J. J. HOFFMAN & C. F. POMMER.

CAR-COUPLING.

No. 188,244. Patented March 13, 1877.

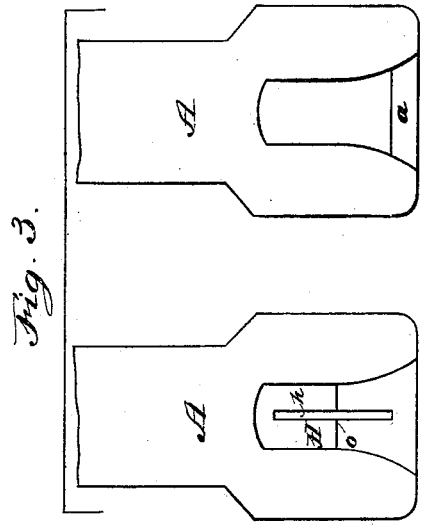

Fig. 3.

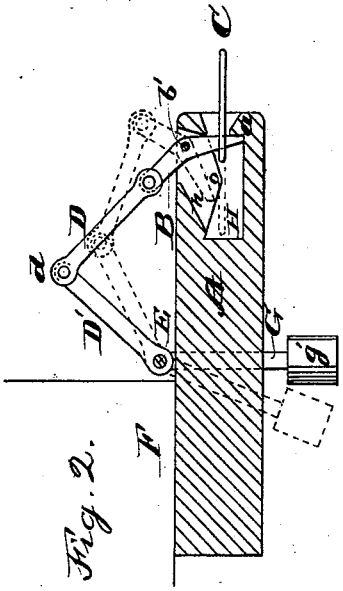

Fig. 2.

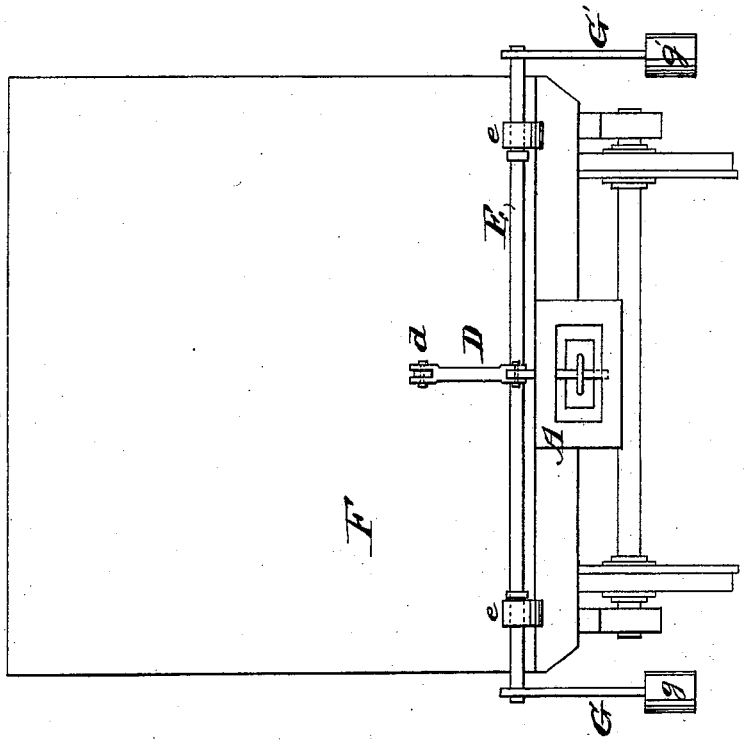

Fig. 1.

WITNESSES.

Aug. Mehr.

Paul Bakewell.

INVENTORS.

John J. Hoffman,
Charles F. Pommer,
by Chas. J. Moody,
their atty.

UNITED STATES PATENT OFFICE.

JOHN J. HOFFMAN AND CHARLES F. POMMER, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **188,244**, dated March 13, 1877; application filed November 4, 1876.

To all whom it may concern:

Be it known that we, JOHN J. HOFFMAN and CHARLES F. POMMER, residents of St. Louis, Missouri, have invented a new and useful Car-Coupling, of which the following is a full, clear, and exact description, reference being had to the annexed drawing, making part of this specification, in which—

Figure 1 is an end elevation of a car having our invention attached; Fig. 2, a longitudinal vertical section of the draw-head, showing the coupling-pin in elevation, and indicating, in dotted lines, the movement of the pin, and parts immediately therewith connected; and Fig. 3, views of the interior of the draw-head, looking, respectively, at the top and the bottom of the chamber therein.

Similar letters refer to similar parts.

The aim of the present invention is to provide a car-coupling that is self-coupling, and that can be uncoupled without having to pass between the cars.

Referring to the annexed drawing, A represents the draw-head of the coupling; B, the coupling-pin, and C the coupling-link. The pin, at a point between its ends, is pivoted in the draw-head, in the upper part of the forward end thereof, as shown at *b'*, Fig. 2. A rod, D D', jointed at *d*, is, at its outer end, pivoted to the upper end of the pin B, and, at its inner end, is fastened to another rod, E, that extends across the end of the car F, just above the draw-head, and supported so as to turn in suitable bearings *e e*. Levers G G', weighted at *g g'*, are fastened, respectively, to the ends of the rod E, and, when left to hang free, they cause the pin B and rod D D' to assume the position shown by the full lines in Fig. 2; but when the levers G G' are turned up, the pin and rod are in the position indicated by the dotted lines.

The coupling is effected automatically by the link C striking the lower end of the pin B, throwing it upward into a longitudinal slot, *h*, in the roof of the chamber H in the draw-head, and out of the way sufficiently to be passed when the pin falls back into the link and against a shoulder, *a*, at the mouth of the draw-head, locking the link. The uncoupling is effected by raising the levers G G' upward, as indicated by the dotted lines, and drawing the pin again into the slot *h*, which allows the link to be withdrawn. To avoid the liability, in uncoupling, of the link catching on the extreme end of the pin, the roof of the draw-head is depressed at *o*. This keeps the link down as the pin is raised, and thus facilitates their disengagement. As soon as the levers are released the pin drops into its original position, ready for recoupling when the link again strikes it. The operation of our invention is, therefore, partly automatic, and wholly safe, for the uncoupling can be effected from either side of the train, through either lever G or G'.

We are aware that a coupling-pin has been pivoted in a draw-head, and that the pin has been operated by a rod leading from above down to the pin. We, therefore, do not claim such features, broadly; but

What we claim is—

1. The herein-described car-coupling, consisting of the draw-head A, having a chamber, H, whose roof is slotted at *h* and depressed at *o*, pin B, link C, jointed rod D D', rod E, and weighted levers G G', combined and operating substantially as described and shown.

2. The combination of the draw-head A, pivoted pin B, rod D D', and the rod E, arranged horizontally, and extending to either side of the car, and at its ends provided with the levers G G', having the weights *g g'*, substantially as described.

JOHN JOSEPH HOFFMAN.
CHARLES FREDERICK POMMER.

Witnesses:
CHAS. D. MOODY,
PAUL BAKEWELL.