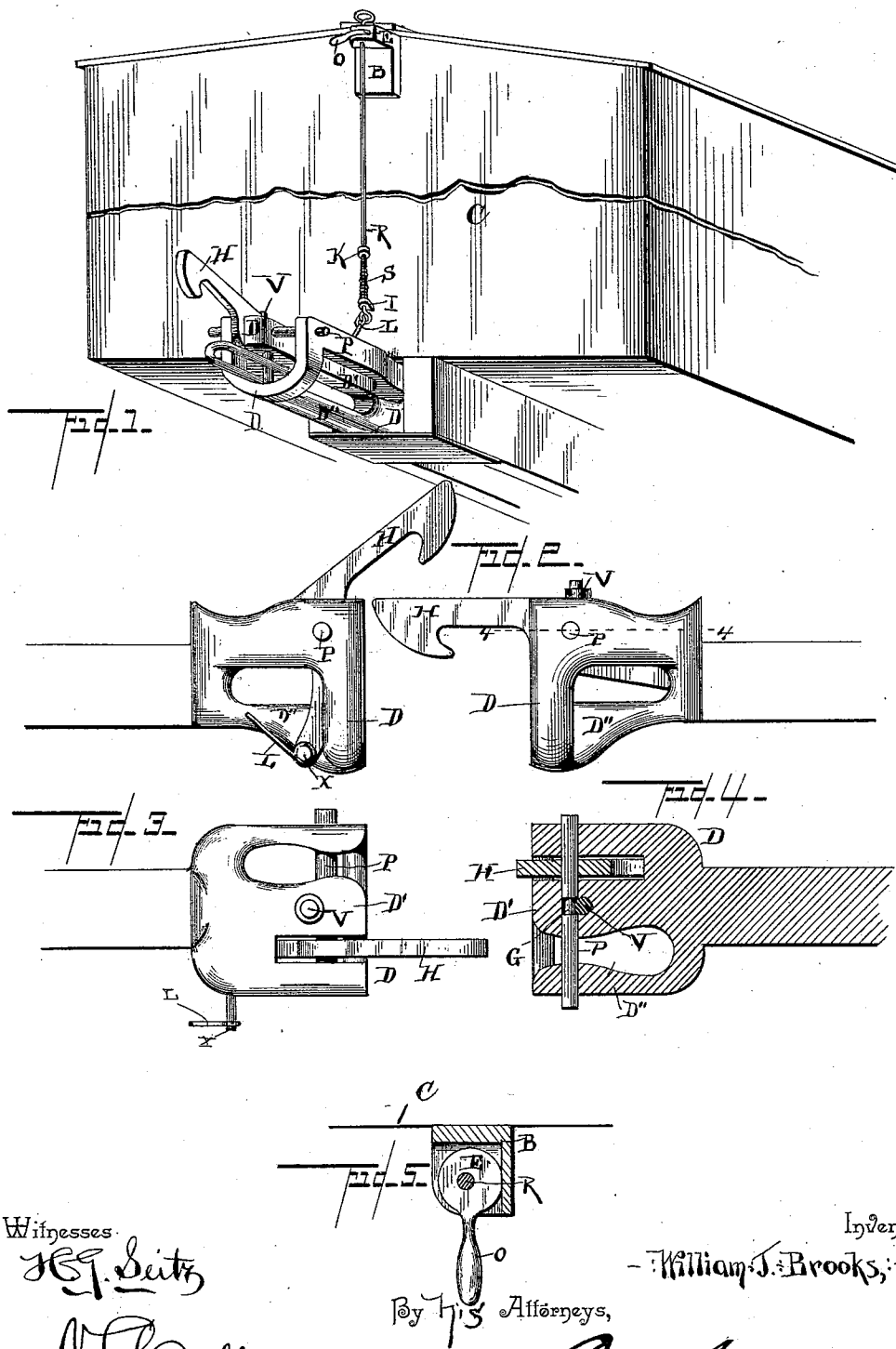


(No Model.)

W. J. BROOKS.
CAR COUPLING.

No. 465,154.

Patented Dec. 15, 1891.



Witnesses

H. J. Lutz

A. J. Collamer

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UNITED STATES PATENT OFFICE.

WILLIAM J. BROOKS, OF ONEONTA, ALABAMA, ASSIGNOR OF ONE-HALF TO
WILLIAM R. MORRIS AND RUFUS A. INGRAM, OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 465,154, dated December 15, 1891.

Application filed July 27, 1891. Serial No. 400,779. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. BROOKS, a citizen of the United States, residing at Oneonta, in the county of Blount and State of Alabama, have invented a new and useful Car-Coupler, of which the following is a specification.

This invention relates to car-couplings of that class known as "hook-and-catch," and the object of the same is to effect certain improvements therein, and more especially in the manner of uncoupling.

To this end the invention consists in the construction hereinafter more fully described and claimed, and as illustrated on the sheet of drawings, wherein—

Figure 1 is a perspective view of the end of a car with my improved car-coupling applied, being taken slightly from the under side. Fig. 2 is a side elevation of two draw-heads uncoupled, the hook in the left draw-head being raised. Fig. 3 is a plan view. Fig. 4 is a transverse horizontal section on the line 4 4 of Fig. 2, being taken through the center of the horizontal pin or pivot. Fig. 5 is a horizontal section through the eccentric catch.

Referring to the said drawings, the letter C designates the car, beneath which is suitably mounted the draw-head D, which is a skeleton frame of the shape shown in the drawings—that is to say, the mouth of the draw-head is U-shaped, the arms of the U connecting with the arms of another U, which stands horizontal, and whose rear end connects with the draw-bar. A lug projects forwardly at the center of the horizontal U and forms a large block D', and an arm D'' projects forwardly from the draw-bar and is joined to the center of the vertical U, all these parts being preferably of malleable castings and in a single piece.

P is a pivot rod or bar, which passes horizontally through the draw-head and through a hole in the block D', and at the center of this rod it has a groove G, which stands within the block.

V is the usual coupling-pin, which passes vertically through the block D' and through the arm D'', the body of this pin engaging the groove in the pivot-pin and preventing

the transverse dislocation of the pivot-rod. When this draw-head is to be coupled to a car having the ordinary pin-and-link coupling, the link passes under the block D' and is engaged by the pin V in a manner which will be clear.

The letter H designates a hook, which is pivotally mounted on the rod P at one side of the block D', the rear end of this hook being provided with a lateral extension X, and when two draw-heads of this character come together the hook of each rides over the unoccupied part of the rod P in the other draw-head and automatically engages the same to couple the cars. The horizontal U and this side of the block D' are scalloped out, so as to permit the front end of the hook of the other draw-head to have a certain lateral play therein as will be necessary when the train is rounding curves.

The letter R designates a rod sliding through an eye I in the end of the car and connected at its lower end by a link L with the lateral extension of the hook, this rod being normally raised by a spring S on the rod between the eye I and a collar K fast on the rod above the eye. The said rod extends through a bracket B at the top of the car and has an operating-handle O at its upper end, and mounted on the rod within the bracket B is the eccentric head E of a catch-lever, as best seen in Fig. 5.

The coupling of the cars is automatic, as will be clear, and they will couple if their draw-heads stand at considerably-different heights.

To uncouple the cars a brakeman on the top of the car (or on the platform, if the bracket B be mounted thereon, as in the case of a passenger-car) bears down on the operating-handle O, whereby the rear end of the hook is depressed and its front end raised out of engagement with the rod P of the other draw-head. Obviously the rod R can be locked in either elevated or lowered position by moving the handle of the catch E in a proper direction to throw the larger side of the eccentric head against the bracket B, as seen in dotted lines in Fig. 5.

This device is simple in its construction and easy of operation.

Considerable change in the details may be

made without departing from the spirit of my invention, and additions may also be made thereto, such as means for operating the hook from the sides of the car. The hook H and
5 rod P can be removed for repairs by simply lifting out the pin V.

What is claimed as new is—

10 In a car-coupling, the combination, with the draw-head and the hook pivoted between its ends therein and having a lateral extension at its rear end, of a rod connected to said extension, a bracket on the end of the car through which said rod passes, a spring for

normally raising said rod, and a catch comprising a handle, and a head which is eccentrically mounted on the rod within said
15 bracket, as and for the purpose hereinbefore set forth.

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

WILLIAM J. BROOKS.

Witnesses:

R. F. ROBINETT,
JAMES E. ELLIS.