(No Model.)

I. L. & C. F. R. HARRY.

CAR COUPLING.

No. 418,616. Patented Dec. 31, 1889.

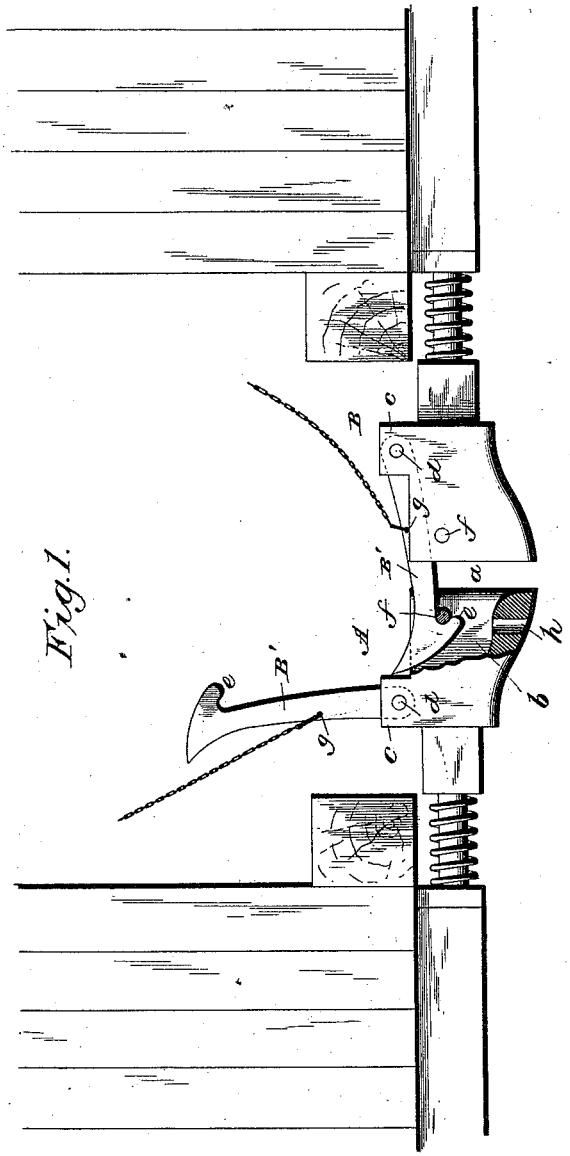

Fig. 1.

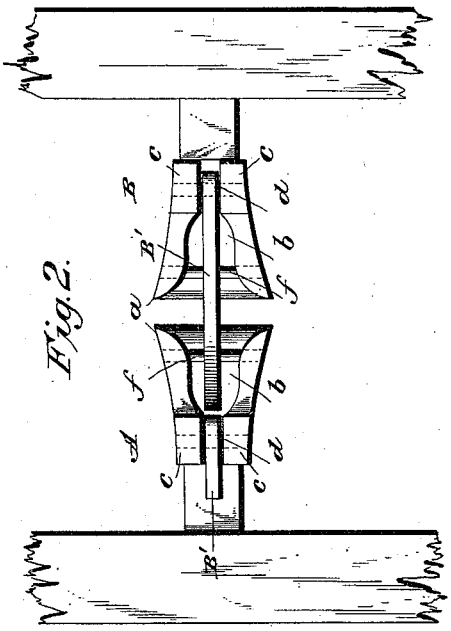

Fig. 2.

Isabella L. Harry.
—and—
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Witnesses
L. S. Elliott.
E. M. Johnson.

By his Attorneys

UNITED STATES PATENT OFFICE.

ISABELLA L. HARRY AND CHARLES F. R. HARRY, OF WEST SALEM, OHIO

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 418,616, dated December 31, 1889.

Application filed September 12, 1889. Serial No. 323,746. (No model.)

To all whom it may concern:

Be it known that we, ISABELLA L. HARRY and CHARLES F. R. HARRY, citizens of the United States of America, residing at West Salem, in the county of Wayne and State of Ohio, have invented certain new and useful Improvements in Car-Couplings; and we 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 of reference marked thereon, which form a part of this specification.

Our invention has reference to car-couplings; and it consists in the improved construction hereinafter described and set forth, whereby a simple and efficient arrangement is provided whereby cars may be readily coupled and uncoupled.

In the accompanying drawings, forming part of this specification, Figure 1 is a side view, partly broken away, showing a car-coupling embodying our improvements; and Fig. 2 is a plan view.

The two draw-heads are designated by the letters A B, and each has a head portion proper *a*, enlarged, as shown, and each recessed to present the coupling-chamber *b*, which is open at its top. Each head portion *a* is provided on its upper side, at the rear of the coupling-chamber, with a pair of ears *c*, through which passes a pin *d*, upon which is pivotally mounted a hook-shaped connecting-link B′, the free portion of which extends longitudinally through the coupling-chamber and terminates in a hook *e*. The links of the respective heads are pivoted in longitudinal line with each other, as shown in Fig. 2, and are each designed to have their hook extremities engage a pin *f*, located transversely in the chamber of the other head, each of said pins *f* also serving as a support to maintain the link of its respective head in proper longitudinal position. The outer ends of the links are inclined, so that as said draw-heads approach each other the inclined faces will contact with the opposite pin *f*, and thereby be automatically raised to hook over the same. Each link is provided with a perforation *g* to engage the hook on the end of a chain led to the top of the car or to the brake-shafts to enable said links to be lifted out of engagement and disconnected. The bottom of each chamber is provided with a perforation *h*, out of vertical alignment with the other parts, so that a pin may be dropped therethrough when one of the draw-heads is to be coupled with a draw-head using the ordinary open link and pin.

By having the top of the draw-head open it will be understood that the parts are much simplified and the engaging-hooks free and unobstructed in their movements. The pivot-connections are such that they may be readily removed, so that the hooks can be readily detached in the event of coupling with an open-link device. It will of course be comprehended that only one link is in an engaged position at one time, the other being thrown in an inoperative position, this arrangement answering all requirements and enabling one man to disengage the connection.

Another important feature connected with our improvement consists in the fact that the link of each coupling is pivoted at the rear of the coupling-chamber and at the top of the draw-head, the forward transverse rod being located in a much lower plane. By this arrangement the front deflecting-face of the link can be formed at a greater pitch, and the engaging-recess greatly reduced, and yet serve to effectually couple the parts. Moreover, the tendency of the link will at all times be to occupy a downwardly-extended position, the enlarged head acting to cause the link to operate by gravity without the necessity of having the link curved or bent to secure compactness, as in prior constructions.

We claim—

In a car-coupling, the combination, with a draw-head having an open top and coupling-chamber and provided with parallel ears *c c* on its upper side at the rear of the coupling-chamber, of a longitudinal link extending beyond said coupling-chamber and terminating in a hook, the other end of said link being snugly pivoted at the rear of the coupling-chamber between said parallel ears *c c*, a transverse pin secured within the coupling-chamber in a lower plane than the link-pivot

to support said link and serving to engage the corresponding pin of a similar draw-head, together with said similar draw-head having its corresponding hooked link in the same longitudinal plane, and devices for independently operating said links, substantially as set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

ISABELLA L. HARRY.
CHARLES F. R. HARRY.

Witnesses:
H. L. WATSON,
R. E. BAKER.