

(No Model.)

2 Sheets—Sheet 1.

G. W. CISCO.

CAR COUPLING.

No. 388,633.

Patented Aug. 28, 1888.

Fig. 1.

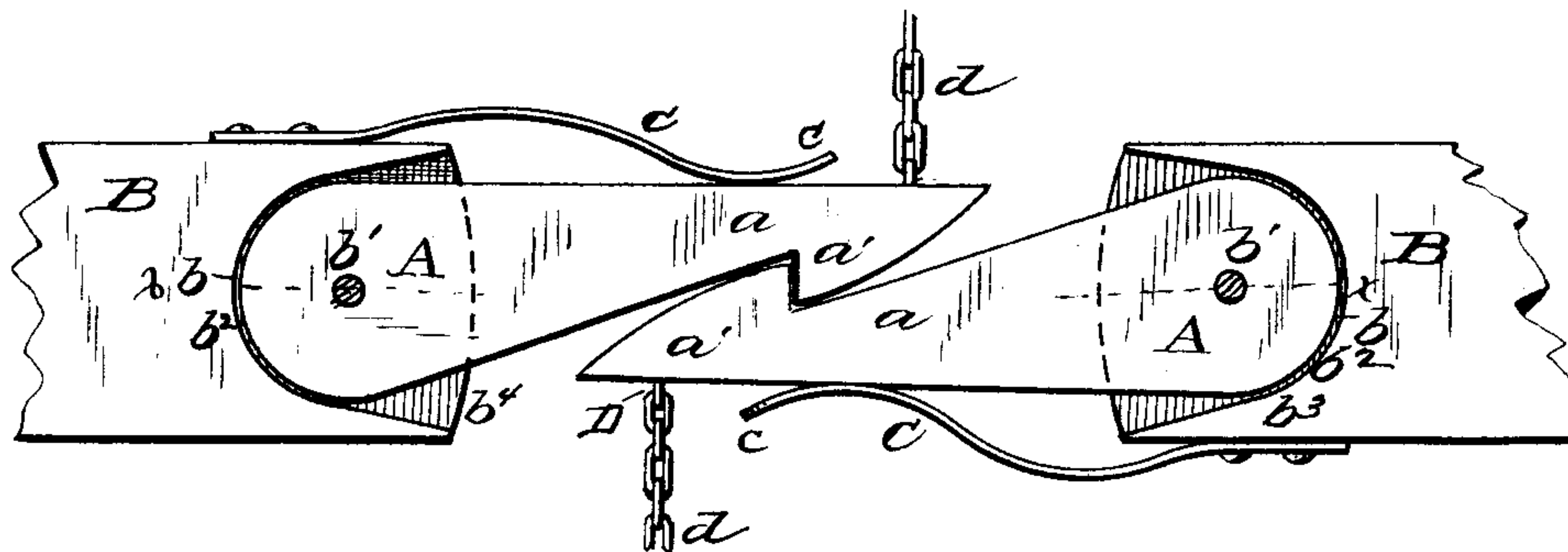
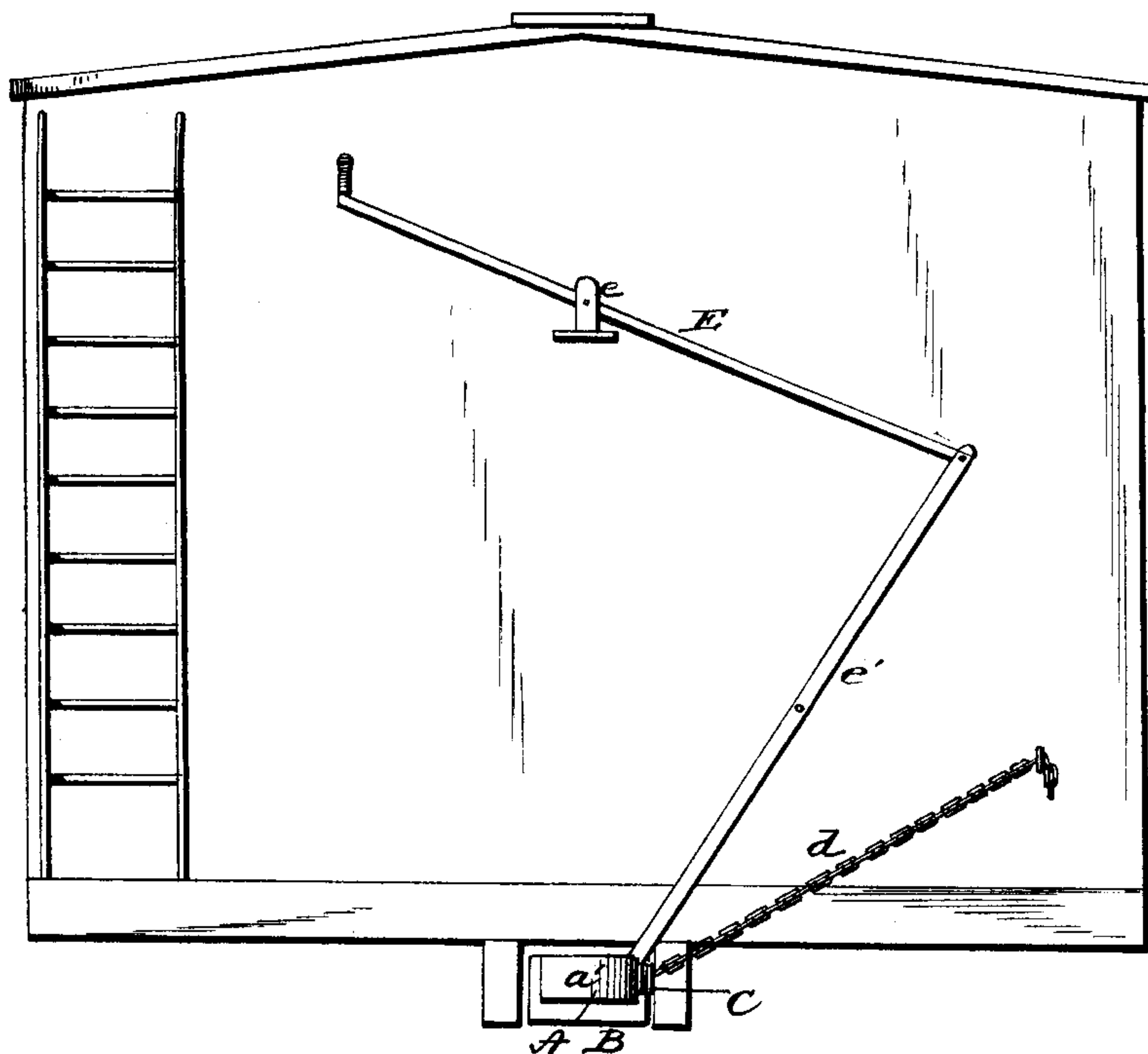


Fig. 2.



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Fig. 3.

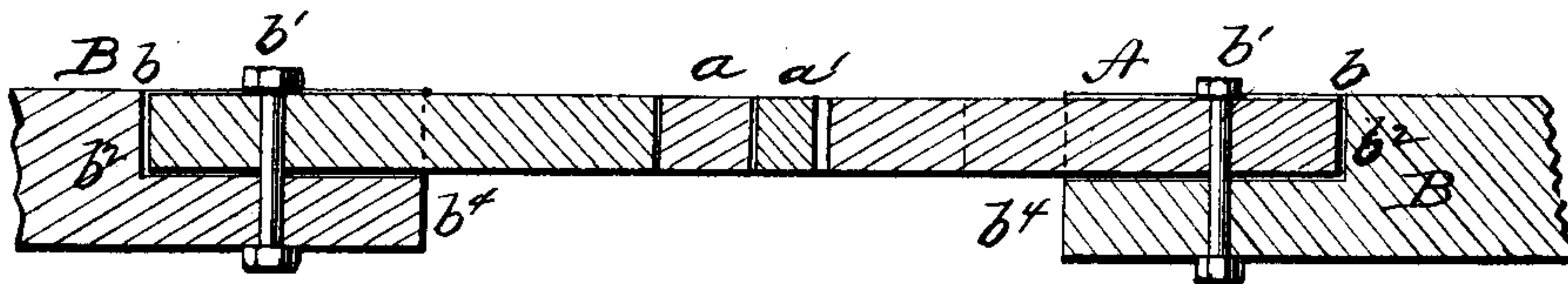
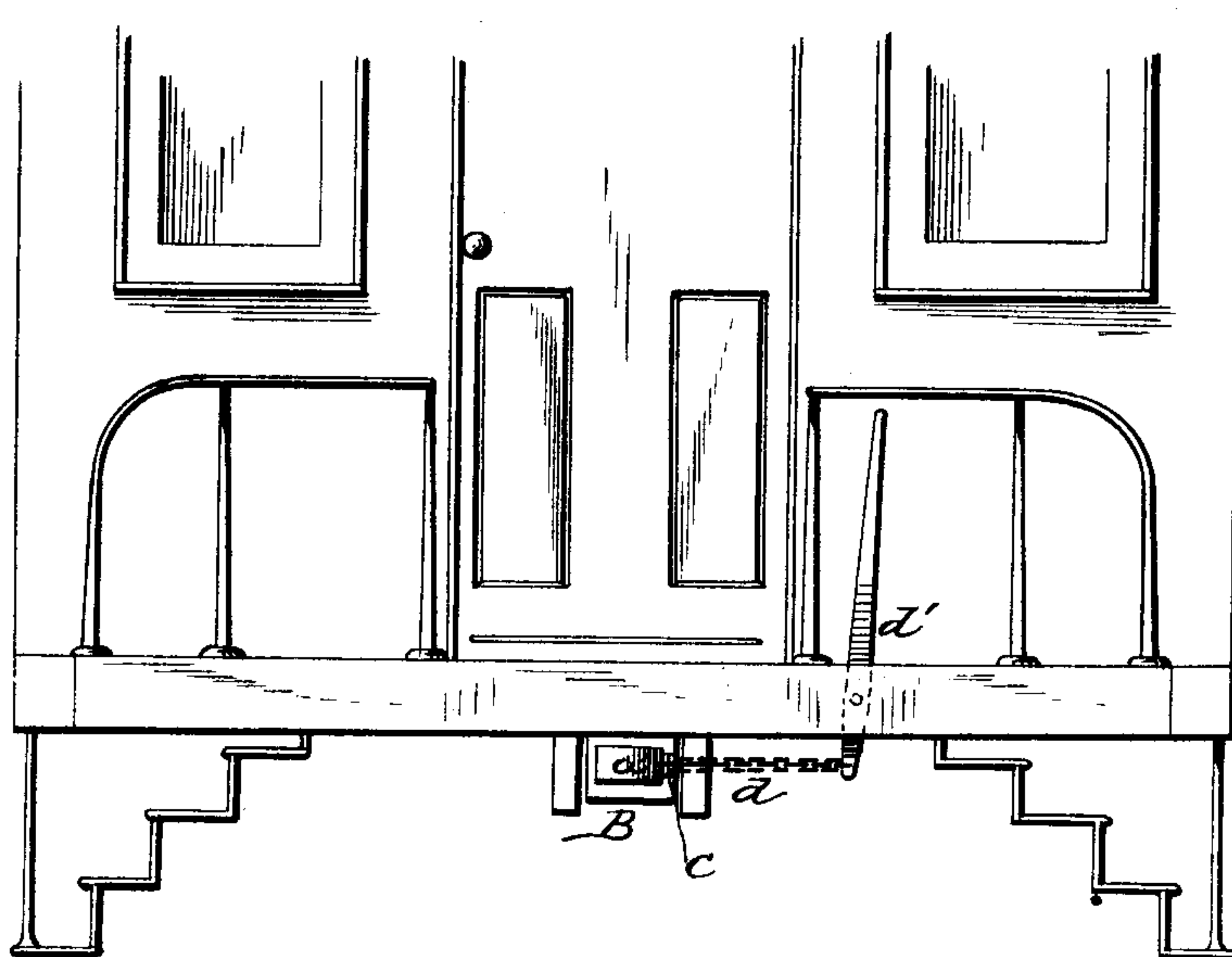


Fig. 4.



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UNITED STATES PATENT OFFICE.

GEORGE WASHINGTON CISCO, OF MONTVALE, NEW JERSEY.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 388,633, dated August 28, 1888.

Application filed April 11, 1888. Serial No. 270,306. (No model.)

To all whom it may concern:

Be it known that I, GEORGE WASHINGTON CISCO, a citizen of the United States, and a resident of Montvale, in the county of Bergen and State of New Jersey, have invented certain new and useful Improvements in Automatic Car-Couplers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to automatic car-couplers.

The object is to produce a coupler which shall be automatic in operation, which may be uncoupled from either side of the car, which will obviate the necessity of the brakeman standing between the car when it is necessary either to uncouple or couple a car, and which shall be simple of construction, efficient and durable in use, and comparatively inexpensive of production.

With these objects in view the invention consists in a coupler the heads of which work in recesses formed in the ends of the draw-bars, and are so adjusted as to permit of lateral movement without the danger of throwing the coupler-heads out of contact with one another; furthermore, in the combination, with the said coupler-heads, of springs operating to cause the coupler-heads to remain in the position requisite for them to perform their necessary function, and, finally, in the various novel details of construction, as hereinafter fully set forth.

In the accompanying drawings, forming part of this specification, and in which like letters of reference indicate corresponding parts, Figure 1 is a top plan view of the coupler-heads, showing them seated in the recesses in the draw-bars and the springs for operating the same. Fig. 2 is an end elevation of a baggage-car, showing the mechanism for uncoupling a car and a chain for keeping the couplers apart. Fig. 4 is an end elevation of a passenger-car, showing the same mechanism, though somewhat different from that employed on a baggage-car; and Fig. 3 is a sectional view of the coupler-heads, showing the recessed draw-bars, the section being taken on the line $x x$ of Fig. 1.

Referring to the drawings, A designates the

coupler-heads, which are of ordinary construction and connect automatically as the respective point-headed hooks a come in collision. A sufficient amount of play is allowed to the hooks to allow the wedge-shaped surfaces a' to slip past each other.

B designates the draw-bars, which are secured in a suitable manner to the car-frame. At one end the draw-bar is provided with a recess, b , in which the coupler-head is pivoted by means of a bolt, b' . This recess is of sufficient depth to allow the coupler-head to be seated far enough to bring its upper face flush with the surface of the draw-bar, while the end portion, b^2 , rests against the shoulder b^3 , formed by the recess in the same. This serves to reduce the force of the shock incident to the coupling of the cars, thereby preventing injury to the bolt b' . The under portion of the draw-bar extends out some distance from the recess, and forms an arm, b^4 , which serves as a support for the coupler-head, and also prevents uneven wear of the bolt on which it is pivoted.

C designates the springs, which are designed to keep the coupler-heads in engagement when once connected. These are made bow-shaped, with the bulged portion outward, in order that the coupler-head may be moved to one side without striking against the spring. The spring is bent up at one end, as shown at c , so as to reduce friction at that point as much as possible, and also to render the movement of the coupler-head more easy.

D designates hooks or screw-eyes, which are secured to the coupler-head at a point preferably near the point-headed hooks. To these are attached chains d , which are connected with levers d' on the platform of the car, and are used to draw the coupler-heads to one side when it is desirable to uncouple a car. The lever just referred to is designed to be used on a passenger-car; but in the case of a baggage or freight car, where the coupling has to be done from the top or on one side, another form of lever has to be used. This is illustrated in Fig. 2, and is constructed as follows:

E designates a rod which works in a guide, e , secured to the end of the car. This rod extends down to and connects with one end of another rod, e' , the other end of which connects with the chain, before referred to. It will be seen readily that the brakeman has

only to pull the rod to one side to throw the coupler-heads out of contact with each other, or to push it in the opposite direction to cause the same to lock.

- 5 When the car is coupled from the side, the chain is used instead of the bar, and should the brakeman desire to keep the coupler open he can do so by simply passing one of the links of the chain over a hook on the end of the car, 10 thereby preventing the coupler from locking.

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

- 15 In a car-coupling, the combination, with the draw-bar having a recess formed near one end, the rear portion of the said recess forming a shoulder, and the under portion of the said

draw-bar extending out and forming an arm, of the coupler-heads fitting in the said recess and resting against the shoulder formed in the 20 recess and moving upon and supported by the arm formed by the elongated portion of the draw-bar, whereby, when the cars are coupled, all jar will be taken from the coupler-head, and in turning a curve the coupler-head will be 25 supported by the arm on the draw-bar, substantially as and for the purpose specified.

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

GEORGE WASHINGTON CISCO.

Witnesses:

H. F. BAUER,

JOSEPH JAY CISCO.