

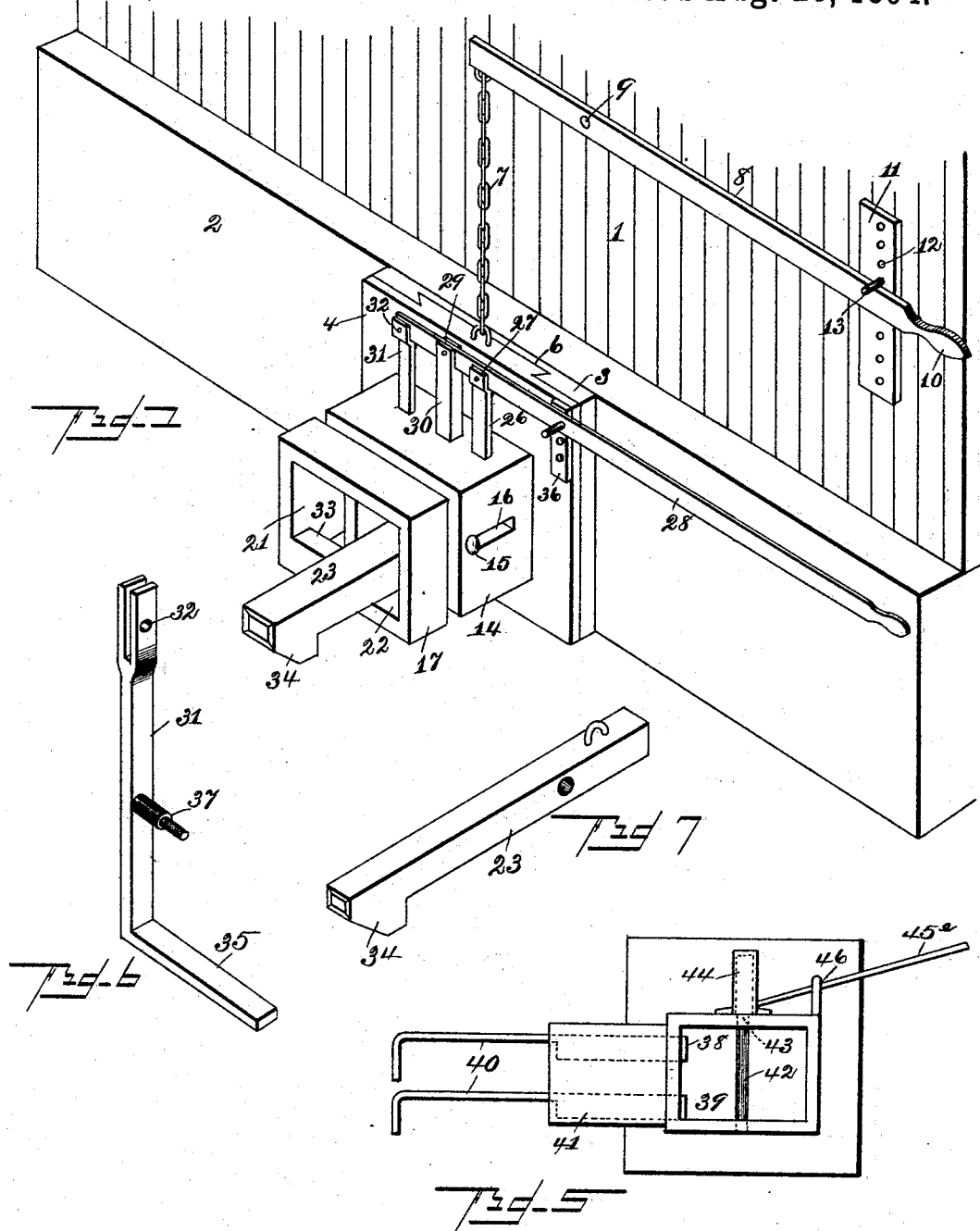
(No Model.)

2 Sheets—Sheet 1.

A. J. WALKER.
CAR COUPLING.

No. 525,036.

Patented Aug. 28, 1894.



Witnesses

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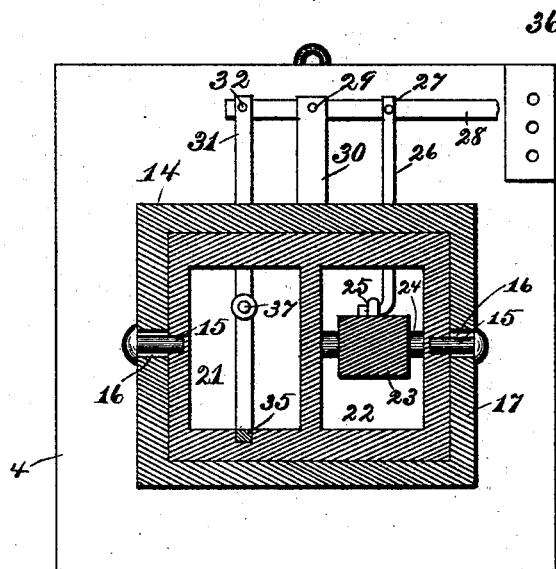
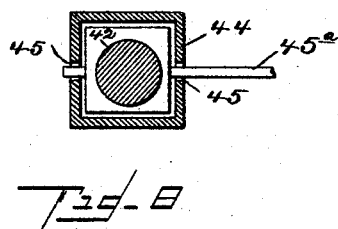
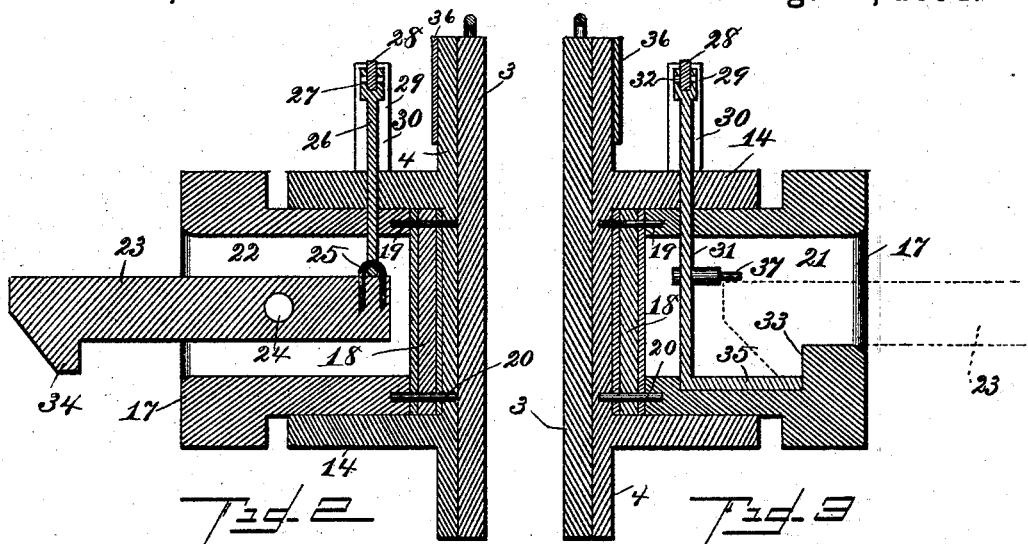
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2 Sheets—Sheet 2

A. J. WALKER.
CAR COUPLING.

No. 525,036.

Patented Aug. 28, 1894.



Witnesses

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UNITED STATES PATENT OFFICE.

ADONIRAM JUDSON WALKER, OF DALTON, MASSACHUSETTS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 525,036, dated August 28, 1894.

Application filed December 19, 1893. Serial No. 494,025. (No model.)

To all whom it may concern:

Be it known that I, ADONIRAM JUDSON WALKER, of Dalton, in the county of Berkshire, State of Massachusetts, have invented certain new and useful Improvements in Car-Couplers, of which the following is a specification, reference being had to the accompanying drawings.

The object of my invention is to produce an improved coupler, which may be automatically coupled and which may be operated both for uncoupling and adjusting for different heights of cars, without the necessity on the part of the operator of going between approaching cars.

In the accompanying drawings: Figure 1 is a perspective view of the end of a box car equipped with my coupler. Fig. 2 is a central longitudinal section, taken on the line 2—2 of Fig. 1. Fig. 3 is a similar view on the line 3—3 of Fig. 1. Fig. 4 is a transverse section on the line 4—4 of Fig. 1. Fig. 5 is a view taken on the line 5—5 of Fig. 1. Fig. 6 is a view of the link lifting arm detached. Fig. 7 is a view of the link or jaw detached. Fig. 8, is a detail showing a section of the guide-frame and head of the pin.

Referring to the figures on the drawings: 1 indicates a car body and 2 its front sill. 3 indicates a plate firmly secured thereto and 4 a sliding plate carrying a dove-tail rib that fits and moves within a dove-tail recess 6.

7 indicates a chain, or the like, by means of which, as from a lever 8, the sliding plate is suspended. The lever is pivoted as at 9 to the car body, and its handle 10 moves across a graduated plate 11, within the holes 12 of which a pin 13 may be adjusted to raise or depress the handle 10 and thereby lower or elevate the sliding plate 4.

From the front of the sliding plate projects a shell 14, to which is secured, as by pins 15, moving in slots 16, a draw-head 17.

18 indicates a cushion of elastic material secured, as by bolts or pins 19 and 20 against the face of the sliding plate 4, within the shell 14. The draw-head 17 bears against this cushion so that too great shock of collision between cars in coupling is obviated.

I desire to employ in the draw-head two coupling chambers 21 and 22, for example, one carrying a link and the other adapted to

receive one. In practice, the links being carried upon the same side, when they come face to face, each is adapted to enter the link receiving chamber of the opposite coupler. For example, in Fig. 2 of the drawings a pivoted link 23 is shown, pivoted as at 24, and pivoted, as indicated at 25, to a pitman 26, pivotally united, as indicated at 27, to a link lever 28. This lever is preferably pivoted, as indicated at 29, to an upright 30, and carries upon its extremity a link lifting pitman 31, pivoted thereto as indicated at 32.

33 indicates a rib or link retaining obstruction, carried in the end of the chamber 21 adapted to receive the hook 34. By this mechanism, it will be perceived that when the lever 28 is depressed the pitman 26 will lift the hook 34 of the link above its ledge 33. At the same time, the pitman 31 will tend to elevate the hooked end of the link entered above it, the pitman 31 being angular, as illustrated, so that its end 35 projects under the end of the link.

A retaining device 36 carried upon the plate 4 is preferably employed to fix the lever 28 in the desired position.

In order to prevent the accidental unhooking of the links, I preferably employ in each of the pitmen 31 a spring-actuated pin 37 which will yield to allow the entrance of the link, but which, as soon as the link has fallen into place, springs over the top of it and prevents its withdrawal until the pitman is positively raised by the action of the lever 31. While this retaining device in connection with the part 33, may be employed, I contemplate also the possible employment of positive retaining pins 38 and 39 sliding transversely in the draw-head and adapted to be actuated by handles 40, the ends of the pins and their handles being preferably incased within a housing 41.

Although, as above stated, I prefer to employ two separate chambers in the draw-head, I may also, for the purpose of using the coupler with any ordinary coupler, provide a pin 42 passing through holes 43 and which may serve as a removable partition, or as a coupling pin where the ordinary pin and link coupling is employed. With this pin I employ to advantage a guide frame 44 having longitudinal slots 45 to accommodate the movement of

a lever 45 pivoted in the head of the pin and pivotally supported upon an upright 46.

When the pin and link coupling is used, of course, the retaining pins 38 and 39 are completely withdrawn from the housing 41, so that the draw-head is empty for the reception of the link.

I do not confine myself to the details of construction herein shown and described, but reserve the right to modify and vary them at will within the scope of my invention.

What I claim is—

1. In a car coupler, the combination with a vertically adjustable shell, of a draw head carried thereby and horizontally yielding therein, substantially as specified.

2. In a car coupler, the combination with a vertically adjustable shell, of a horizontally yielding draw-head carried thereby, adjustable mechanism operatively connected with said shell, adapted to raise and lower the same and means for fixedly adjusting said mechanism, substantially as specified.

3. In a car coupler, the combination with a vertically adjustable shell, of a horizontally yielding draw-head carried thereby provided with a plurality of link receiving chambers, substantially as specified.

4. In a car coupler, the combination with a vertically adjustable shell, of a horizontally yielding draw-head carried thereby provided with two chambers, a link movably secured in one chamber, and link actuating mechanism in both chambers, substantially as specified.

5. In a car coupler, the combination with a vertically adjustable shell, of a horizontally yielding draw-head carried thereby provided with two chambers, link actuating mechanism in both chambers and mechanism adapted

to actuate the link actuating mechanism in both chambers simultaneously, substantially as specified.

6. In a car coupler, the combination with a supporting part, of a vertically adjustable draw-head provided with two chambers, a movable link in one chamber, separate link actuating mechanism in each chamber and mechanism operatively connected with said link actuating mechanisms and adapted to actuate them simultaneously, substantially as specified.

7. In a car coupler, the combination with the draw-head provided with two chambers, of a pivoted link within one of the chambers, the other chamber being adapted to receive the hooked end of a twin coupler link, a lever pivoted to the draw-head, a pitman pivotally securing the same to the link, and a link lifting pitman also secured to the lever and adapted to lift the hooked end of the engaging link, substantially as set forth.

8. In a car coupler, the combination with a draw-head, of a lever pivoted thereto, a link lifting pitman pivoted to the lever, and a spring-actuated pin carried on the pitman, substantially as and for the purpose specified.

9. In a car coupler, the combination with a draw-head, of a pivoted link, a lever for operating the same, a vertically movable pin adapted to separate the draw-head into two chambers, and mechanism for adjusting the pin, substantially as and for the purpose specified.

In testimony of all which I have hereunto subscribed my name.

ADONIRAM JUDSON WALKER.

Witnesses:

W. B. CLARK,
JOHN V. BURR.