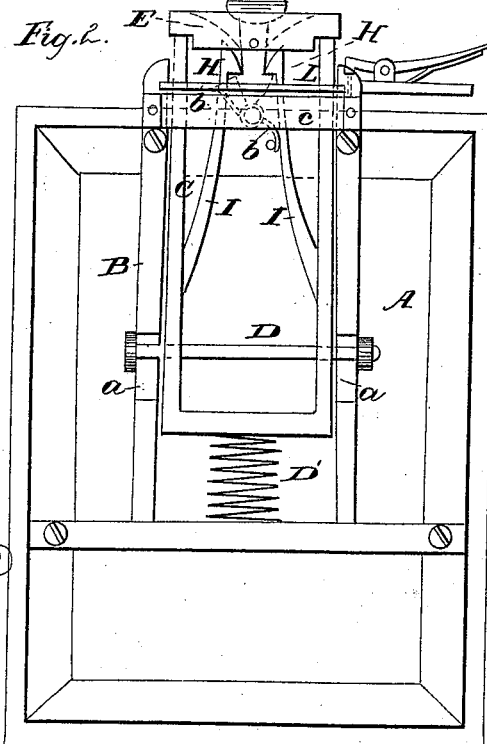
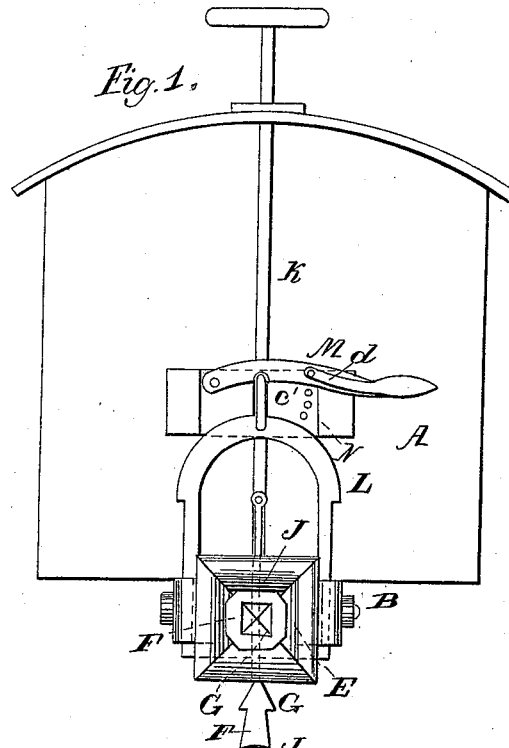


HINMAN & NEVILL.

Car Coupling.

No. 55,104.

Patented May 29, 1866.



Witnesses:

Wm. H. Huntington
Wm. H. Nevill

Inventors:

Wm. H. Hinman
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Forbitum & Co.

attys.

UNITED STATES PATENT OFFICE.

WILLIAM W. HINMAN AND WILLIAM W. NEVILL, OF JACKSONVILLE, ILL.

IMPROVED CAR-COUPLING.

Specification forming part of Letters Patent No. 55,104, dated May 29, 1866.

To all whom it may concern:

Be it known that we, WILLIAM W. HINMAN and WM. W. NEVILL, of Jacksonville, State of Illinois, have invented a new and Improved Car-Coupling; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front view of our invention; Fig. 2, an inverted plan or bottom view of the same.

Similar letters of reference indicate like parts.

This invention relates to a new and improved car-coupling of that class which are commonly called self-coupling; and it consists in a novel arrangement of parts, as hereinafter fully shown and described, whereby the cars may be readily disconnected without a person passing between them, and the draw-head rendered capable of being raised or lowered to suit the height of a draw-head of an adjoining car.

A represents a portion of a railway-car, and B is a metal frame which is firmly bolted to the under side or to the bottom thereof. The form of this frame is shown clearly in Fig. 2.

Within the frame B there is another frame, C, secured by a bolt, D, which passes through oblong slots *a* in the frame B. The frame C is allowed to work vertically on the bolt D as a center, and the oblong slots *a a* admit of the frame C being moved horizontally in the frame B, the frame C being kept thrown outward to the extent of its forward movement by means of a spiral spring, D. (Shown in Fig. 2.)

The frame C constitutes the draw-head of the device, and its front end is provided with a flaring head-piece, E, through which the shackle F passes. This shackle is provided with a spear-shaped head, G, which catches between hooks H H, at the ends of elastic plates I I, secured one to each side of the frame C, as shown clearly in Fig. 2. The elasticity of the plates I I has a tendency to keep the hooks H H engaged with the shackle F, and the latter is provided with a head, G, at each end and a central hub, J, the latter determining the distance the shackle may enter the draw-head.

K is a vertical rod which has flanges *b* projecting horizontally from it. The lower end of this rod is stepped in a cross-bar, *c*, at the under side of the frame or draw-head C, and said rod extends up through the platform of the car and up through the top of the same, if desired. By turning this rod K it will be seen that the plates I I may be distended or forced apart by the flanges *b b*, and the shackle F released, and the rod may be turned from the platform or from the top of the car. Hence the danger arising from persons passing between the platforms in order to uncouple cars is entirely avoided.

L is a vertical sliding frame which is fitted in grooves in the front part of the frame B. The frame or draw head passes through this sliding frame L, and the upper end of the latter is connected by a link, *e*, with a lever or arm, M, which is pivoted to a plate, N, secured to the outer side of the car. This lever or arm M has a pin, *d*, passing through it into any of a series of holes in the plate N, and it will be seen that by adjusting the lever or arm M the frames L and C may be raised or lowered and retained at any desired height to suit the height of a draw-head of an adjoining car, and so as to insure the two cars coupling if their platforms vary in height.

We do not claim, broadly, the spear-head shackle and the spring-hooks H H, for they have been previously used in car-couplings; but

We do claim as new and desire to secure by Letters Patent—

The frame or draw-head C, which contains the spring-hooks H H, secured within the frame B, attached to the under side of the car, substantially as shown, to admit of the vertical and horizontal movements thereof, in connection with the vertically-sliding frame L, arranged as shown, or in any equivalent way, for the purpose of adjusting the frame or draw-head C higher or lower, as may be desired.

The above specification of our invention signed by us this 13th day of November, 1865.

W. W. HINMAN.
W. W. NEVILL.

Witnesses:

C. H. PRATT,
S. MOUNT.