

T. J. ORR.
CAR COUPLING.

Patented Sept. 1, 1896.

Fig. 1.

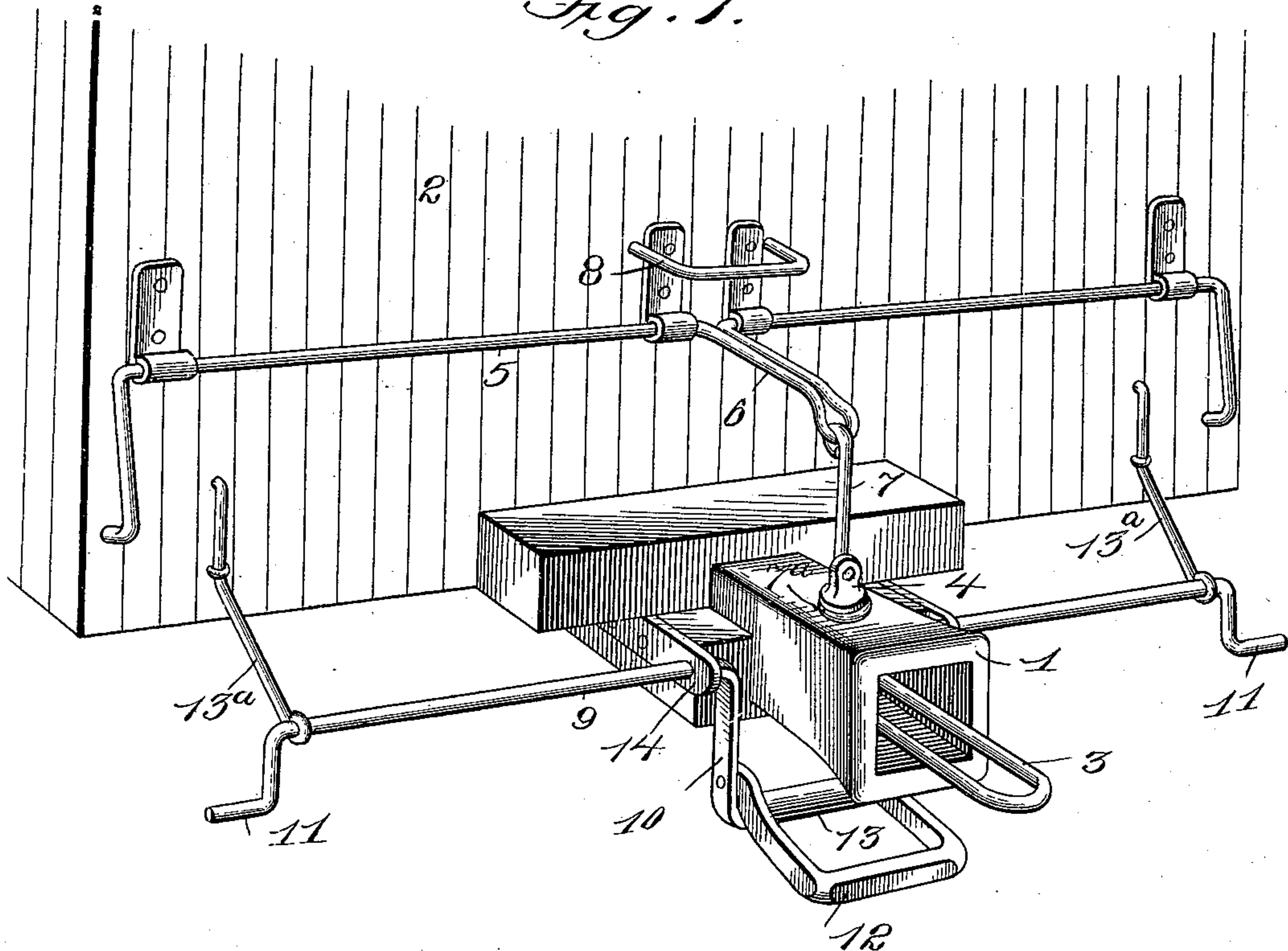


Fig. 2.

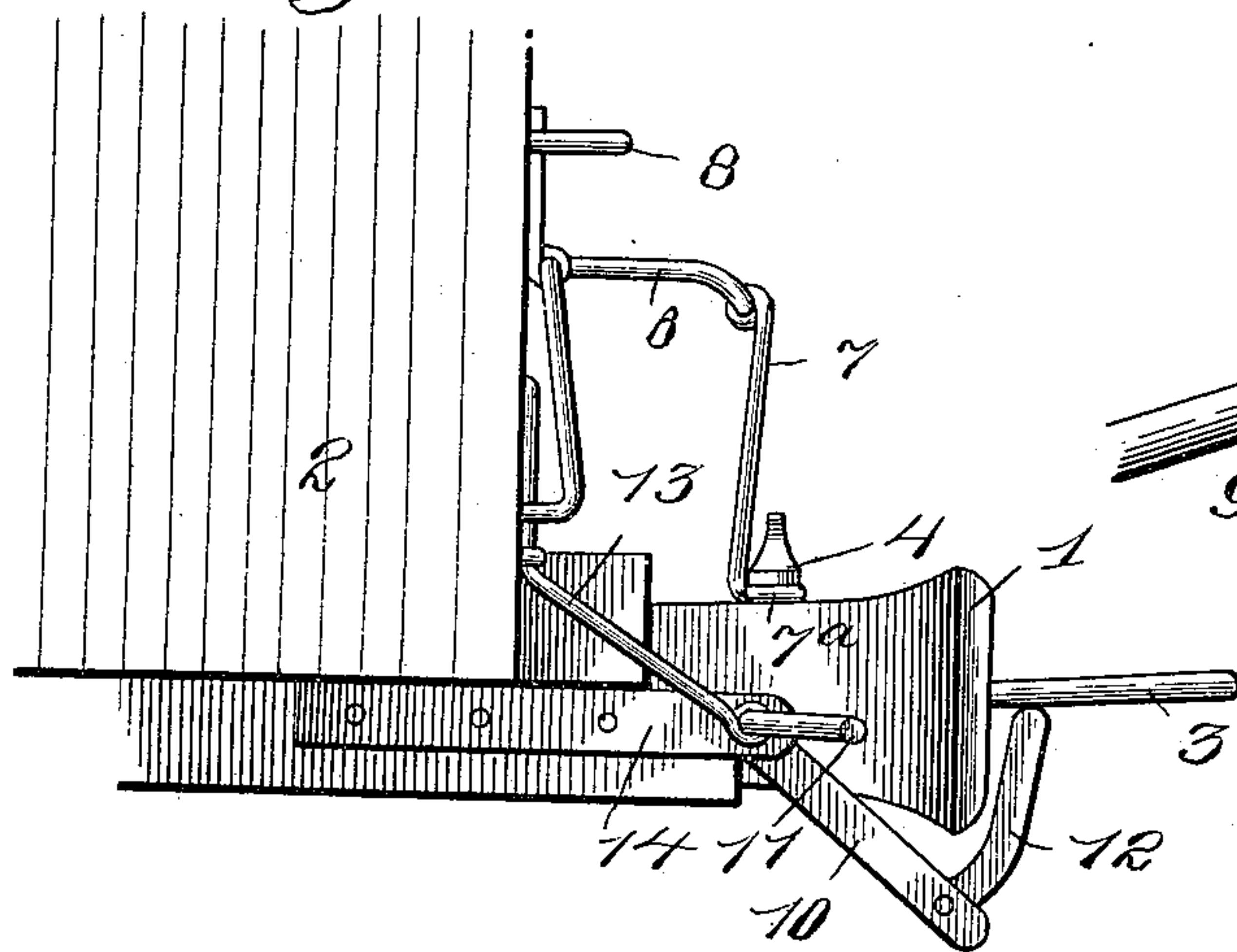
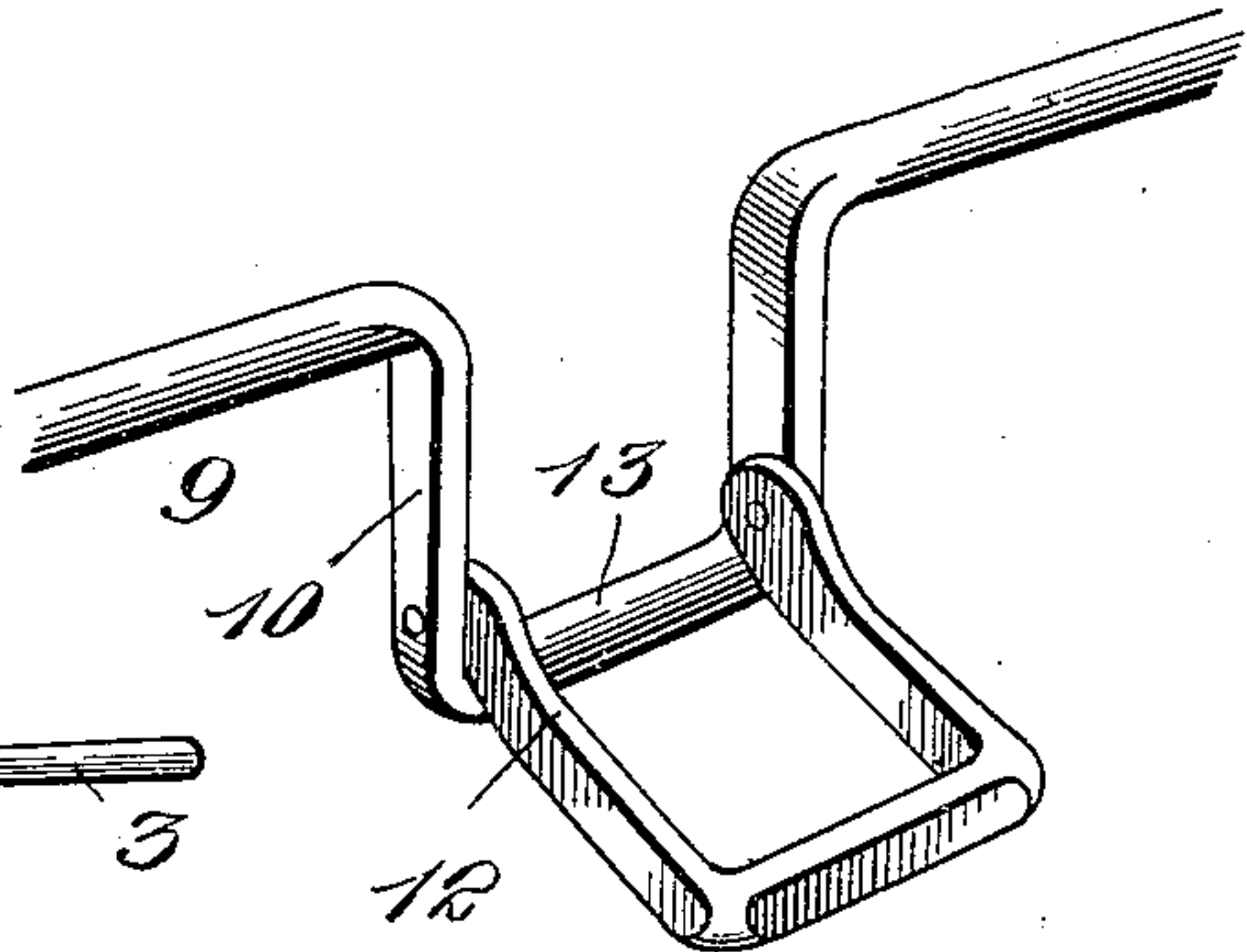


Fig. 3.



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UNITED STATES PATENT OFFICE.

THOMAS J. ORR, OF LADONIA, TEXAS, ASSIGNOR OF TWO-THIRDS TO
ROBERT M. ESTILL AND JOHN HUBER, OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 567,109, dated September 1, 1896.

Application filed December 31, 1895. Serial No. 573,923. (No model.)

To all whom it may concern:

Be it known that I, THOMAS J. ORR, a citizen of the United States, residing at Ladonia, in the county of Fannin and State of Texas, have
5 invented a new and useful Car-Coupling, of which the following is a specification.

The invention relates to improvements in car-couplings.

The object of the present invention is to
10 provide for pin-and-link car-couplings an attachment which will enable cars to be readily coupled and uncoupled without going between them, and by which a link may be readily
15 guided into the mouth of a draw-head without necessitating a person going between the cars.

A further object of the invention is to provide a link lifting or guiding device which will be strong and durable and will not be
20 materially injured should it be caught between two draw-heads during the operation of coupling.

The invention consists in the construction and novel combination and arrangement of
25 parts hereinafter fully described, and illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

In the drawings, Figure 1 is a perspective view of a portion of a car having a car-coupling constructed in accordance with this invention. Fig. 2 is a side elevation of the same. Fig. 3 is a detail perspective view of the central portion of the link lifting or guiding device.

35 Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a draw-head, mounted on a car 2 in the usual manner, provided with a coupling-pin perforation, and having a link-cavity receiving a link 3, which is engaged by a coupling-pin 4. The draw-head, link, and pin are of the ordinary construction, and the attachment hereinafter described may be readily applied to all kinds of cars and pin-and-link car-couplings.

The coupling-pin is preferably controlled by a transverse rock-shaft 5, journaled on the car 2 in suitable bearings, provided at its terminals with handles and having a centrally-
50 arranged arm 6 extending outward from the

car, terminating over the coupling-pin, and connected with the latter by a link 7. The arm 6 may be of any desired construction, and it forms an eye or opening at its outer end 55 which is linked into an eye at the upper end of the link 7. The link 7 is provided at its lower end with a horizontally-disposed eye 7^a, receiving the coupling-pin, and the upward swing of the arm of the rock-shaft is limited 60 by a substantially rectangular stop 8, mounted on the car above the transverse rock-shaft, and preventing the coupling-pin from being withdrawn from the draw-head during the operation of uncoupling. Any suitable means 65 may be employed for enabling the rock-shaft to be operated from the top of a box-car for uncoupling.

The link is guided into the mouth of an approaching draw-head by means of a transverse rock-shaft 9, journaled on the car at opposite sides of the draw-head in suitable bearings, and provided with a central rectangular loop 10, and having handles 11 at its terminals. The central rectangular loop has 75 its sides located at opposite sides of the draw-head, and it has a link engaging and supporting a frame 12 pivoted to it at the inner faces of its sides adjacent to the transverse bottom portion 13. The link supporting or engaging 80 frame 12 bears against the transverse portion 13 of the rectangular loop to provide a rigid support for the link 3, which may be raised or lowered from the sides of the car by means of the rock-shaft 9, to guide it into the mouth 85 of a draw-head without necessitating the operator going between cars. The link supporting or engaging frame 12, by being pivoted to the sides of the loop 10, is adapted, should it be caught between two draw-heads, 90 to swing upward to prevent the link-guiding mechanism from being crushed and materially injured.

The transverse rock-shaft 9 may be journaled on bearing-brackets 13^a, extending upward and downward from the car 2, and bearings 14 at opposite sides of the draw-head, but the link-guiding mechanism may be journaled in any desirable manner to suit the car to which it is applied.

It will be seen that the link-guide device may be readily applied to any ordinary car,

and that it will enable a link to be guided into the mouth of a draw-head without necessitating the person going between cars, and that the apparatus will not be materially injured should the link-guiding frame become caught between two draw-heads during the operation of coupling.

It will also be seen that the operation of uncoupling may be performed without going between cars, and that the coupling-pin will not be lost or disengaged from the draw-head in raising it for coupling or uncoupling.

Changes in the form, proportion, and minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention.

What I claim is—

In a car-coupling, the combination with a car, and a draw-head, of a transverse rock-

shaft journaled in suitable bearings and provided with a depending loop arranged adjacent to and extending beneath the draw-head, and consisting of a transverse lower portion and opposite sides, and a substantially rectangular link supporting or engaging frame pivoted to the sides of said loop above the transverse bottom portion thereof, and bearing against and having its outward swing limited by the said bottom portion and capable of swinging upward, substantially as and for the purpose described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

THOMAS J. ORR.

Witnesses:

W. R. SHIELDS,
D. A. DUNCAN.