No. 698,957.

Patented Apr. 29, 1902.

## J. JENKINS.

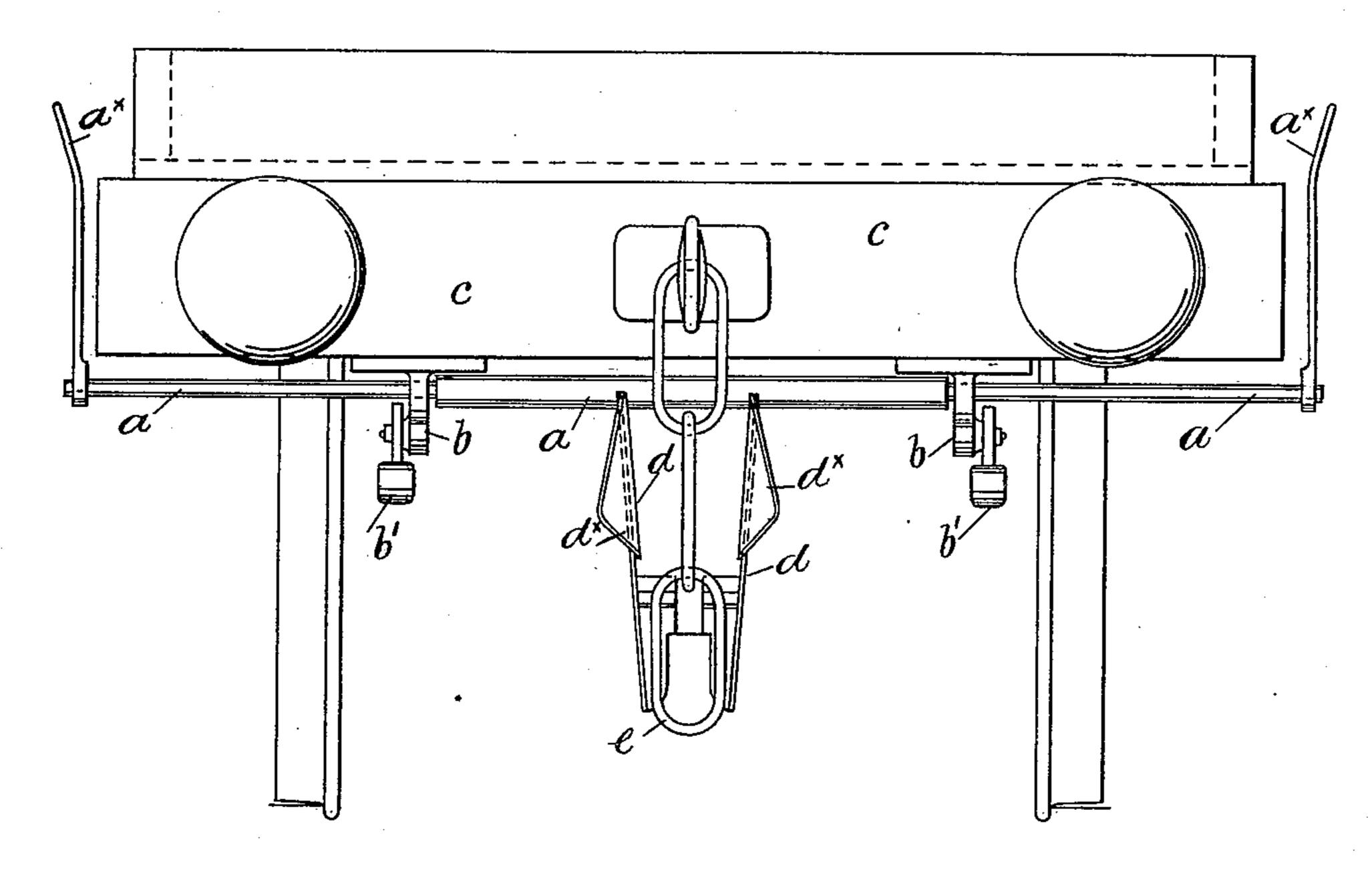
#### APPARATUS FOR COUPLING OR UNCOUPLING RAILWAY ROLLING STOCK.

(Application filed July 12, 1901.)

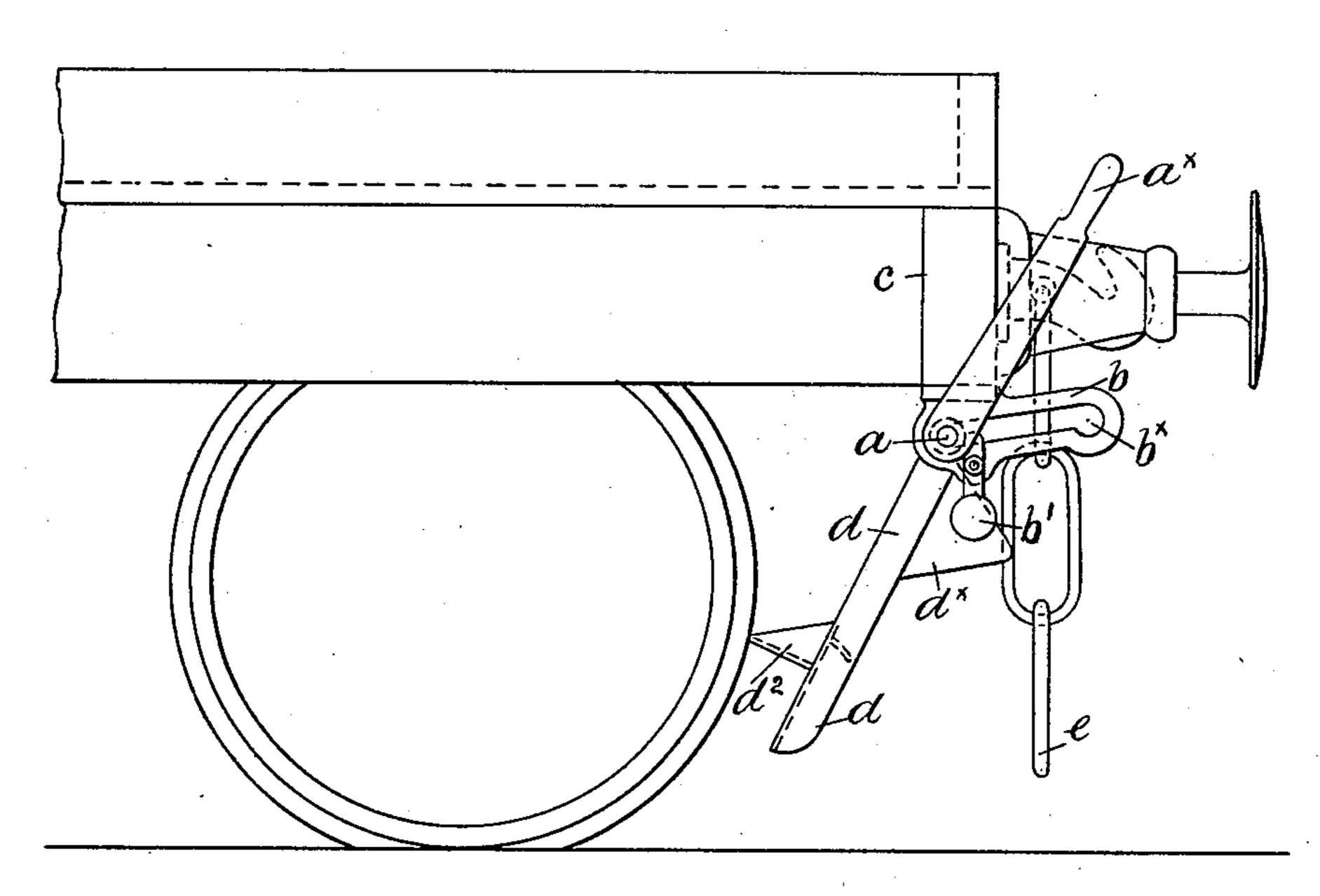
(No Model.)

3 Sheets—Sheet 1.

## FIC. I.



FIC. 2.



WITNESSES: A.W. Wright. INVENTOR

JANIES JENKINS

BY

HOWFAN AND HOWAN

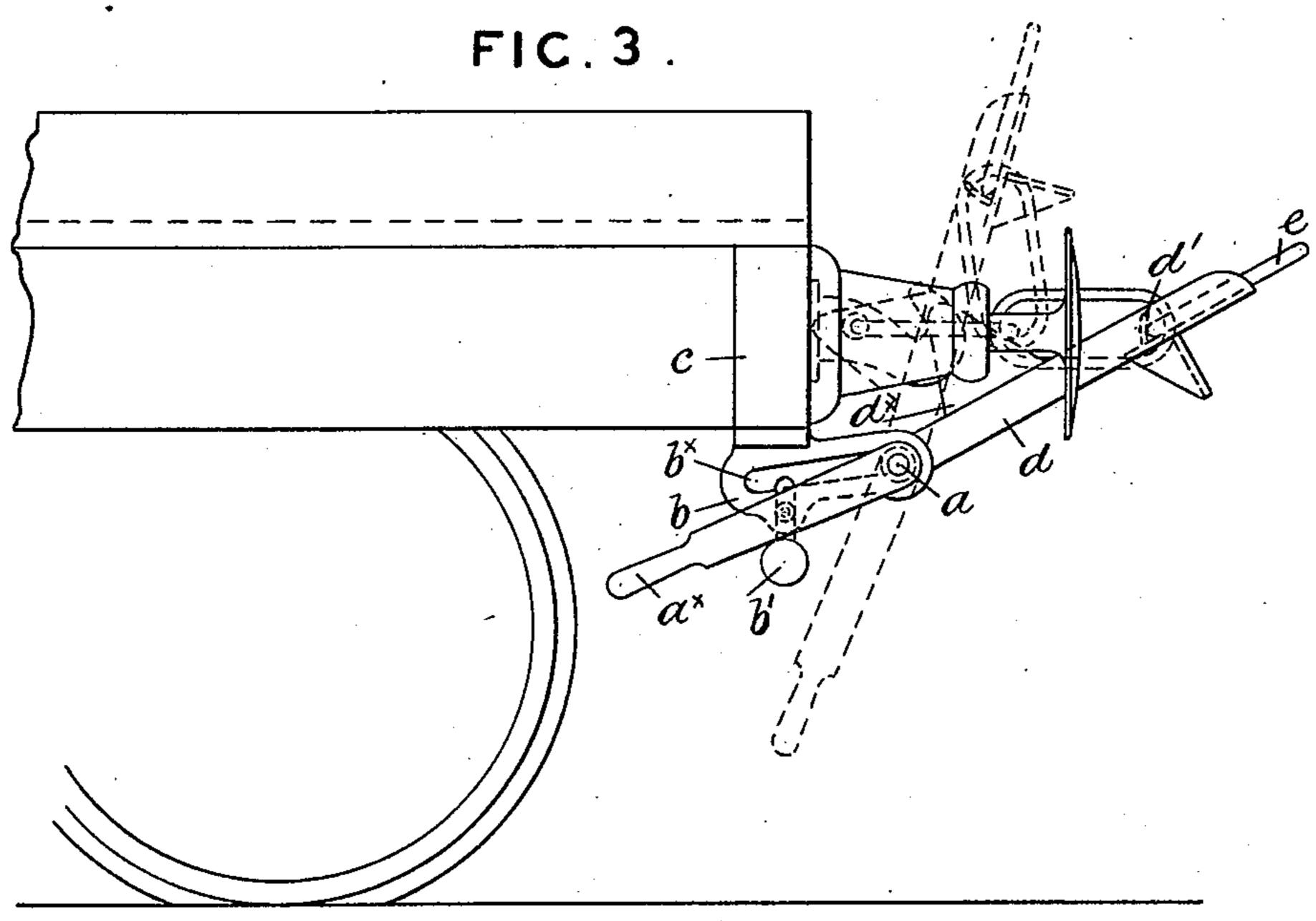
## J. JENKINS.

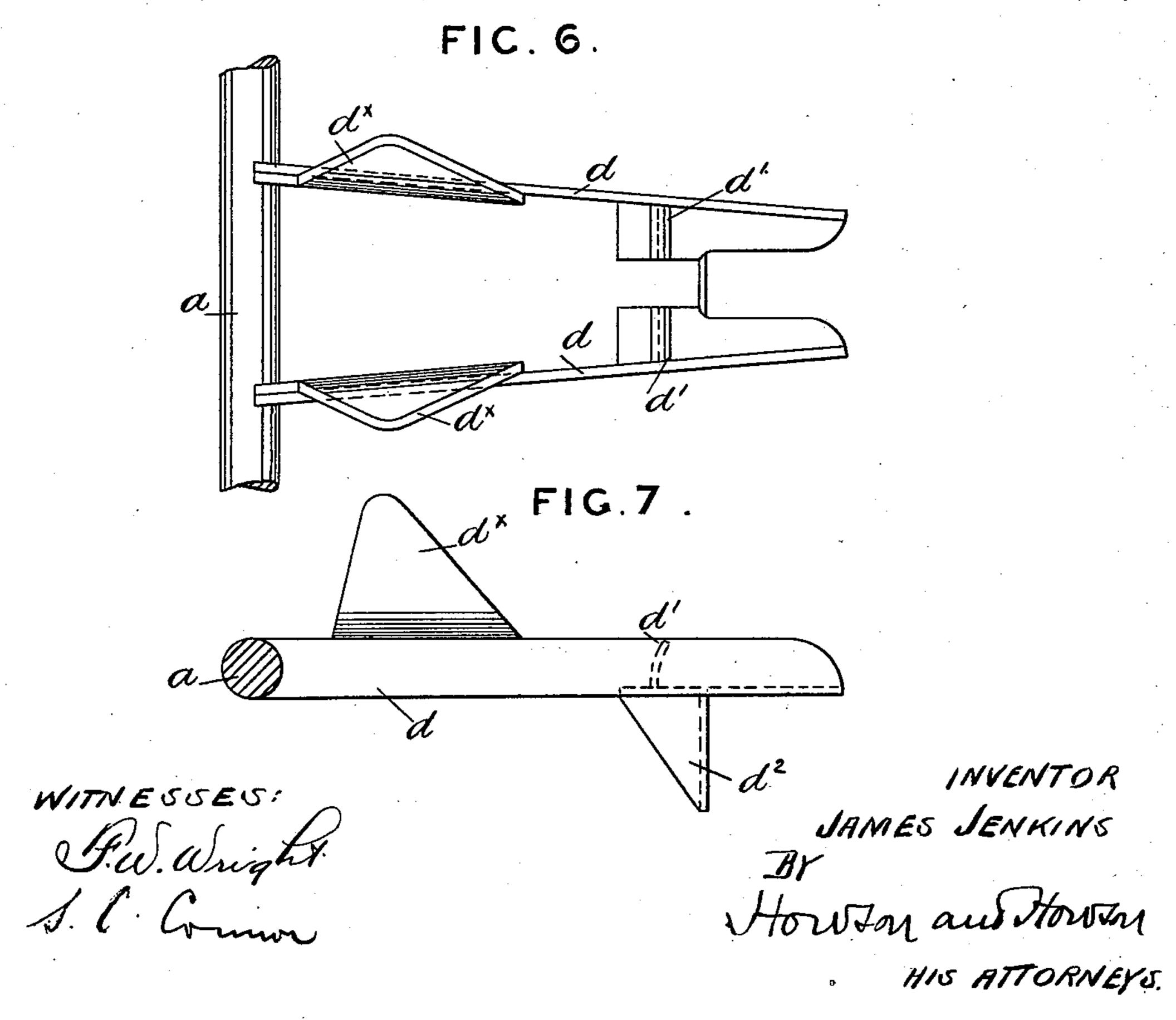
## APPARATUS FOR COUPLING OR UNCOUPLING RAILWAY ROLLING STOCK.

(Application filed July 12, 1901.)

(No Model.)

3 Sheets—Sheet 2.

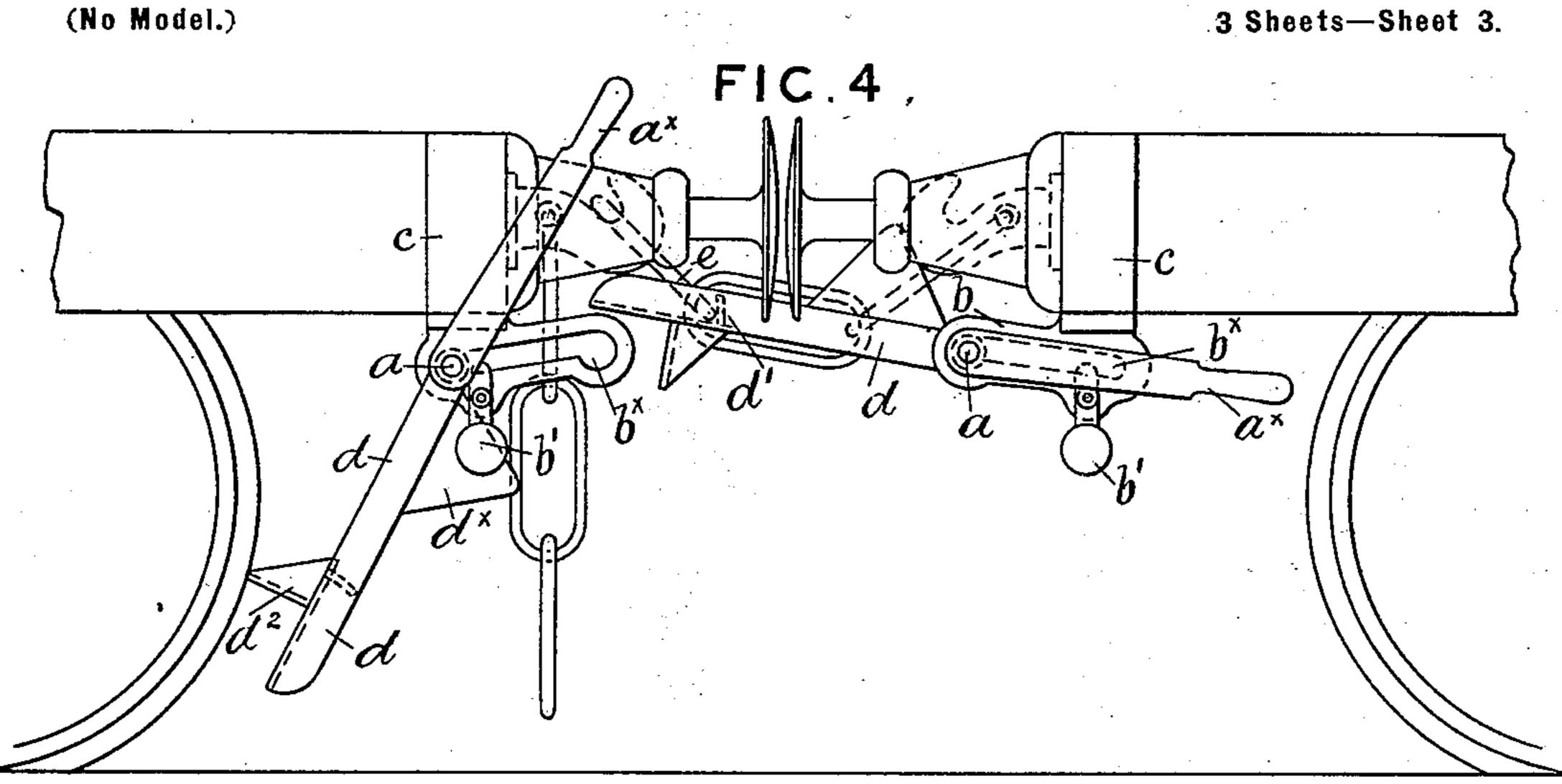


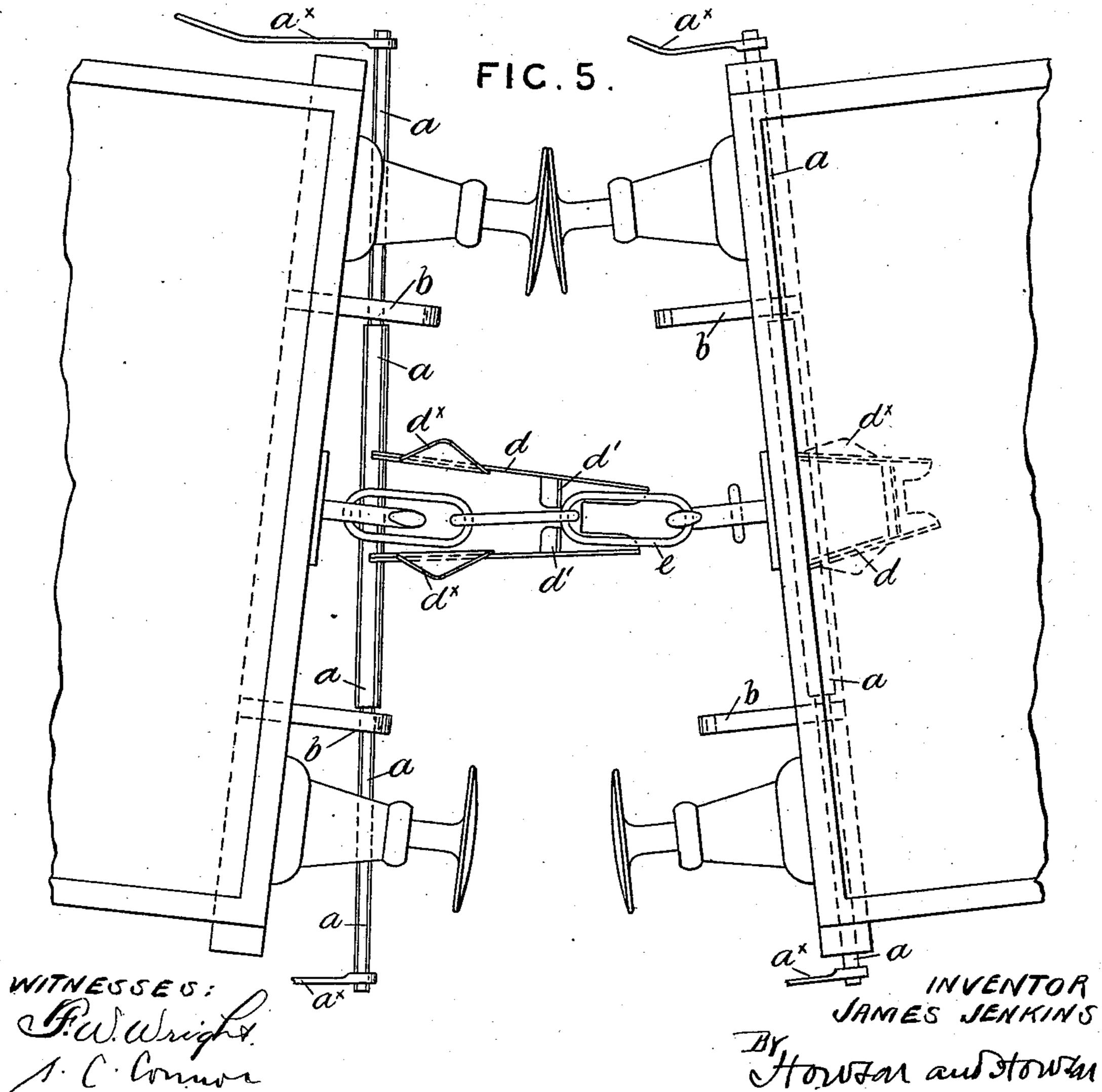


### J. JENKINS.

#### APPARATUS FOR COUPLING OR UNCOUPLING RAILWAY ROLLING STOCK.

(Application filed July 12, 1901.)





# United States Patent Office.

## JAMES JENKINS, OF CARDIFF, ENGLAND.

APPARATUS FOR COUPLING OR UNCOUPLING RAILWAY ROLLING-STOCK.

SPECIFICATION forming part of Letters Patent No. 698,957, dated April 29, 1902.

Application filed July 12, 1901. Serial No. 68,070. (No model.)

To all whom it may concern:

Be it known that I, JAMES JENKINS, a subject of the King of Great Britain, residing at 40 Richard street, Cathays, Cardiff, England, have invented new and useful Improved Apparatus for Coupling or Uncoupling Railway Rolling-Stock, of which the following is a specification.

This invention relates to an improvement in the device for coupling and uncoupling railway-wagons and like vehicles which have draw-links depending from a hook fitted in the center of the head-stock or buffer-beam, for which a patent for Great Britain was granted to me, dated January 11, 1899, No. 694.

The object of the present invention is to simplify the aforesaid apparatus, and thereby reduce the cost of construction, and to facili-

20 tate its application. In the accompanying drawings, illustrating my invention, and to which I hereinafter refer, Figure 1 is an end view, and Figs. 2 and 3 are part side views, of an ordinary railway-25 wagon with my invention applied, Fig. 2 showing the apparatus out of action and Fig. 3 showing the coupling raised in position for placing on the hook of an adjacent wagon. Fig. 4 is a side view of parts of two wagons 30 coupled with the mechanism by which the coupling is effected in the positions it would appear before being released after having placed the link of one vehicle on the draw-hook of another. Fig. 5 is a plan of parts of two 35 wagons, showing how my invention can be applied if the vehicles should happen to be on a curve in a siding. Figs. 6 and 7 are respectively a plan and a side view of couplinglifter drawn to an enlarged scale.

In the views similar letters refer to similar

parts.

a is a rocking shaft that is supported in slotted guides b, which are fixed to the head-stock c at a suitable distance apart. The center portion of the shaft a is of larger diameter than the ends, so as to afford increased strength for uniting thereto the lifter d, by which the coupling-chain is raised when the vehicles require to be coupled or uncoupled and which is of a form similar to that which is shown in the drawings and described in the specification of the aforesaid British Pat-

ent No. 694 of 1899, with stops, as d', and with the addition of horns, as  $d^{\times}$ .

In applying my invention when two vehi- 55 cles require to be coupled the shaft a, which is ordinarily in the position shown in Fig. 2, is rotated by one of the handles  $a^{\times}$  being turned down toward the center of the vehicle or by other equivalent means, thereby rais- 60 ing the lifter d, which at the same time is pushed forward by the horns  $d^{\times}$  pressing against the head-stock c, as shown in dotted lines in Fig. 3, causing the shaft a to slide along the slots  $b^{\times}$  and enter the recesses at 65 the forward ends of the guides b, thereby not only lifting the link e, but placing it over the hook of the adjacent wagon, onto which it falls as soon as the lifter is released, as shown in Fig. 4, which is effected either manually 70 or automatically by the hook of one vehicle coming in contact with the tailpiece  $d^2$  of the lifter d on another vehicle when said lifter is placed in the position shown in Fig. 3.

By the manipulation of the shaft a, which 75 may be moved along the slots  $b^{\times}$  either parallel with the end of the vehicle or one end of said shaft moved along one of the slots  $b^{\times}$  in a reverse direction to that which the opposite end of the shaft is moved, the coupling-link e 80 can be placed on the hook of the adjacent vehicle irrespective of their relative positions, or on a curve, as shown in Fig. 5. The slots in the guides b are formed at the forward end with a semicircular recess, into which the 85 shaft a may fall, as hereinbefore described, or one portion only of the shaft may be placed in the recess in one of the guides to facilitate the manipulation of said shaft when the vehicles are to be double-coupled. Said guides 90 have a tumbler b' fitted thereto, by which the shaft a is retained at the rear end of the slot when not in use.

When the vehicles require to be uncoupled, the draw-link is raised from the hook of the 95 adjacent wagon in the same manner as when said hook is placed thereon, or, if double-coupled, one of the horns  $d^{\times}$  may be employed to raise the link of the other vehicle from the hook of its own vehicle.

I claim as my invention—

1. Apparatus for coupling railway-cars comprising a pivoted chain-lifter, a slotted guide in which it is mounted, projections on

the upper part of the lifter, and an operatinghandle whereby, on the continued movement of the handle the links are first raised, the projections are forced against the car-body 5 and the pivoted chain-lifter and chain are

forced outward in the slotted guide.

2. Apparatus for coupling railway-cars comprising a pivoted chain-lifter, a slotted guide in which it is mounted, projections on the upper part of the lifter, and an operating-handle whereby on the continued movement of the handle the links are first raised, the projections are forced against the car-body and the pivoted chain-lifter and chain are forced outward in the slotted guide, in combination with a projection on the lower side of the lifter adapted to be acted on by the hook of the approaching car, to throw the lifter backward in its slotted guide and drop the extended link over the hook, substantially as described.

3. Apparatus for coupling railway-cars comprising a pivoted lifter, an operating-shaft for the lifter, a slotted guide therefor on each side of the car and a recessed outer end to the slides and means for first raising

the lifter and then advancing it on the rotation of the shaft so that the shaft occupies a position in the forward end of the guide and is retained there by the recess, as and for the 30

purpose described.

4. Apparatus for coupling railway-cars comprising a pivoted lifter, an operating-shaft for the lifter, a slotted guide therefor on each side of the car and a recessed outer 35 end to the slides and means for first raising the lifter and then advancing it on the rotation of the shaft so that the shaft occupies a position in the forward end of the guide and is retained there by the recess, in combination with a projection on the under side of the lifter adapted to be acted on by the hook of an approaching car to throw the lifter back out of the recess and permit the lifted link to fall onto the hook, substantially as described. 45

In testimony whereof I have signed my name to this specification in the presence of

two subscribing witnesses.

JAMES JENKINS.

Witnesses:

JOHN P. INGLEDEW, NORMAN M. INGLEDEW.