H. BLANCHARD, Jr.

Car Coupling.

No. 109,797. Patented Dec. 6, 1870.

Fig. 1.

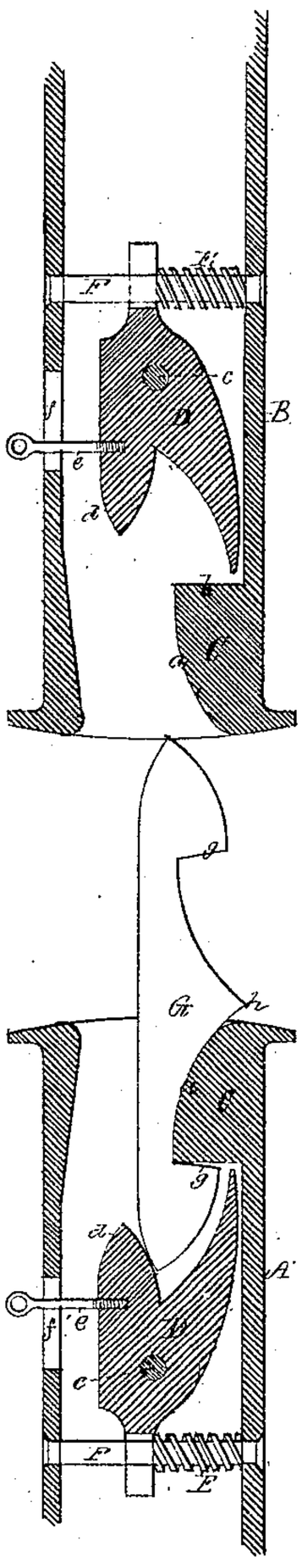


Fig. 2.

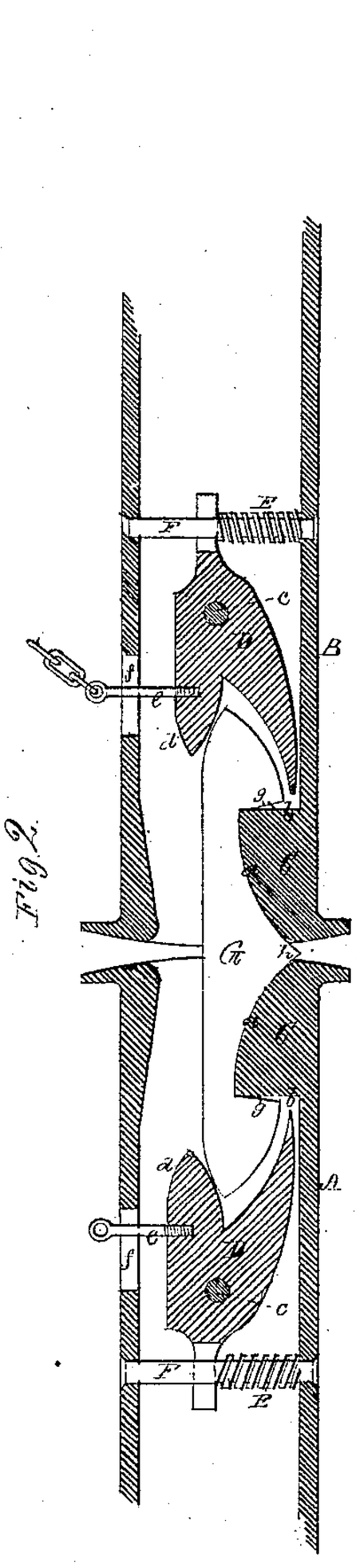
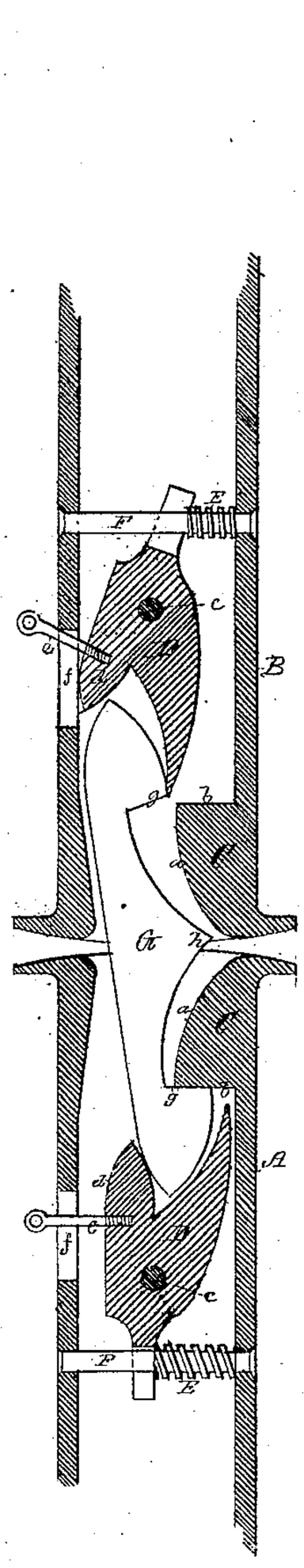


Fig. 3.



Witnesses.

S. N. Peters

L. N. Miller

Henry Blanchard.

by his attorney.

R. H. Eddy

United States Patent Office.

HENRY BLANCHARD, JR., OF BOSTON, MASSACHUSETTS.

Letters Patent No. 109,797, dated December 6, 1870.

IMPROVEMENT IN CAR-COUPLINGS.

The Schedule referred to in these Letters Patent and making part of the same.

To all persons to whom these presents may come:

Be it known that I, HENRY BLANCHARD, JR., of Boston, of the county of Suffolk and State of Massachusetts, have made a new and useful invention having reference to Railway-Carriage Couplings; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawing, of which—

Figure 1 denotes a longitudinal section of two draw-bars, with their couplings disconnected.

Figure 2 is a similar section, showing the draw-bars as coupled together.

Figure 3 is a similar section, in which the coupling-link or coupler is thrown up in the draw-bars, for the purpose of being disconnected from one of them.

At the lower part of each draw-bar A or B, and near the mouth thereof, is an abutment or catch, C, having a curved sloping top, *a*, and a vertical shoulder, *b*.

In rear of such catch is a furcated or three-armed lever, D, it being formed as represented, and pivoted to the draw-bar, as shown at *c*.

The rear arm or prong of the lever rests on a helical spring, E, supported on a rod or pin, F, which extends vertically through the draw-bar and arm.

From the upper front arm *d* of the lever a pin, *e*, is projected upward through a slot, *f*, in the top of the draw-bar.

To the upper end of the pin *e* a chain or rope may be fixed for raising the lever up to the top of the draw-bar chamber, in manner as shown in fig. 3.

With such draw-bars and coupling-levers I use a coupler or duplex-hooked bar or shackle, G, it being provided, at its opposite ends, with pointed hooks *g g*, and at its middle with an angular projection, *h*, all formed and arranged as represented.

The purpose of the said projection *h* is to support the coupler horizontally on the top of the catch, so as to diminish the leverage of the coupler against the lever D, in comparison to what would be the case were the coupler not provided with such projection *h*.

The coupler, on being forced into either draw-bar, will strike against the upper prong or arm of the fork, and, by action thereon, will force up the lever until the hook of the coupler may pass the catch. As soon as this takes place, the coupler will drop upon and in rear of the catch, and be coupled to the draw-bar; and should, in such case, the coupler protrude from one draw-bar, it will couple together the two draw-bars, and be held down upon their catches by the pressure of the springs E E of such bars.

By raising either lever, its lowest or longest arm will raise the coupler or shackle-bar off the catch, so as to disconnect the two, and unshackle the two draw-bars.

I am aware of the car-coupling described in the specification of Charles Haskins' application for a patent, filed December 20, 1865, and make no claim thereto. Although, in some respects, it is analogous to mine, yet in others it is materially different.

Instead of a slotted bar or trigger to slide vertically, and to be held down by a turn-button, for the purpose of raising the shackle-bar out of engagement with the catch, and instead of employing in the mouth of the draw-bar a spring to hold the shackle-bar in engagement with the catch, I employ the forked lever D and the spring E, constructed and arranged in manner as represented, whereby I am enabled to dispense with the turn-button, and cause the lever and spring automatically to perform the function of holding the shackle-bar G in engagement with the catch C; the lever also, while being raised, serving to perform the function of disengaging the shackle-bar from the catch.

My lever also forms a stop to arrest the inward movement or advance of the shackle-bar into the draw-bar, whereas there is no such device in the car-coupler of Haskins.

Again, my forked lever is arranged within and pivoted to the draw-bar, whereas Haskins' shackle-lifter is separate from the draw-bar, and slides, or is arranged in the platform to which the draw-bar is applied.

I claim—

The forked lever D, the spring E, and the catch C, arranged, constructed, and combined with the draw-bar A or B, and for use with the double-hooked shackle-bar G, in manner substantially as explained.

H. BLANCHARD, JR.

Witnesses:

R. H. EDDY,

S. N. PIPER.