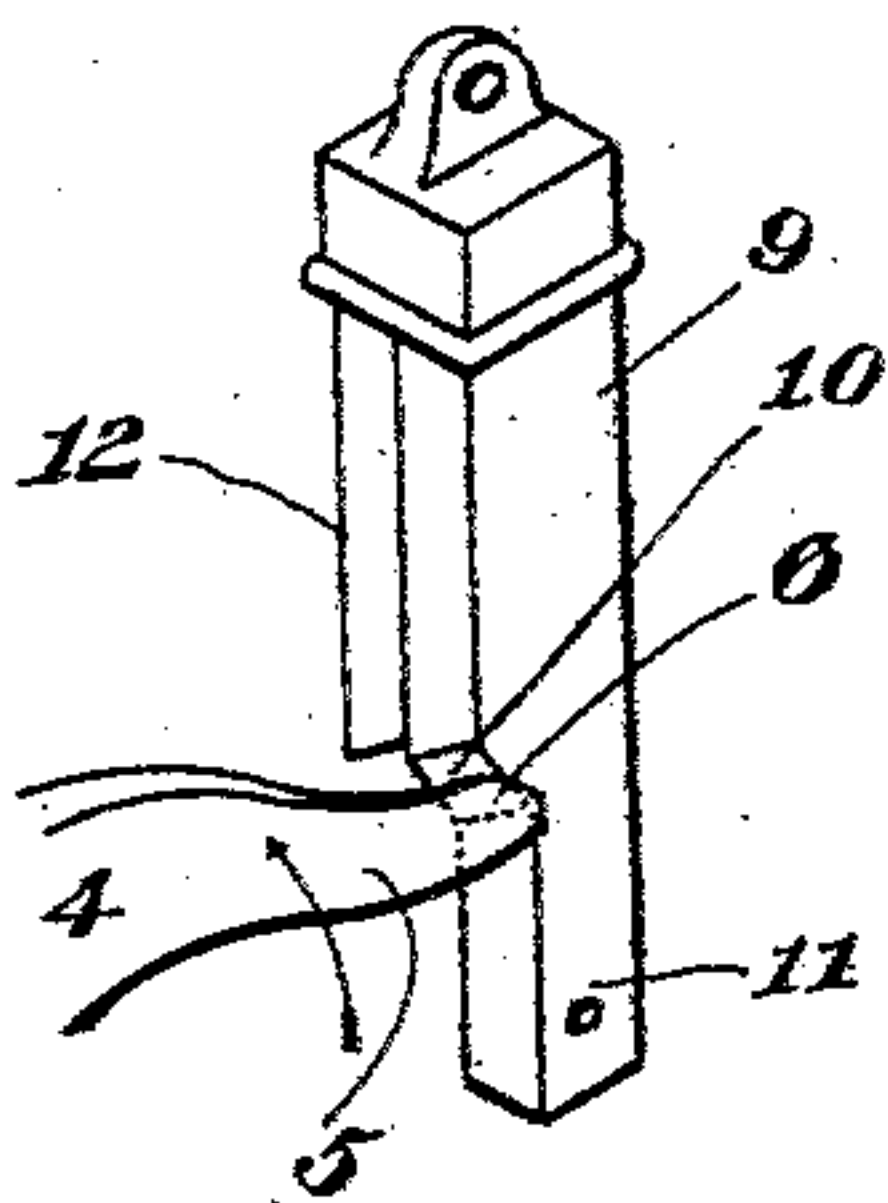


Fig. 4.

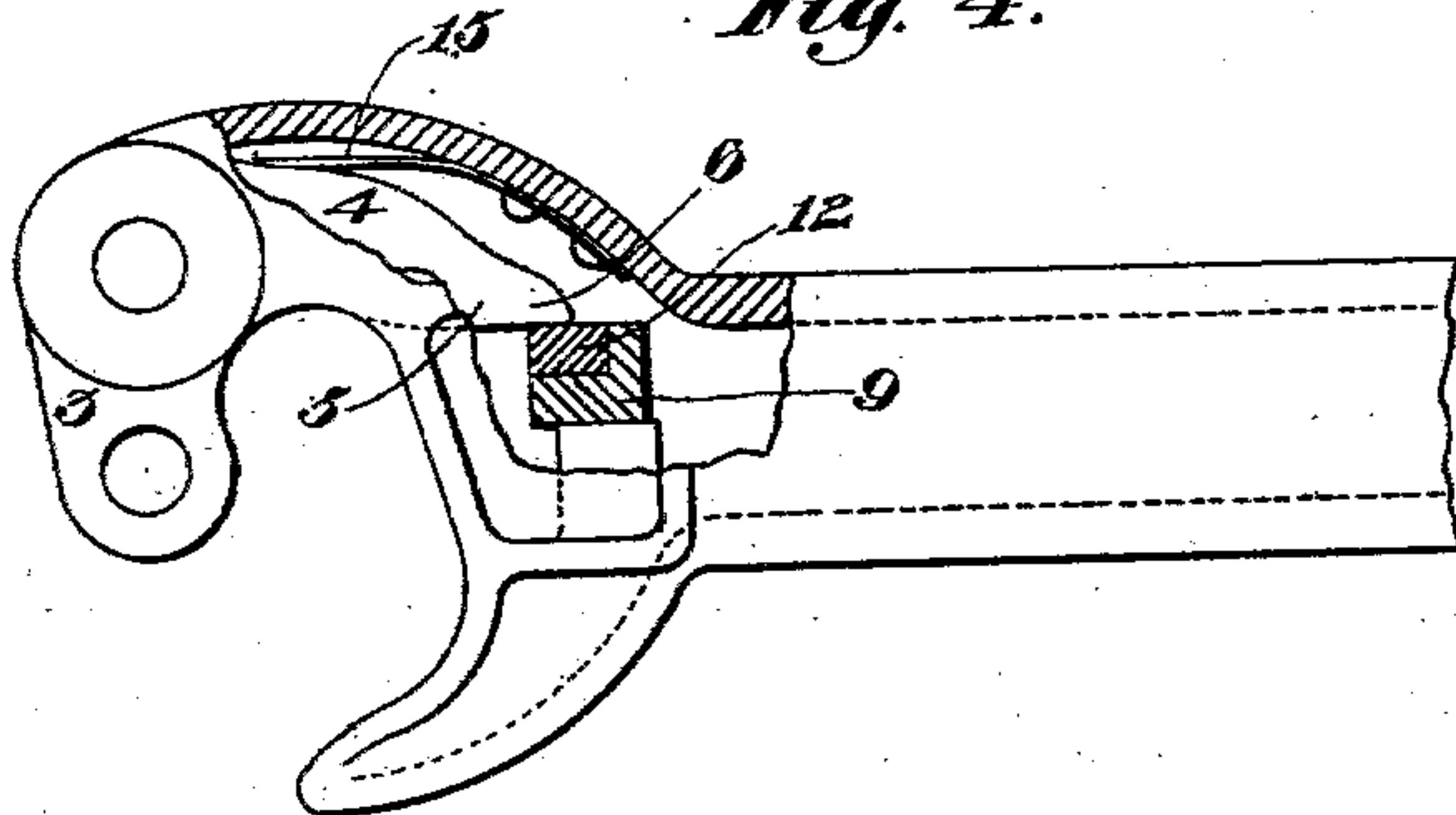


Fig. 6.

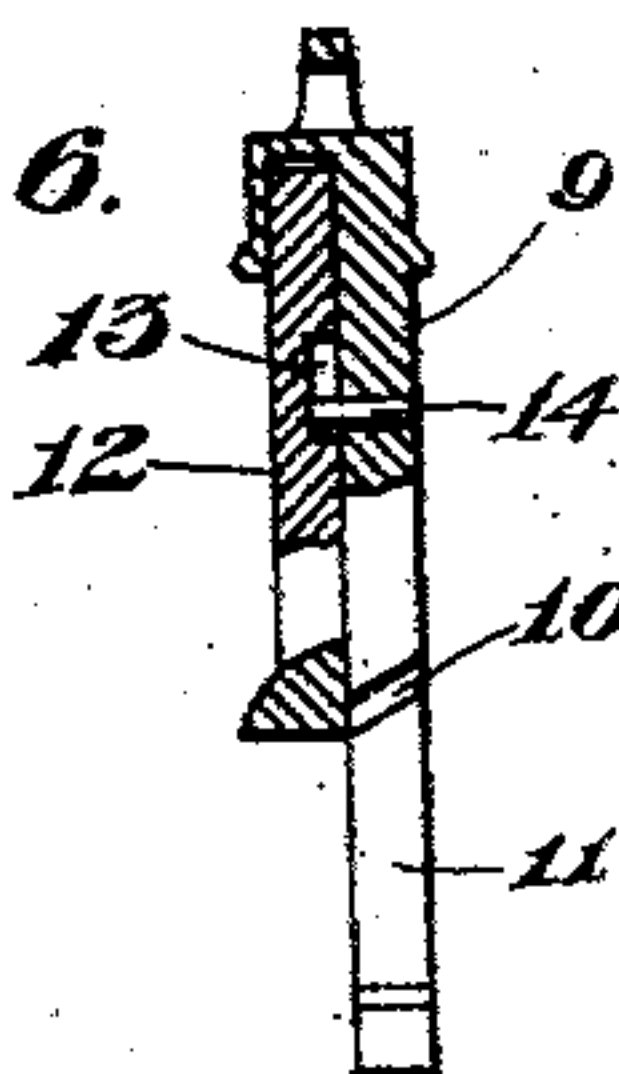
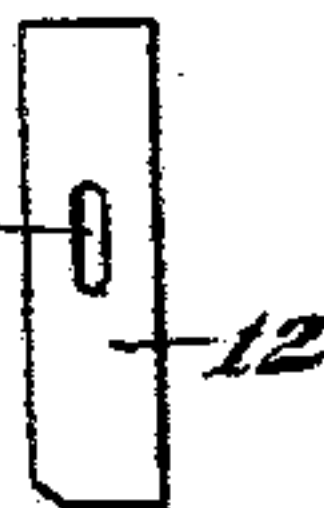


Fig. 7.



Witnesses:

C. C. Butterfield.

J. Edwards

Inventor:

William Reese  
by O. M. Clarke  
his Attorney.



# UNITED STATES PATENT OFFICE.

WILLIAM REESE, OF CARNEGIE, PENNSYLVANIA, ASSIGNOR OF ONE-HALF  
TO JAMES SKEWS AND JOHN CONNELLY, OF SAME PLACE.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 629,173, dated July 18, 1899.

Application filed March 4, 1899. Serial No. 707,763. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM REESE, a citizen of the United States, residing at Carnegie, in the county of Allegheny and State of Pennsylvania, have invented or discovered a new and useful Improvement in Car-Couplers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a central longitudinal vertical section through a draw-head furnished with my improved variable-position locking-pin, the jaw being shown in section. Fig. 2 is a cross-sectional view taken on the line 11 11 of Fig. 1. Fig. 3 is a plan view showing the operation of coupling on a curve. Fig. 4 is a plan view of one draw-head, partly in section, showing the tail of the locking-jaw locked at the extreme position. Fig. 5 is a detail view in perspective of the tail of the locking-jaw coming into contact with the locking-pin. Fig. 6 is a detail view in front elevation, partly in section, of the locking-pin, showing the tail of the jaw in engagement with the main pin, the supplemental portion being raised. Fig. 7 is a detail view of the supplemental sliding portion.

My invention relates to the class of twin-jaw couplers conforming to the Master Car-Builders' standard, and has reference more particularly to the mechanism employed in locking and unlocking the tail of the swinging jaw, the construction otherwise involving no change from the well-known type of "Janney" couplers.

Referring to the drawings, 2 is the draw-head, in which is pivoted the usual swinging jaw or knuckle 3, provided with the extended tailpiece 4, made with a vertical flat face 5 on the inner side of its end and having its outer end rounded at 6 and tapered down to a rounded nose.

The interior of the draw-head is hollow and provided with a vertical slot 7 8 in the upper and lower walls, in which is mounted the locking-bolt 9. This bolt is beveled inwardly at 10 at a point corresponding with the position of the tail of the jaw, and the downwardly extending portion 11 is correspondingly narrowed in width.

Slidingly mounted upon the bolt 9 at the opposite side from the approach of the swinging tailpiece is a supplemental bolt 12, vertically movable with relation to the main bolt and adapted to be held upwardly by the tail of the jaw when the backward motion of the jaw is purposely arrested at such point immediately under the supplemental bolt, thereby permitting the main bolt to drop downwardly in front of the tailpiece to arrest its forward movement, but holding the jaw in a partially-closed position. The object of such construction is to better adapt the coupler to use on curves, where, as shown in Fig. 3, the parts will move readily and easily come into contact and accomplish the act of coupling if the jaw is partially opened. The supplemental bolt 12 projects upwardly and has a sliding bearing in the recessed head of the main bolt and is also provided with a vertical slot 13, into which projects a pin 14, mounted in the main bolt, which pin limits the downward travel of the supplemental bolt. It will be noticed that the corner or face of the supplemental bolt is slightly beveled on the approach side, so that in the operation of entirely closing the jaw in coupling the tailpiece will ride under both the beveled portion 10 and the bottom of the supplemental bolt, causing both to rise thereby, although it will be seen that the supplemental bolt will be carried up with the main bolt by reason of the pin 14.

In operation the tail of the locking-jaw will ordinarily swing around, raising the main and supplemental bolts and seating itself in a closed position back of both bolts, as shown in Fig. 4. When it is desired to set it as described, the head is thrown around until the tail passes beyond the beveled portion 10 of the main bolt, when such bolt will fall by gravity and the tail will arrest the fall of the supplemental bolt, as in Fig. 6, and will bear against the inner face of the main bolt until thrown back to the last position in the act of coupling. Raising of both bolts is accomplished in the usual manner, the slot and pin preventing excessive downward travel of the supplemental bolt.

It will be noticed that a spring 15 is provided, attached to the interior of the draw-head and bearing upon the tail of the locking-



jaw in such a manner as to throw it outwardly when the end of the tail is released, thus automatically opening the jaw.

Having described my invention, what I claim is—

1. In a car-coupling, the combination of a draw-head, a swinging jaw pivotally mounted therein having an extended tailpiece rounded at its outer end, a main locking-bolt vertically and slidingly mounted in the draw-head in the path of the swinging tailpiece provided with a beveled shoulder, a reduced lower extension and a recessed head, and a supplemental independent vertically-movable bolt mounted on the side of the main locking-bolt, projecting upwardly into the recessed head of the main locking-bolt and provided with a beveled shoulder and means for limiting its downward movement.

2. In a car-coupling, the combination of a draw-head, a swinging jaw pivotally mounted therein having an extended tailpiece rounded at its outer end, a main locking-bolt vertically and slidingly mounted in the draw-head in the path of the swinging tailpiece provided with a beveled shoulder, a reduced lower extension, a limiting-pin and a recessed head, and a supplemental independent vertically-movable bolt mounted on the side of the main locking-bolt having a vertical slot in engagement with the limiting-pin, a beveled lower shoulder adapted to be engaged by the tailpiece, and an upper extremity projecting into the recessed head of the main bolt.

3. In a car-coupling, the combination of a draw-head, a swinging jaw pivotally mounted

therein having an extended tailpiece rounded at its outer end, a spring mounted in the draw-head and adapted to bear against the tailpiece when closed, a main locking-bolt vertically and slidingly mounted in the draw-head in the path of the swinging tailpiece provided with a beveled shoulder, a reduced lower extension, a limiting-pin and a recessed head, and a supplemental independent vertically-movable bolt mounted on the side of the main locking-bolt having a vertical slot in engagement with the limiting-pin, a beveled lower shoulder adapted to be engaged by the tailpiece, and an upper extremity projecting into the recessed head of the main bolt.

4. In a car-coupling, in combination with a draw-head, and a swinging jaw pivotally mounted therein having an extended tailpiece rounded at its outer end: the locking-bolt consisting of the main bolt 9 having a beveled shoulder 10, a downward extension 11, a recessed head at the upper end with means for attaching a lifting device and a limiting-pin 14, with the supplemental bolt 12 beveled on its lower approach side and having a sliding bearing in the recessed head of the main bolt, a vertical slot 13 for engagement with pin 14, and adapted to operate independently of the main bolt or to be lifted with it.

In testimony whereof I have hereunto set my hand.

WILLIAM REESE.

Witnesses:

THOS. M. BROWN,  
C. M. CLARKE.