

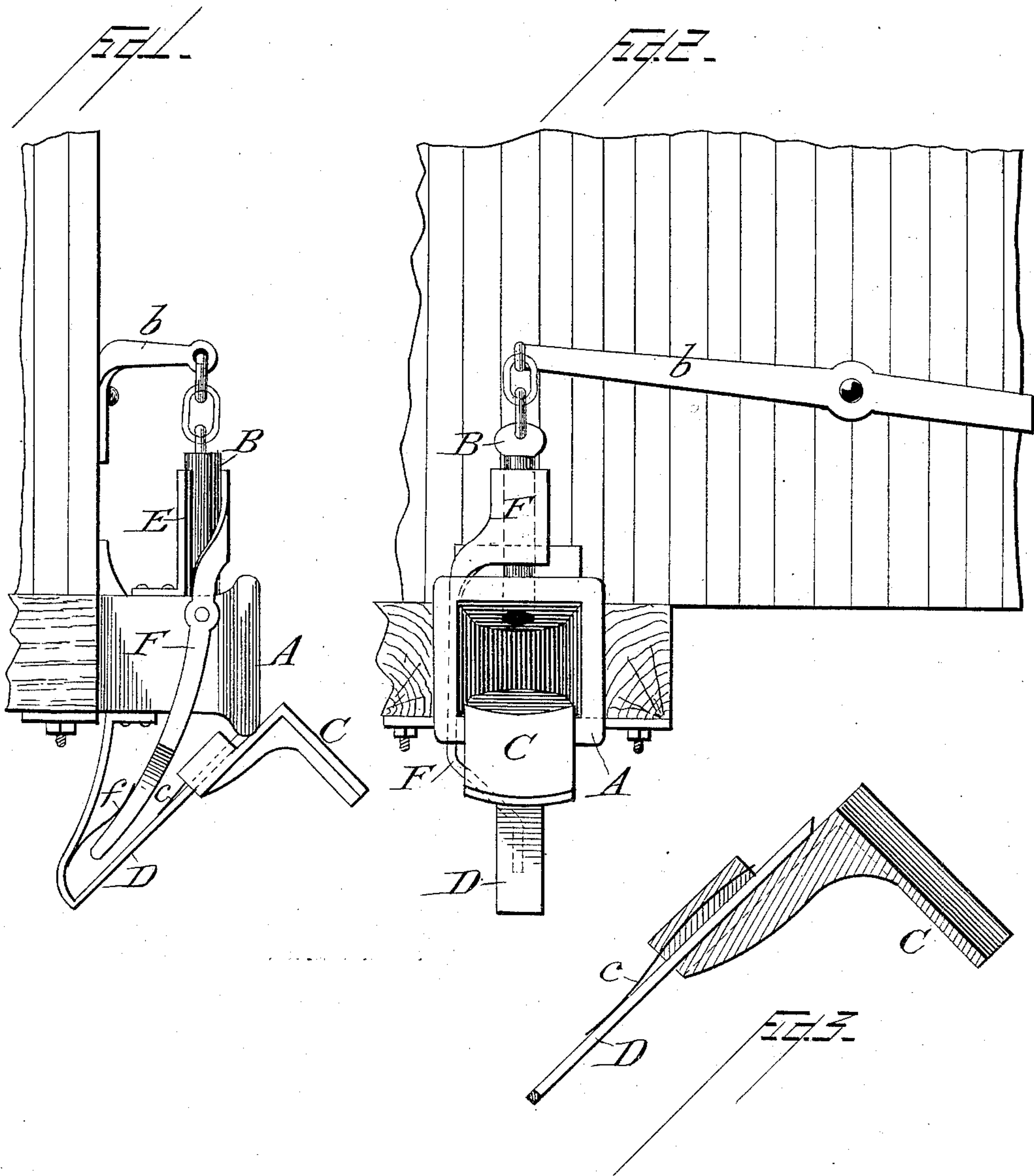
(No Model.)

M. W. BROWN.

CAR COUPLING.

No. 385,658.

Patented July 3, 1888.



Attest:

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UNITED STATES PATENT OFFICE.

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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 385,658, dated July 3, 1888.

Application filed February 25, 1888. Serial No. 265,331. (No model.)

To all whom it may concern:

Be it known that I, MINOR W. BROWN, a citizen of the United States, residing at Gainesville, in the county of Hall and State of Georgia, have invented a new and useful Car-Coupling; 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to car-couplings, the object being to furnish a car-coupling that shall be simple in detail and automatic and reliable in its operation.

It consists of means for guiding the link to enter the draw-head and of supporting the pin and of automatically releasing it on the link arriving at the proper position.

In the accompanying drawings, Figure 1 is a side elevation showing the link-deflector in position to enter the link, and also shows the pin held in suspension ready to drop on the entry of the link. Fig. 2 shows the device attached to the end of a car, the several parts being in the same relative position as in Fig. 1. Fig. 3 is a central section through the link-deflector, showing more clearly the concavity of its face.

In the figures like reference-marks indicate corresponding parts in the several views.

A is the draw-head, and B the pin, of an ordinary pin-and-link coupling.

C is the link-deflector, and D is its guide.

E is the bracket for contact with the pin when raised, and F is the lever which holds said pin in contact.

The draw-head A and the pin B are such as are used in the ordinary pin-and-link coupling. On the bottom of the draw-head A is attached the guide D, of suitable form. On the front half of the guide D slides the deflector C. On the side of the guide D near the top is a flat spring, *c*, for the purpose of holding the deflector C at the top of said guide, when so placed, until the approaching draw-head shall strike it, when it will descend thereon. This deflector is concaved on its face

to guide the link up its center, and has a slot attachment to the guide D, as shown. On top of the draw-head A and near the pin-hole in the same is secured the pocket E, which nearly conforms to the shape of the pin and extends upwardly for a sufficient distance to keep the pin in an upright position when said pin is nearly withdrawn from the hole. Pivoted on the side of the draw-head is the lever F, which is bent from the side across the center of the draw-head in such a manner that it will when pressed against the pin hold said pin against the bracket E and by frictional contact hold it in suspension. This lever F is also bent under the draw-head to the center and thence downwardly in such a direction and in such shape as will cause the deflector to come in contact with it when it is forced by the approaching draw-head to slide down the guide D. Owing to the inclination of the lower end of this lever to the guide D the deflector C will force the lever back against the pressure of the spring *f*, and in this way release the pin and allow it to drop. The pin is raised by means of the lever G, which is connected to the pin by the chain *g*.

The operation of this device is as follows: To couple two cars the pin is raised by means of the lever G, after which the deflector is raised to the point, as shown in Fig. 1, which releases the lever F and allows it to clamp the pin firmly between its upper arm and the bracket E, the deflector C being held in its position by the spring *c*. As the opposing draw-head approaches, the free end of the link will strike the deflector and be thereby raised and guided into the draw-head. The opposing draw-head will then strike the deflector and force it from its seat on the spring until it will fall by gravity. As it descends it strikes the lower arm of the lever F, and, owing to the inclination of said lever to the guide D, it will depress the lever against the spring *f*, and thus release the pin, which, dropping into its place, completes the operation.

The upper corner of the deflector may be used as a support for the link when the link is in its draw-head, or a deflector, as hereinbefore set forth, when the link is in the opposite draw-head.

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

1. In a car-coupling, as a means of suspending the pin, the bracket E, the lever F, pivoted to the draw-head, and the spring *f*, substantially as shown and described.

2. In a car-coupling, the deflector C, the spring *c*, and the guide D, substantially as

shown and described, and for the purpose so specified.

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

MINOR W. BROWN.

Witnesses:

W. A. BROWN,

Z. T. CASTLEBURY.