

No. 752,855.

PATENTED FEB. 23, 1904.

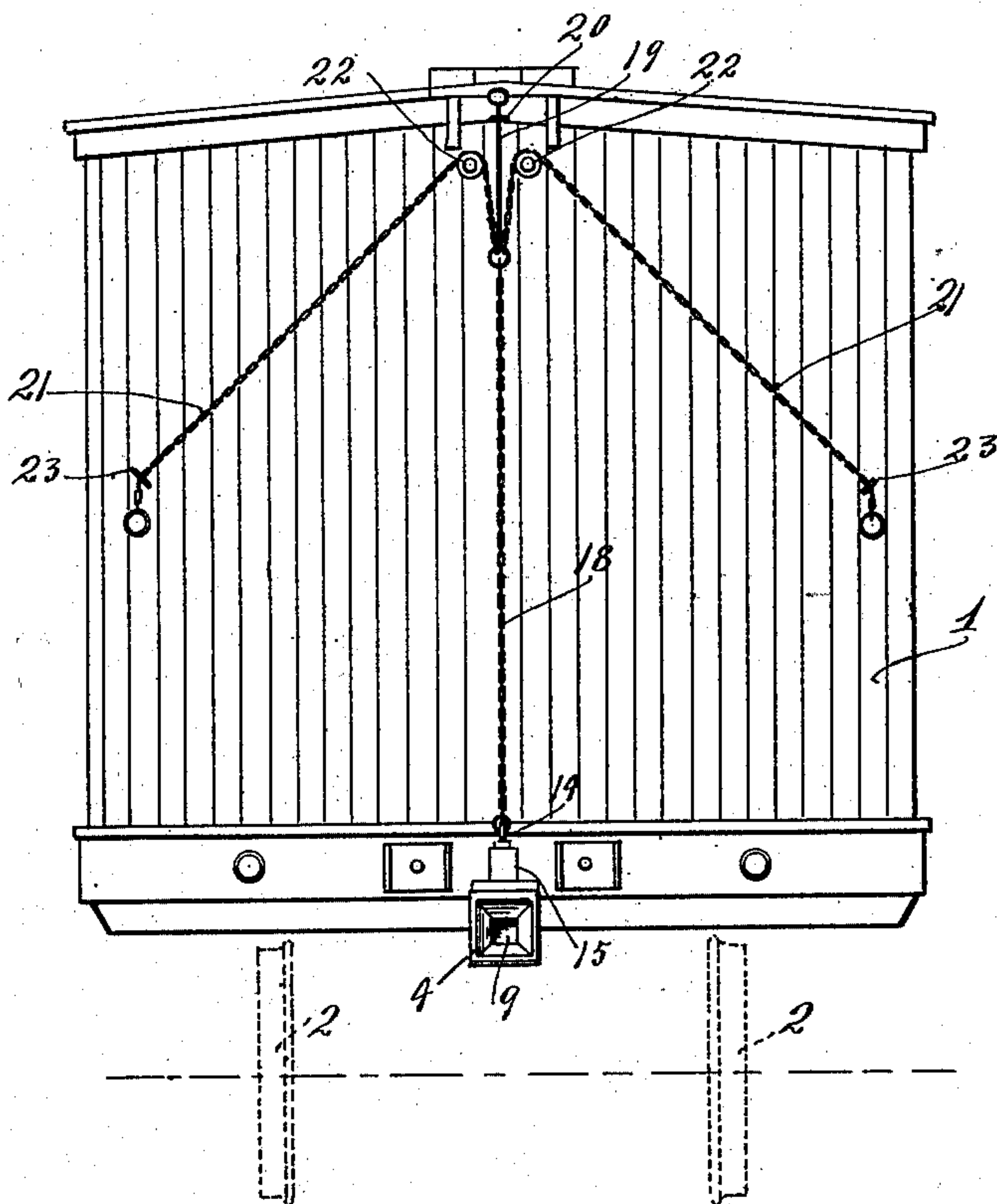
C. A. OLSON.
CAR COUPLING.

APPLICATION FILED MAR. 30, 1903.

NO MODEL.

2 SHEETS—SHEET 1.

Fig. 1.



Witnesses
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2 SHEETS—SHEET 2.

Fig. 3

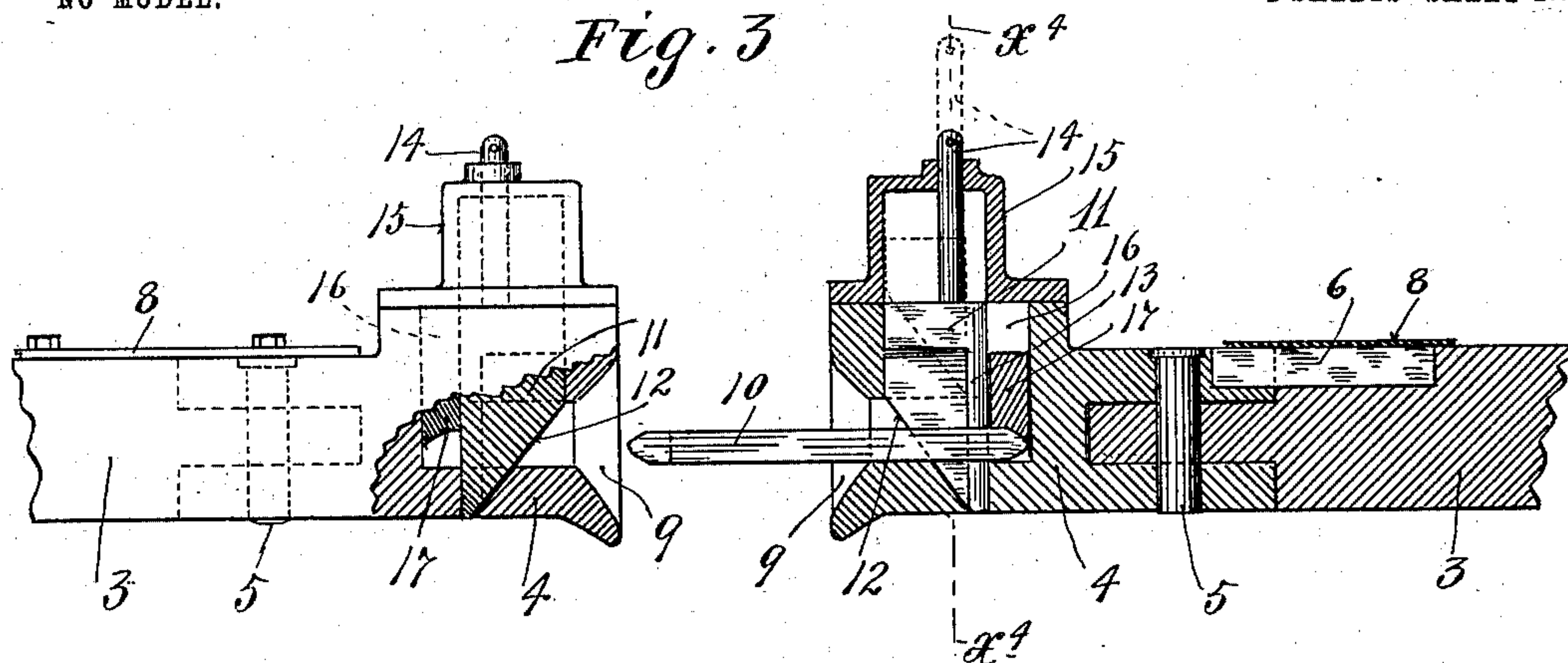


Fig. 2

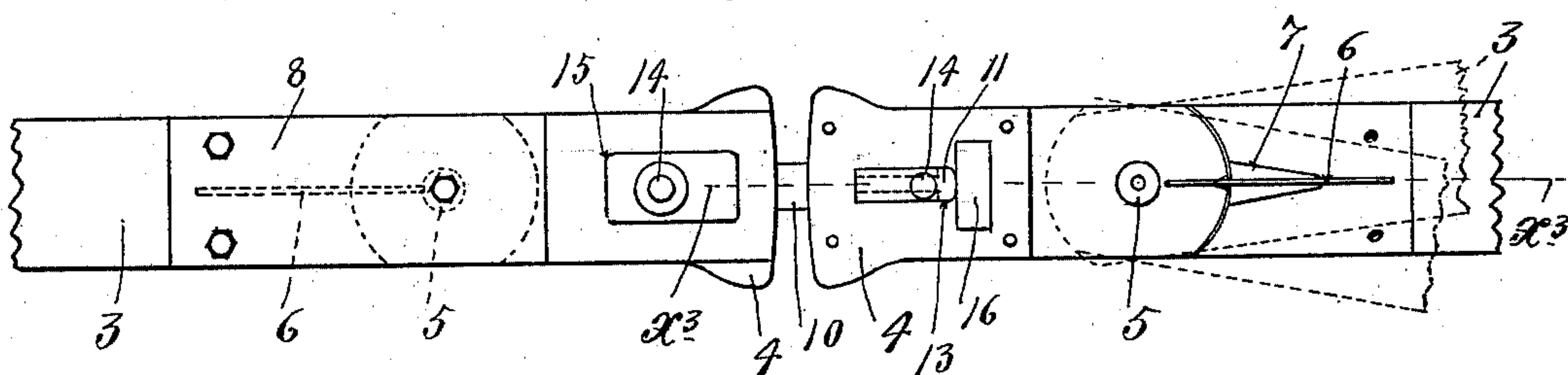
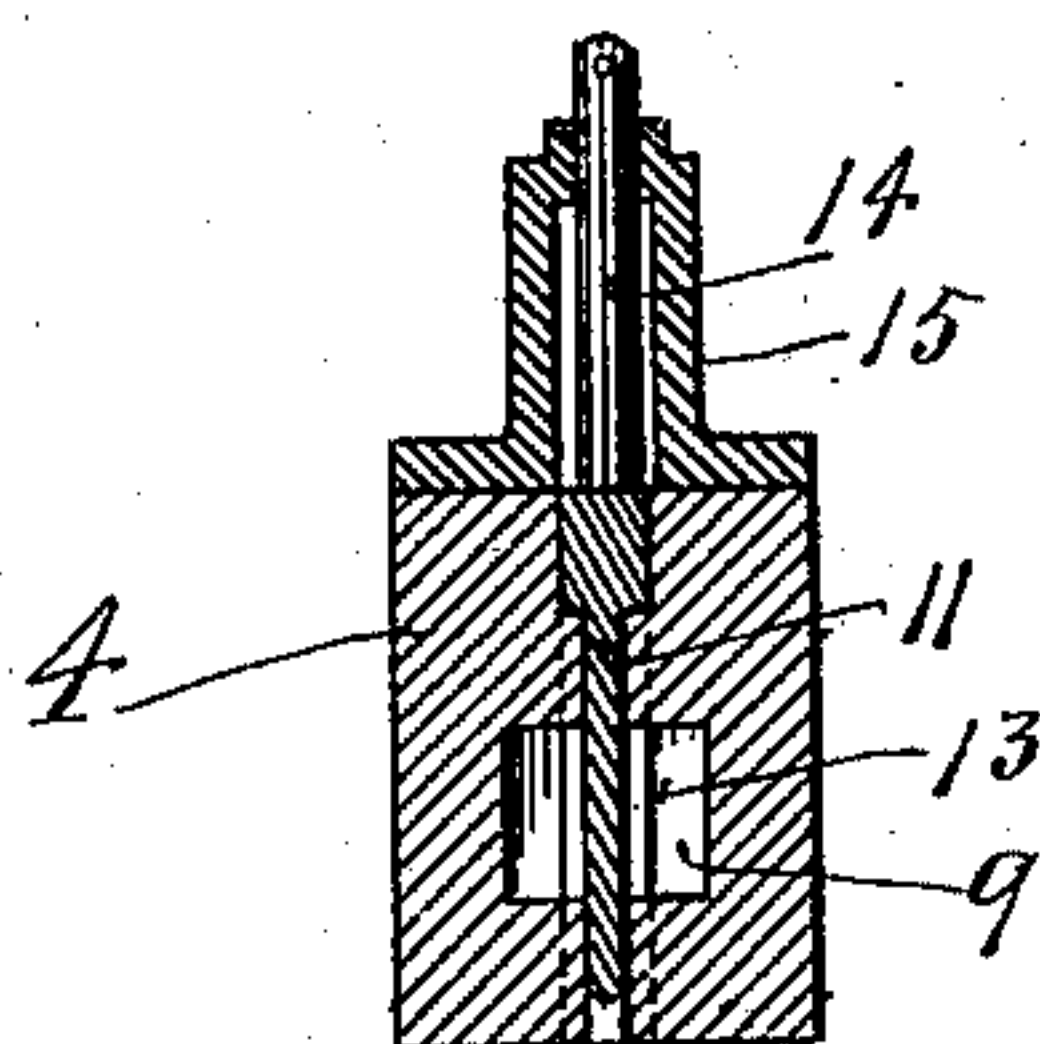


Fig. 4



Witnesses.

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UNITED STATES PATENT OFFICE.

CARL A. OLSON, OF ST. FRANCIS, MINNESOTA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 752,855, dated February 23, 1904.

Application filed March 30, 1903. Serial No. 150,095. (No model.)

To all whom it may concern:

Be it known that I, CARL A. OLSON, a citizen of the United States, residing at St. Francis, in the county of Anoka and State of Minnesota, have invented certain new and useful Improvements in Car-Couplers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to automatic car-couplers, and has for its object to improve the same, as hereinafter set forth.

The invention is illustrated in the accompanying drawings, wherein like characters indicate like parts throughout the several views.

Figure 1 is an end elevation showing the body of a car having applied thereto one of my improved couplers and means for releasing the lock-dog thereof. Fig. 2 is a plan view of a pair of couplers designed in accordance with my invention, some parts being broken away and others being removed. Fig. 3 is a view, partly in side elevation and partly in section, on the line $x^3 x^3$ of Fig. 2, some parts being broken away; and Fig. 4 is a transverse section on the line $x^4 x^4$ of Fig. 3.

The numeral 1 indicates the body of a car, and the numeral 2 indicates in dotted lines the wheels of one of the trucks.

The numeral 3 indicates the draft-bar of the coupler, which may be yieldingly connected to the body of the car in the ordinary or any suitable way.

The numeral 4 indicates the coupler-head, which has an interlapping joint with the end of the draft-bar 3 and is pivotally connected thereto by a pin 5. A flat spring 6 is closely fitted at its ends in slits formed in the upper lug of the head 4 and in the upper portion of the draft-bar 3 and yieldingly holds the coupler-head in an intermediate position in straight line with said draft-bar. To afford clearance for the intermediate portion of the spring 6, the draft-bar is cut away at 7. The spring 6 is preferably covered by a guard-plate 8, which is detachably secured to the top of the draft-bar 3.

The projecting end of the coupler-head 4 is recessed at 9 to form a seat for the coupling-

link 10. The outer extremity of the seat 9 flares outward, so as to guide the end of the link 10 into the same under the coupling action.

A lock-dog 11 is mounted to work vertically through the coupler-head and through the link-seat 9. The forward lower portion of the lock-dog 11 is beveled at 12, so that the dog will be raised whenever the end of a link is forced against the said surface 12, thereby permitting the link to be automatically caught by the said dog. Said dog 11 is further provided with vertical side flanges 13, that fit in correspondingly-formed vertical seats in the coupler-head and assist in holding the lock-dog against outward lateral movements under draft strains. The lock-dog is also provided with a vertical stem 14, which works upward through a housing 15, detachably secured to the coupler.

Mounted in the vertically-extended seat 16, formed in the coupler-head just back of the lock-dog 11, is a gravity-actuated link-arighting block 17, which when the link is locked by the lock-dog 11, as shown in Fig. 3, presses downward on the coupled end of the link, and thus holds the link in a horizontal position, so that its outer end will properly enter the link-seat of the coupler-head, to which it is to be coupled. The lower end of the block 17 is beveled, so that it will be raised when engaged by the end of the link. Were it not for this block the outer and heavier portion of the link would overbalance the inner and lighter portion and cause the link to incline downward toward its outer end, so that the proper coupling action would not usually be accomplished.

The stem 14 of the lock-dog 11 is connected by a chain or other flexible connection 18 to a hand-rod 19, mounted to work through a suitable guide 20 on the end of the car-body. The upper end of this hand-rod 19 is in position where it may be reached by a person on the top of the car. To enable the lock-dog to be raised by a person at either side of the car and without stepping between the cars, a pair of chains or flexible connections 21 are connected to the upper end of the chain 18 and are passed over suitable guide-sheaves

22 on the end of the car and through suitable guide-staples 23, also on the end of the car, but close to the sides thereof. - As is evident through the connections described, the lock-dog may be lifted at will without stepping between the cars and either from the top or from the sides of the car.

The coupler described is of extremely simple construction, is of small cost, has few parts to get out of order, operates entirely without the use of springs, and is efficient for the purposes had in view.

It will of course be understood that the coupler described is capable of modification within the scope of my invention as herein set forth and claimed.

What I claim, and desire to secure by Letters Patent of the United States, is as follows:

The combination with a coupler-head 4 having the link-seat 9, of the lock-dog 11 mounted to move vertically in said coupler-head and having the beveled surface 12, the link 10 adapted to be caught by said lock-dog, and the vertically-movable arighting-block 17 mounted in said coupler-head inward of said lock-dog and operating on the inner end of the coupled link to hold the same in an approximately horizontal position, which arighting-block is movable independently of the lock-dog, substantially as described.

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

CARL A. OLSON.

Witnesses:

MARSHALL ANDERSON,
A. N. GRANQUIST.