

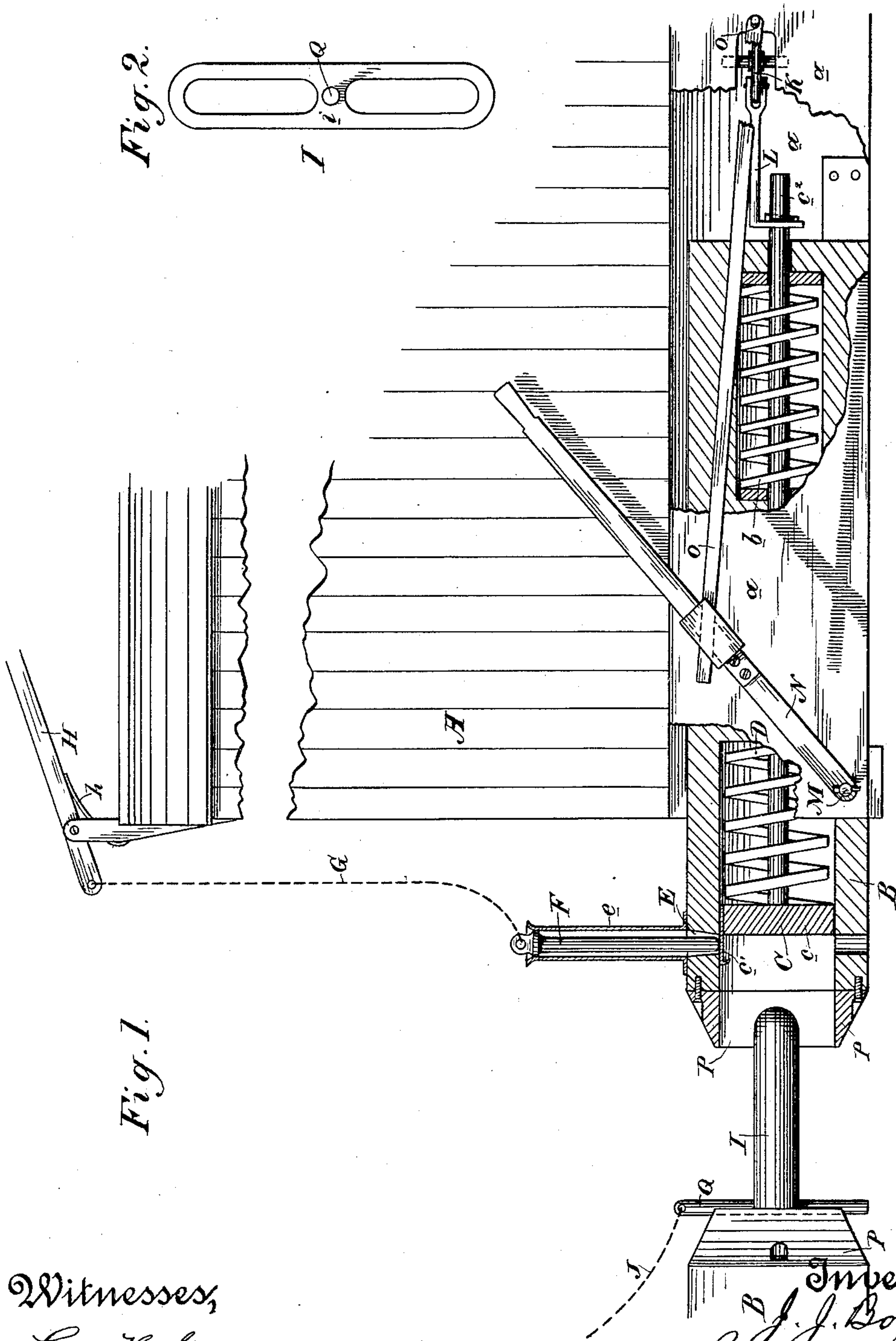
(No Model.)

J. J. BOGARD.

CAR COUPLING.

No. 353,118.

Patented Nov. 23, 1886.



Witnesses,
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UNITED STATES PATENT OFFICE.

JOHN JASPER BOGARD, OF TEHAMA, CALIFORNIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 353,118, dated November 23, 1836.

Application filed April 15, 1886. Serial No. 199,024. (No model.)

To all whom it may concern:

Be it known that I, JOHN JASPER BOGARD, of Tehama, Tehama county, State of California, have invented an Improvement in Car-Couplings; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to that class of car-couplings in which a latch is held forward under the influence of a spring and sustains the pin, which is dropped by the contact of the entering link with the latch, whereby the latter is forced back, relieving the pin, which drops through the link; and my invention consists in the arrangement of the latch with respect to the draw-head, the means by which it may be retracted from the side of the car when it is wished to uncouple the car from below, and the means by which the device is uncoupled from the top of the car, together with details of construction relating to the link and its attachment to the car, and a removable shoe for the draw-head, all of which I shall hereinafter more fully describe.

The object of my invention is to provide an automatic car-coupling which can be uncoupled without the necessity of passing between the cars, whereby the danger to life and limb is avoided.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a side elevation of a car and the draw-head frame under it, the latter being broken away to show the coupling, which is in longitudinal section. Fig. 2 is a plan view of the coupling-link I.

A is the car, under which is secured in suitable manner in frame *a* the draw-head B, which is provided with a spring-buffer, *b*, at its rear. Within the draw-head is the latch C, consisting of a suitable head, *c*, and a top flange, *c'*. The latch has a rearwardly-extending stem or shank, *c''*, which passes back through the entire length of the draw-head and has its rear end projecting therefrom. A spring, D, within the draw-head bears against the head *c* of the latch and keeps it forward to position, so that its top flange, *c'*, lies directly under the pin-hole E, said pin-hole having an upwardly-extending guide-tube, *e*.

F is the pin which fits within the tube *e* and rests upon the flange *c'* of the latch. The pin is secured by a chain, G, to the lever H,

pivoted upon the top of the car, and having a spring, *h*.

I is a link, which is made double—that is to say, with two apertures divided by a central transverse bar, *i*. Through the bar passes a vertical pin, Q, which serves two objects—namely, as a stop for limiting the insertion of the link in the draw-head and as a means for readily securing it to the car, as by the chain J, so that it cannot be lost.

Through the side of the frame *a*, in which the draw-head is mounted, is pivoted a lever, K. To the rear end of the stem or shank *c''* of the latch is keyed the link L, the other end of which is pivoted to the inner end of the lever K.

Pivoted upon a shaft, M, secured to the frame *a* and projecting sidewise, is a lever, N, upon which is slotted the forward end of a connecting-rod, O, the rear end of which is pivoted to the outer end of the lever K. The lever extends upwardly beside the car, so that it can be operated without having to go between the cars.

By the constant use and contact of the opposing draw-heads their faces are frequently marred and injured to such an extent in time that the whole draw-head becomes worthless. To obviate this, I bolt to the face of each draw-head the removable shoe P, which has the proper bevel, and may be attached to and detached from the draw-head whenever desired. In this way when the shoe becomes worn it can be taken off and another put in its place, thus saving the main body of the draw-head.

The operation of the coupling is as follows: When the two cars come together, the link I, which is supposed to be secured in the draw-head of one of the cars, enters the draw-head of the other, and, coming in contact with the latch C therein, drives said latch back, so that the pin F is relieved and drops down through the link. When it is desired to uncouple from the top of the car, the lever H is pressed down, thus drawing up the pin. There is enough power in using this lever to accomplish this result, even against the spring-latch which binds the link against the pin; but when the brakeman is on the ground and desires to uncouple from the side, to avoid the trouble of mounting the car, he presses forward the lever N, and this, through the rod O, the lever

K, and the link L, draws back the shank or stem c^2 of the latch C, whereby the pin is relieved and may be drawn out by hand. The object of the cross-pin Q in the center of the link is to keep said link from entering the draw-head too far, and this is accomplished by the pin coming in contact with the face of the draw-head.

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

1. In a car-coupling, the draw-head B and the vertically-moving pin F, in combination with the spring-actuated latch C within the draw-head, and having a flange, c' , for supporting said pin, the double coupling-link having a cross-pin for limiting the insertion of the link within the draw-head, and means for attaching the pin to the car, substantially as herein described.

2. In a car-coupling, the draw head B and

the vertically-moving pin F, in combination with the coupling-link I, latch C, supporting the pin and releasing it by the action of the entering link, and having a rearwardly-extending stem or shank, c^2 , passing through the draw-head and projecting at its rear end, the spring D within the draw-head, by which the latch is held forward, the pivoted lever N, the pivoted lever K, the connecting-rod O between the levers, and the link L, connecting the lever K with the rear end of the latch-stem c^2 , whereby the latch is drawn back to uncouple the cars, substantially as herein described.

In witness whereof I have hereunto set my hand.

JOHN JASPER BOGARD.

Witnesses:

THOS. F. BUTLER,
EDW. TESREAU.