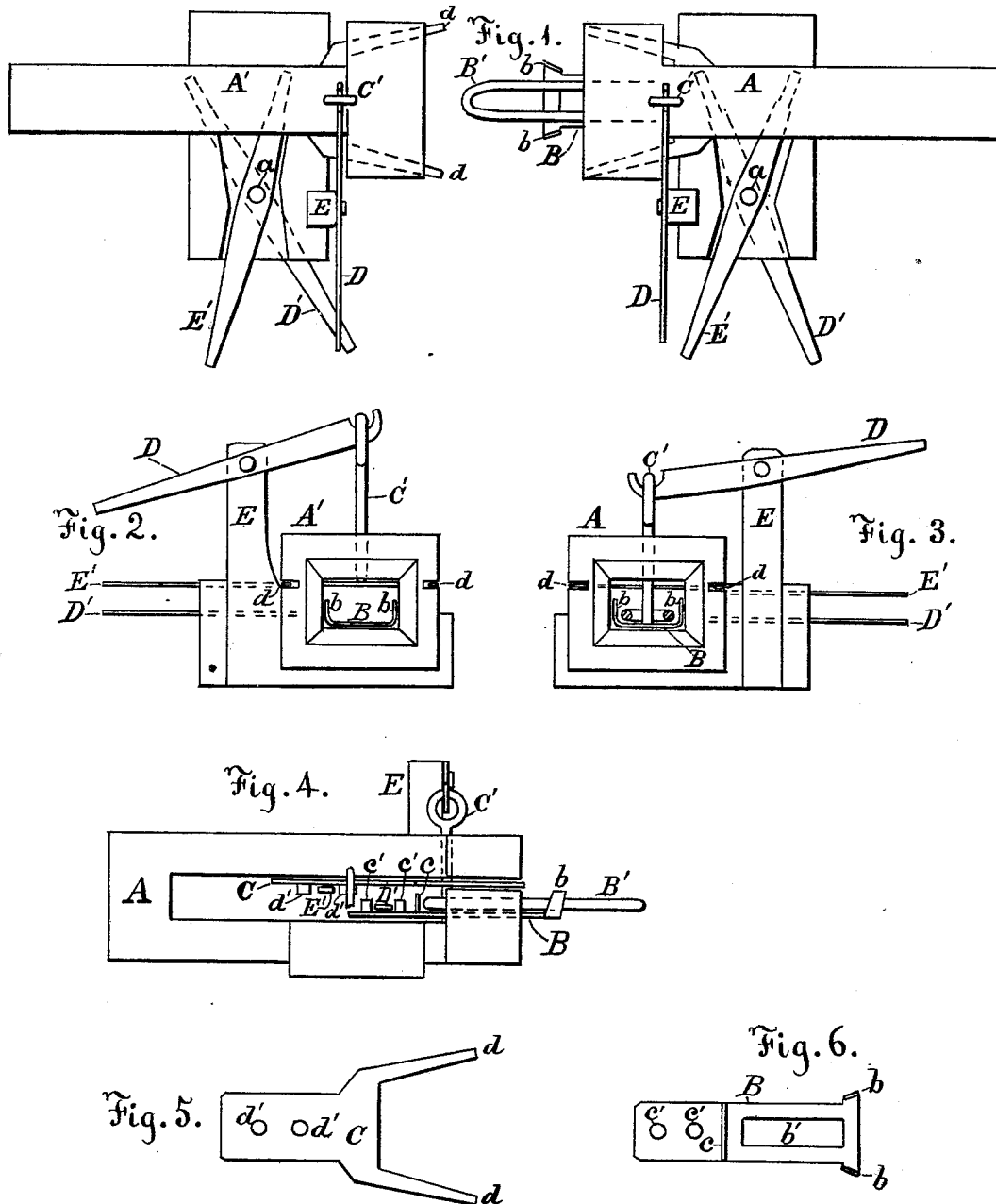


E. M. WILLIAMS.
Car-Coupling.

No. 218,466.

Patented Aug. 12, 1879.



Witnesses :
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UNITED STATES PATENT OFFICE.

EDWARD M. WILLIAMS, OF GILEAD, MICHIGAN.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **218,466**, dated August 12, 1879; application filed May 13, 1879.

To all whom it may concern:

Be it known that I, EDWARD M. WILLIAMS, of Gilead, in the county of Branch and State of Michigan, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the invention, which 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 letters of reference marked thereon, which form a part of this specification.

My invention relates to safety-couplings for railroad-cars; and it consists of devices for operating the ordinary link-and-pin couplings, so that the operator may not be exposed to danger between the cars, which devices are constructed as hereinafter described, and as shown in the drawings, in which—

Figure 1 is a plan view of the draw-heads and couplings of two cars to be coupled. Figs. 2 and 3 are end views of the same. Fig. 4 is a side view of one of the draw-heads with the coupling devices. Figs. 5 and 6 are views of the link and pin supporters detached.

A A' represent the draw-heads of two cars to be coupled. B represents a link-supporter adjusted to slide in a slot in the draw-head, and provided with lugs *b b* to hold the link B' in position laterally, and having a slot, *b'*, to receive the end of the coupling-pin, a plate, *c*, forming a stop to the inner end of the link, and the pins *c' c'* to receive the inner end of the operating-lever.

C represents the coupling-pin supporter adjusted to slide in the slot in the draw-head. This supporter is bifurcated, forming the arms *d d*, which are adjusted to slide in grooves in the sides of the draw-head, and it is provided with the pins *d' d'* to receive the inner end of the operating-lever.

The coupling-pin C' is operated by a lever, D, pivoted to a standard, E; and the link-supporter and pin-supporter are operated by

the side levers, D' E', pivoted at *a*, the inner ends of which levers extend in between the pins on the supporter-plates; and the outer ends of all the levers extend outward far enough to enable the operator to couple and uncouple the cars without going in between them.

In coupling the cars the link-supporter of the draw-head containing the link is moved out by lever D', as shown in Fig. 1; and the link-supporter of the other draw-head is moved back by its side lever, and the pin is elevated by the lever D, and the pin-supporter moved outward by the lever E', as shown in Figs. 1 and 2 of the drawings. In this position the ends of the arms *d* extend beyond the end of the draw-head, and the link is held in a horizontal position; and as the cars are moved together the extended end of the link enters the other draw-head, and the end of the draw-head A, striking the ends of the arms *d*, slides back the supporter C from under the coupling-pin, which drops through the link coupling the cars.

What I claim as new, and desire to secure by Letters Patent, is—

1. The link-supporter B, having the lugs *b b* and stop-plate *c*, and adjusted to slide in the draw-head by means of the side lever, D', substantially as and for the purposes described.

2. The coupling-pin supporter consisting of the plate C, having the projecting arms *d d*, in combination with the operating-lever E', whereby the plate may be moved back and forth in the draw-head, substantially as and for the purposes described.

In testimony that I claim the foregoing as my own invention I affix my signature in presence of two witnesses.

EDWARD M. WILLIAMS.

Witnesses:

FRANCIS M. BISSELL,
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