J. KUNTZE.
Car-Coupling.

No. 206,582.

Patented July 30, 1878.
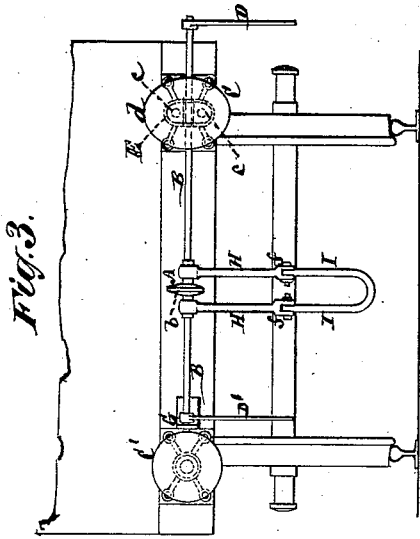
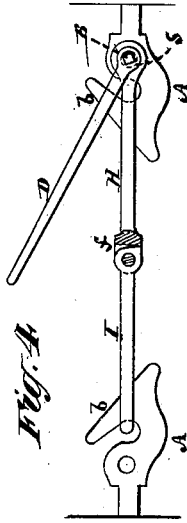Fig. 3

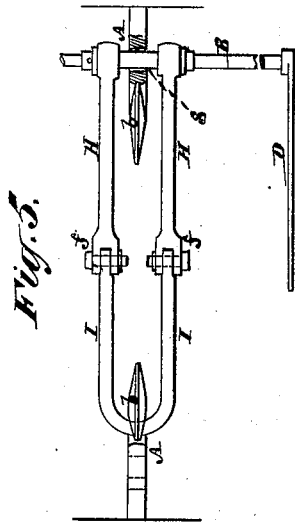Fig. 4

Fig. 5
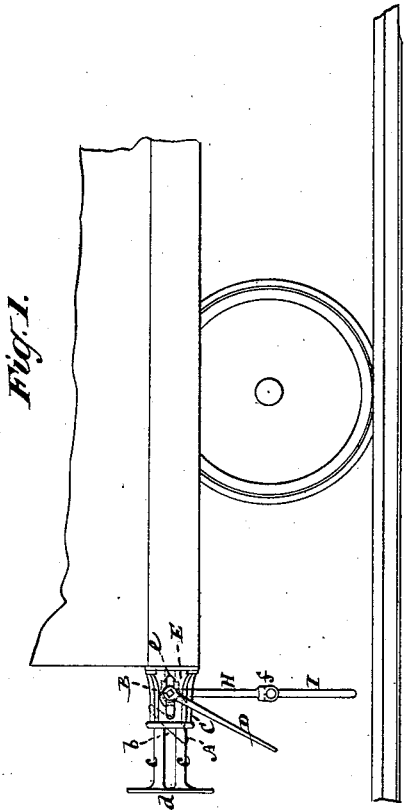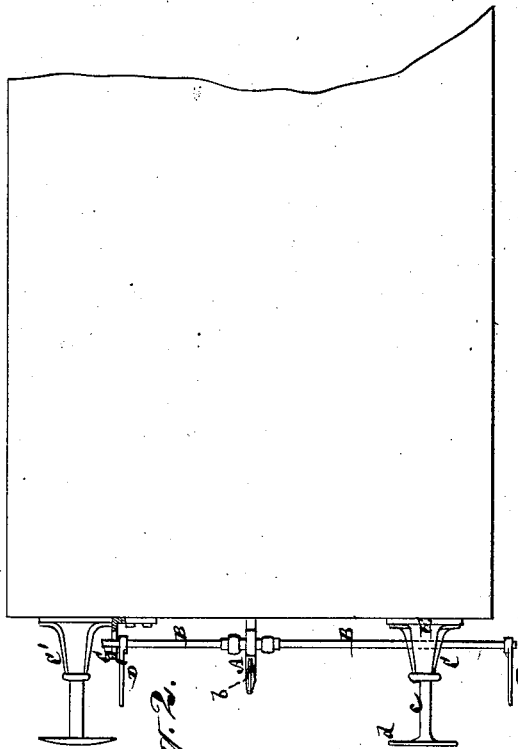
Fig. 1

Fig. 2

Witnesses
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UNITED STATES PATENT OFFICE.

JULIUS KUNTZE, OF HAMBURG, GERMANY.

IMPROVEMENT IN CAR-COUPLINGS.

To all whom it may concern:

Be it known that I, JULIUS KUNTZE, of the city of Hamburg, Germany, have invented certain new and useful Improvements in Couplings for Railway-Vehicles, and buffers used in connection therewith, of which the following is a description, reference being had to the accompanying drawing, forming part of this specification.

This invention relates to couplings for railway-vehicles and means used to engage and disengage the coupling, whereby said engagement and disengagement may be accomplished without exposure of the person between the adjacent ends of the vehicles to be connected or disconnected.

The invention consists in a novel construction of buffer and other parts for facilitating such outside operation of the coupling, and to provide for making and breaking the connection between the vehicles when on a curve in the track.

Figure 1 represents a side elevation of a railway-vehicle in part, with my invention applied. Fig. 2 is a plan of the same; and Fig. 3 is an end view thereof. Figs. 4 and 5 represent a side view and plan, respectively, of the coupling upon a larger scale, as applied to the draw-hooks of two adjacent vehicles.

A A are the draw-hooks applied to the ends of either vehicle. The front portions *b* of each of said hooks are made inclined to facilitate the connection of the coupling.

B is a rod, which is fitted to pass freely through a hole, *s*, in either of said hooks A. This rod is extended beyond the buffer C on one side of the vehicle, and has attached to it a lever, D, outside of said buffer. Such rod may also, if desired, be similarly extended toward the opposite side of the vehicle, stopping short, by way of modification, of the other buffer, C', and being furnished on such side of the vehicle with another lever, D'.

When the rod B is extended through either buffer, as shown in the case of the buffer C, the latter is constructed with duplicate buffer-rods *c c*, arranged one above the other, to prevent interference of the rod B with the buffer-rods, and to provide for the proper operation of the buffer.

A buffer-plate, *d*, of oval form—that is, of greater height than width—may be substituted for a round one, whereby to attach the outer ends of the rods *c c* to. These rods pass within a bracket or box, E, having a slot, *e*, in it for the rod B to pass through, and to permit of said rod being moved forward and backward, relatively to the track, when engaging and disengaging the coupling between vehicles on a curve in the permanent way, or as other circumstances may require. The opposite end portion of said rod B is also fitted to play within a slotted bracket, G, for the same purpose or purposes.

Both buffers C C' operate as buffers generally do—to resist shock.

The coupling proper consists of duplicate arms or levers H H, secured to the rod B on opposite sides of either draw-hook A. The opposite or outer ends of these arms H H are constructed to form joints *f f*, with which the links or loops I of the coupling are pivoted, and constructed so that said loops are not at liberty to drop much, if at all, out of line with the arms H H.

To engage and disengage the coupling it is only necessary to turn the rod B by either lever D or D'.

I claim—

1. The buffer C, having duplicate rods *c c*, in combination with the rod B, arranged to extend across the end of the vehicle beyond said buffer, the lever D, secured to said shaft outside of the buffer, and the coupling loop or link, essentially as described.

2. The slotted brackets E G, in combination with the rod B, one or more levers, D D', for operating said rod, and a coupling loop or link controlled by the rod B, substantially as specified.

JULIUS KUNTZE.

Witnesses:
    FR. REINCKE,
    H. DAUL.