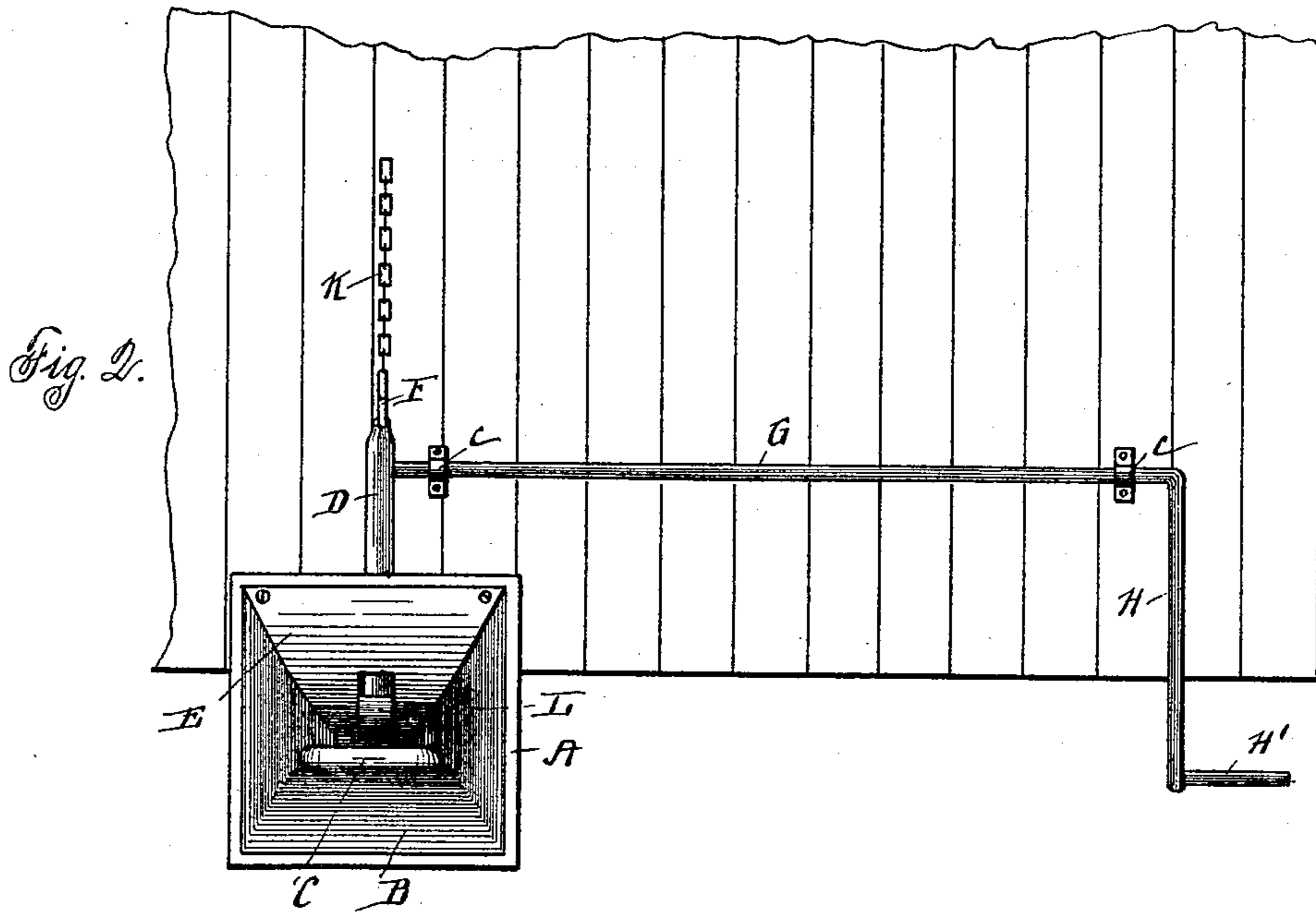
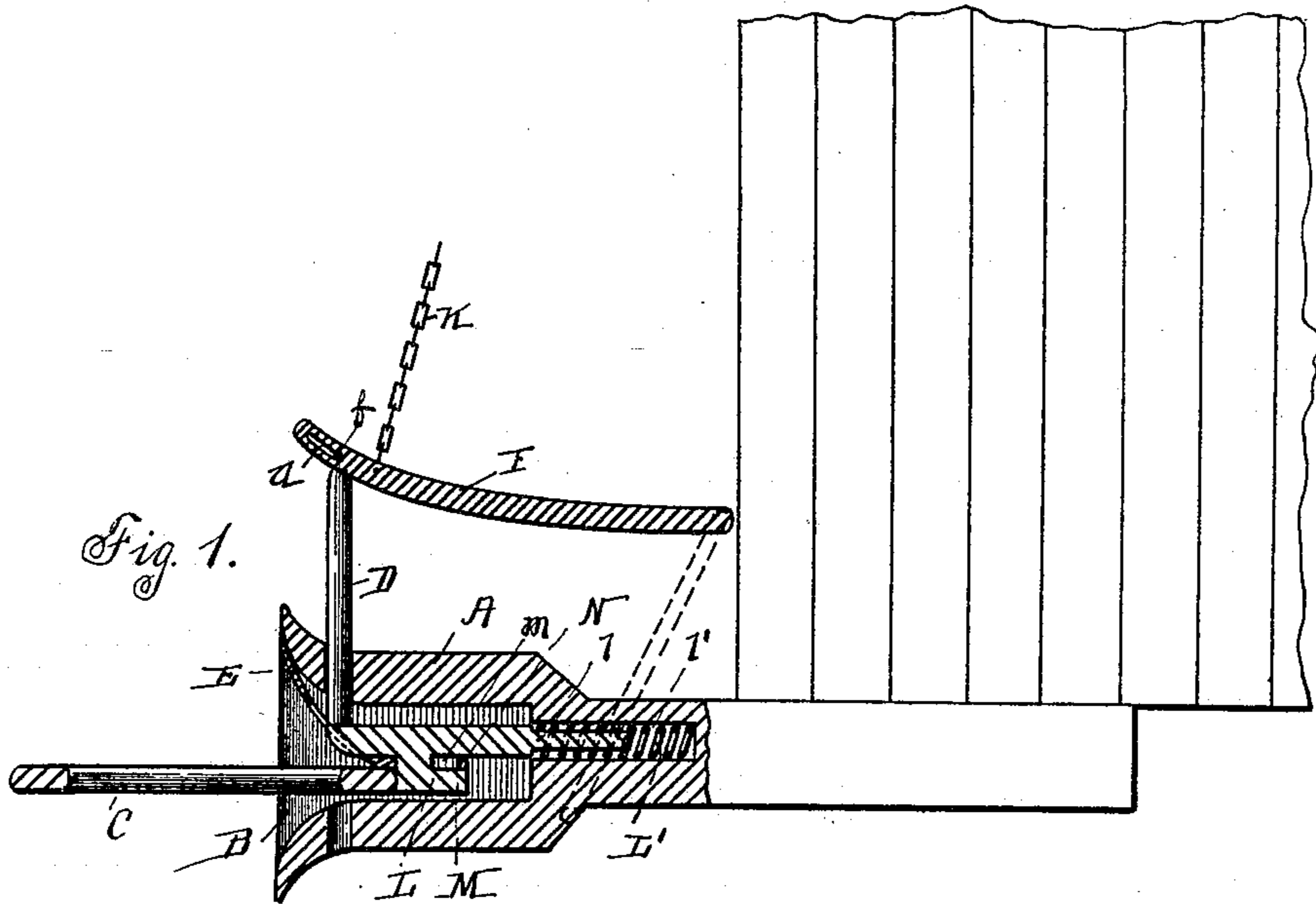


(No Model.)

S. P. NELSON.
CAR COUPLING.

No. 520,376.

Patented May 22, 1894.



WITNESSES

Geo. M. Anderson
Phil. Massi.

INVENTOR

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UNITED STATES PATENT OFFICE.

SWEN P. NELSON, OF OMAHA, NEBRASKA, ASSIGNOR TO THE NELSON CAR COUPLING COMPANY, OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 520,376, dated May 22, 1894.

Application filed October 7, 1893. Serial No. 487,443. (No model.)

To all whom it may concern:

Be it known that I, SWEN P. NELSON, a citizen of the United States, and a resident of Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Car-Couplings; and I do 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 the letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a vertical longitudinal view of the invention and Fig. 2 is a front view.

This invention has relation to certain new and useful improvements in car couplings, and is more particularly designed as an improvement upon the coupling set forth and claimed in my former patent, No. 467,014, dated January 12, 1892, and it consists in the novel construction and combination of parts, all as hereinafter described and pointed out in the appended claims.

The first feature of the improvement consists more particularly in the combination with the coupling and uncoupling mechanisms of the means provided for raising the coupling pin from its coupling engagement with the link; and a second feature consists in the combination with the coupling and uncoupling mechanism, of a movable pin holder.

Referring to the accompanying drawings the letter A designates the drawhead, B its link-receiving chamber, C the link, and D the coupling pin.

E is the spring plate secured in the upper forward portion of the draw-head opening, and projecting downwardly and rearwardly, with an opening therein for the pin, all as in the patent above referred to.

F is a lever having a slot *a* in one end portion which loosely engages a projection *b* on the head of the pin D, said lever extending backwardly over the draw-bar. Connected to the opposite end portion of said lever is a

rock shaft G which is journaled in bearings *c, c*, affixed to the end of the car, said shaft having at its outer end cranks H, H', by means of which it may be operated from the side of the car. When said shaft is operated, its inner end acts upon the lever F, raising the forward end thereof, and thereby lifting the pin from coupling engagement with the link. Connected to the said lever F near its forward end, is a chain or cable K which extends to the top of the car and provides means for raising the pin from the roof.

Located in the rear portion of the chamber B of the draw-head A, is a reciprocating pin support and buffer block L, having a reduced portion or shank *l* which is received in a passage *l'* in the draw-bar, a spring L' being provided to normally project the forward portion into position to support the pin. The forward end of the support is arranged to engage with the pin slot in the spring E when in this position. The support is provided with an extension M on its under side, said extension being recessed at *m* to engage a guide N. As the link enters the drawhead chamber B, its inner end contacts with the forward edge of the extension M of the pin support, forcing said support backwardly against the spring L', which in a large measure takes up the shock of the concussion. As the support is forced back the pin falls through the spring E into coupling engagement with the link, said spring taking a bearing upon the inner end of the link.

The coupling is effected automatically, which, together with the uncoupling devices hereinbefore described, renders it unnecessary to enter between the cars, either in coupling or uncoupling.

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

1. In a car coupling, the combination with the draw-head, the spring plate E having the pin opening therein, the reciprocating pin-support and buffer block L having its forward end portion adapted to engage the opening in the plate E when the parts are in uncoupled positions, the spring L', the pin, the

slotted lever loosely connected to said pin, and a cranked rock shaft also connected with said lever, substantially as specified.

2. In a car coupling, the combination with
5 the draw-head A, its chamber B, the spring plate E having the pin opening therein, and the buffer and pin support, of the lever having a slot engaging the head of the pin, a crank shaft connected to said lever, and ex-
10 tending to the side of the car and means con-

nected with said lever whereby it may be operated from the roof of the car to raise said pin, substantially as specified.

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

SWEN P. NELSON.

Witnesses:

J. S. HOLLAND,
BRANTLEY EAST.