

No. 748,384.

PATENTED DEC. 29, 1903.

F. LEHRMANN.
CAR COUPLING.

APPLICATION FILED NOV. 11, 1901.

NO MODEL.

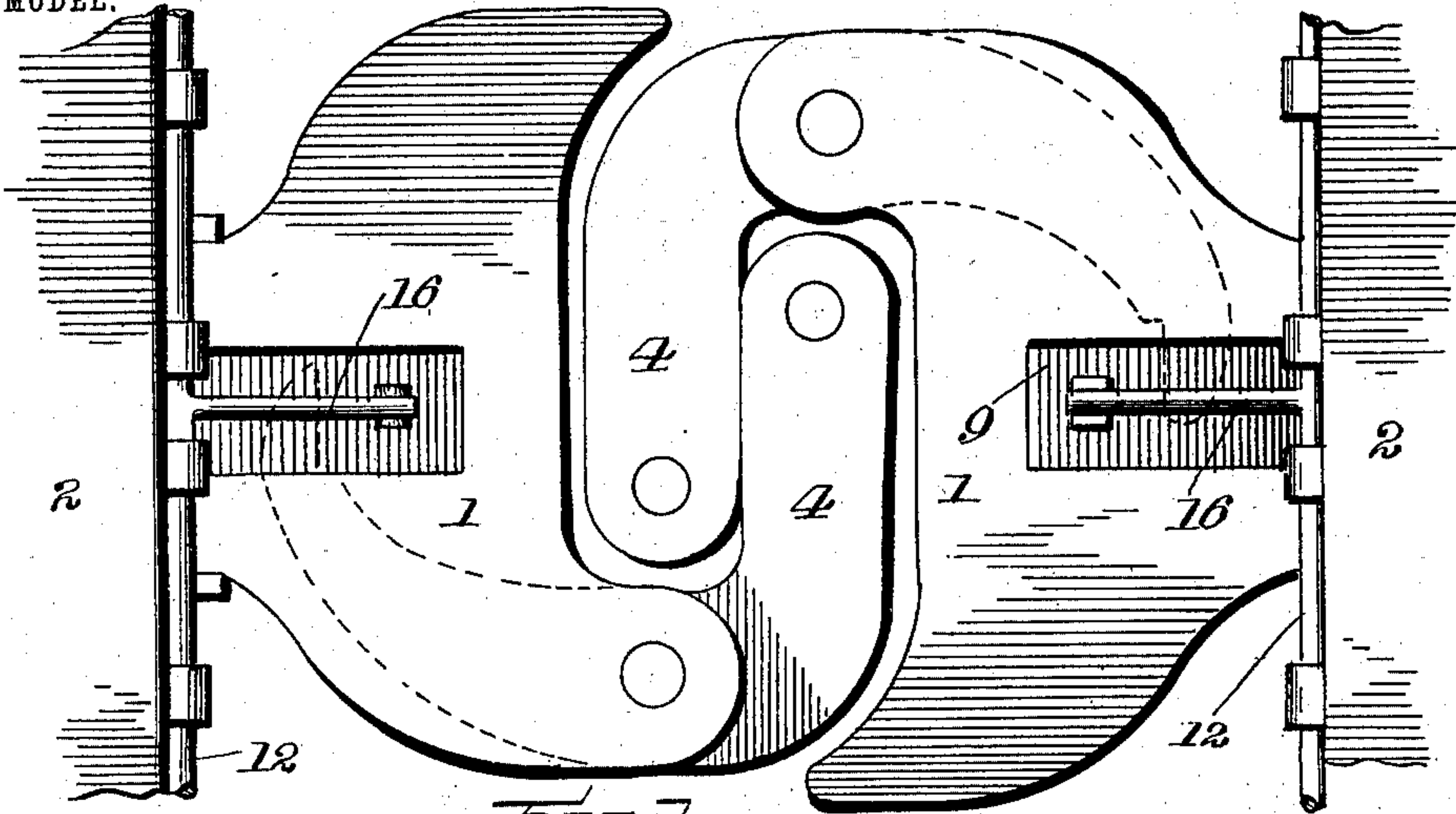


Fig. 1.

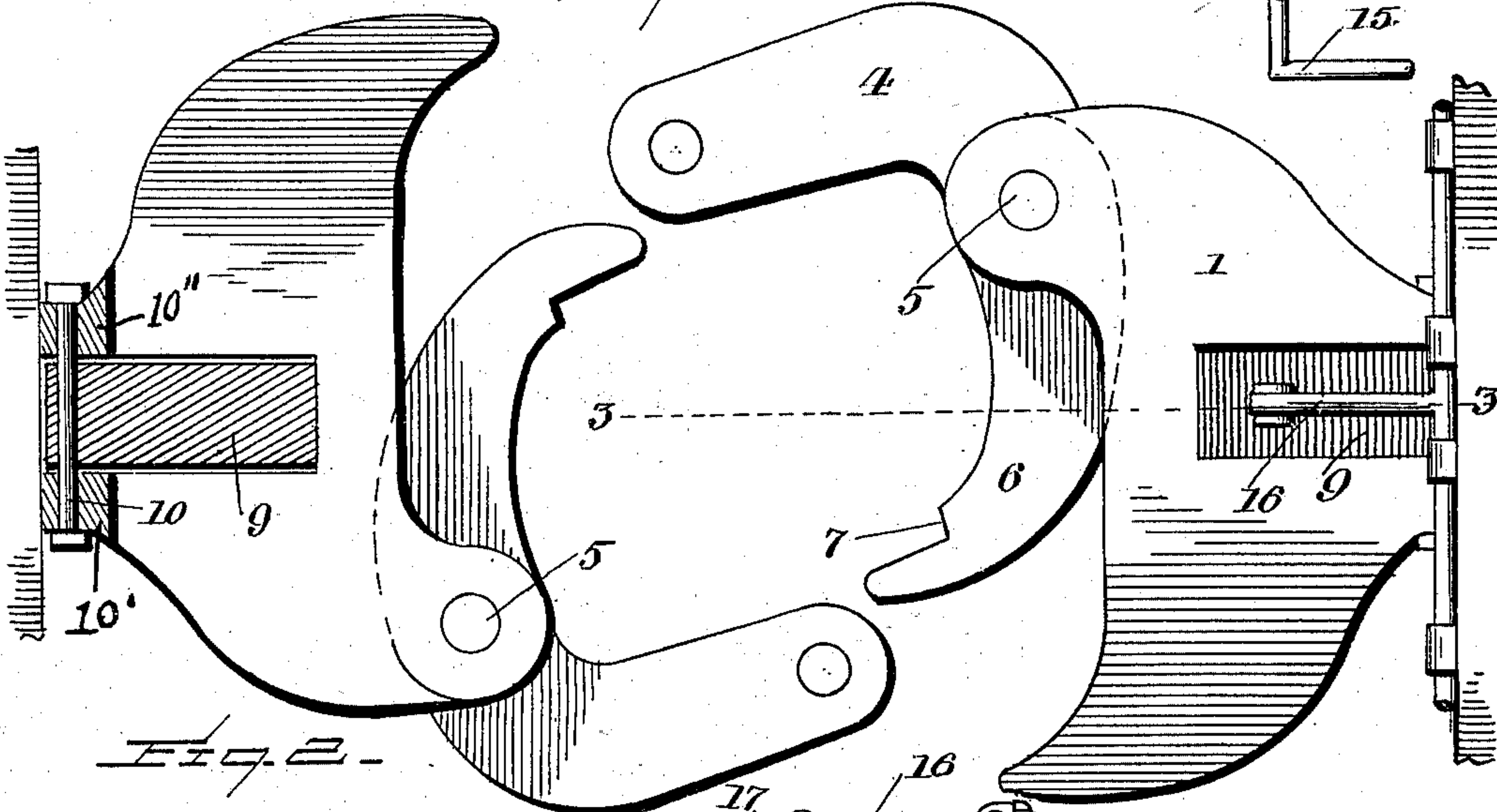


Fig. 2.

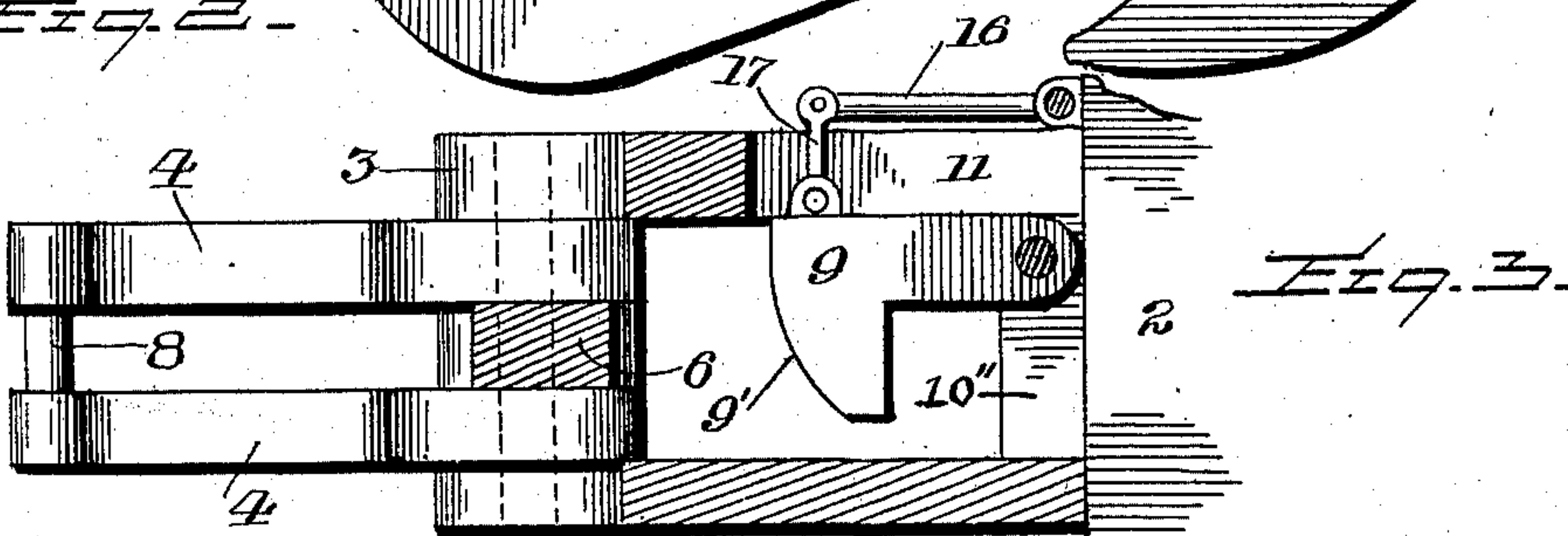


Fig. 3.

Witnesses:
J. H. Butler.
E. E. Potter.

Inventor.
Frederick Lehmann.

By *H. G. Smith*
Attorneys

UNITED STATES PATENT OFFICE.

FREDERICK LEHRMANN, OF BLYTHEDALE, PENNSYLVANIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 748,384, dated December 29, 1903.

Application filed November 11, 1901. Serial No. 81,856. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK LEHRMANN, a citizen of the United States of America, residing at Blythedale, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Car-Couplers, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in car-couplers, the object of the invention being to construct a coupler which will automatically couple when the cars are brought together and which may be readily operated from a point at the side of the cars to uncouple and permit the disengagement of the cars.

A further object of the invention is to construct a coupler of this class which when uncoupled will throw the knuckles into such a position that the cars will automatically couple when brought together.

With the above and other objects in view the invention consists in the novel combination and arrangement of parts to be hereinafter more fully described, and specifically pointed out in the claim.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like numerals of reference indicate corresponding parts throughout the several views, in which—

Figure 1 is a top plan view of my improved coupler, showing the coupler attached to two cars in a coupled position. Fig. 2 is a like view of the coupler in an uncoupled position, a portion of one of the couplers being in horizontal section. Fig. 3 is a longitudinal sectional view taken on the line 3-3 of Fig. 1, showing the knuckle in the uncoupled position with the coupler-latch down.

In the drawings the reference-numeral 1 indicates the draw-head, which is suitably connected to the framework of the car 2 in any approved or desired manner. This draw-head is provided with apertured lugs or ears 3, in which is journaled the knuckle or jaw 4, this knuckle or jaw being pivotally mounted on the pin 5 and having a locking arm or horn 6, which is adapted to swing within the opening provided therefor in the draw-head

1. This locking arm or horn 6 is provided on its inner face near the outer end with a shoulder 7, which is adapted to engage with the pawl or latch after the coupler is locked to prevent the withdrawal of the knuckle or jaw, as will be further explained. The knuckle or jaw comprises an upper and lower plate, and they have secured therein, near their outer ends, the pin 8, so that the ordinary link-coupler may be connected to the car equipped with my improved coupler. The knuckle or jaw is locked by means of the latch or pawl 9, which is mounted upon the shaft 10, carried by the draw-head, and the draw-head is cut away on its upper face, as at 11, to permit the elevating of the latch or pawl 9, so as to unlock the coupler. I preferably operate this pawl or latch 9, so as to elevate the same by means of the operating-rod 12, journaled in keepers 14, carried by the car, the said rod being extended out to or to a point near the sides of the cars and provided with crank end 15. This rod is connected by the extension 16 and link 17 to the latch or pawl 9. The outer face of this latch or pawl 9 is beveled, as shown at 9', so that the locking arm or horn in its closing operation will tend to raise the latch or pawl until it passes beyond the same, when the latter falls and the shoulder 7 of the locking arm or horn engages the latch or pawl to prevent the uncoupling of the cars until the latch or pawl is raised.

The rear ends of the draw-head sections, the latter being formed of flat plates, are spaced apart by means of portions 10' 10'', which are spaced apart to admit therebetween the pawl 9, the shaft 10 of the latter being secured in said portions 10' and 10''. The knuckle-plates space the forward ends of the draw-head sections apart.

It will be observed that when the coupler is in a coupled position that the body portion of the knuckle or jaw lies at a direct right angle to the pawl or latch and that the inner faces of both the upper and lower plate of the opposite knuckle or jaw are in engagement with each other, thus giving considerable purchasing-surface to the knuckles or jaws. When the pawl or latch 9 is elevated by means of the handles or cranks 15, either one or both of the knuckles may swing outward to the position as shown in Fig. 2 and

will remain in this position until the cars are again brought together, when they will be automatically coupled.

It will be noted that various changes may be made in the details of construction without departing from the general spirit of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a car-coupling, the combination with the draw-head formed of upper and lower flat spaced-apart sections, of a knuckle comprising upper and lower flat spaced-apart plates interposed between said draw-head sections, a locking-horn interposed between said knuckle-plates, and extending outwardly therefrom, a shoulder formed on the end of said

horn, said knuckle-plates spacing the forward ends of the draw-head sections and said horn spacing the knuckle-plates, a pin connecting the forward ends of the knuckle-plates, the said draw-head sections having spacing means at their rear ends, a pawl located between said last-named spacing means, a shaft passing through the pawl and said last-named spacing means, the upper draw-head section being apertured with means extending through the aperture and connected to the pawl for operating the latter.

In testimony whereof I affix my signature in the presence of two witnesses.

FREDERICK LEHRMANN.

Witnesses:

JOHN NOLAND,
E. E. POTTER.