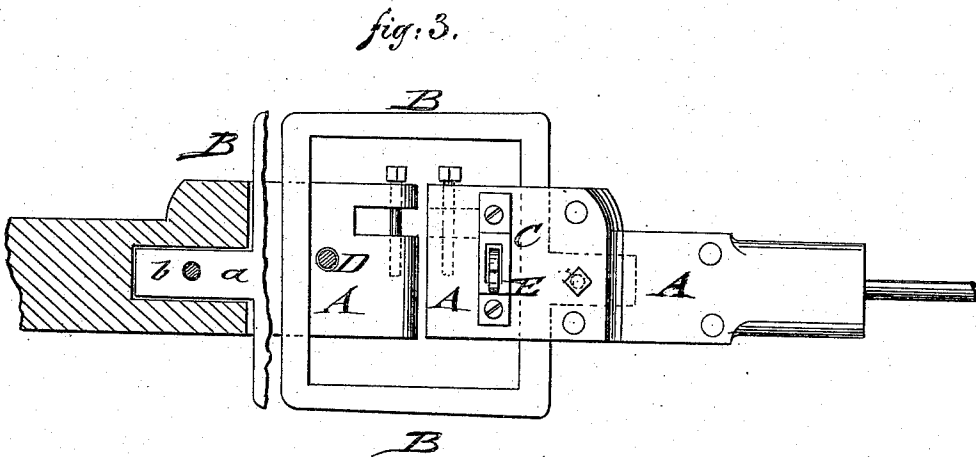
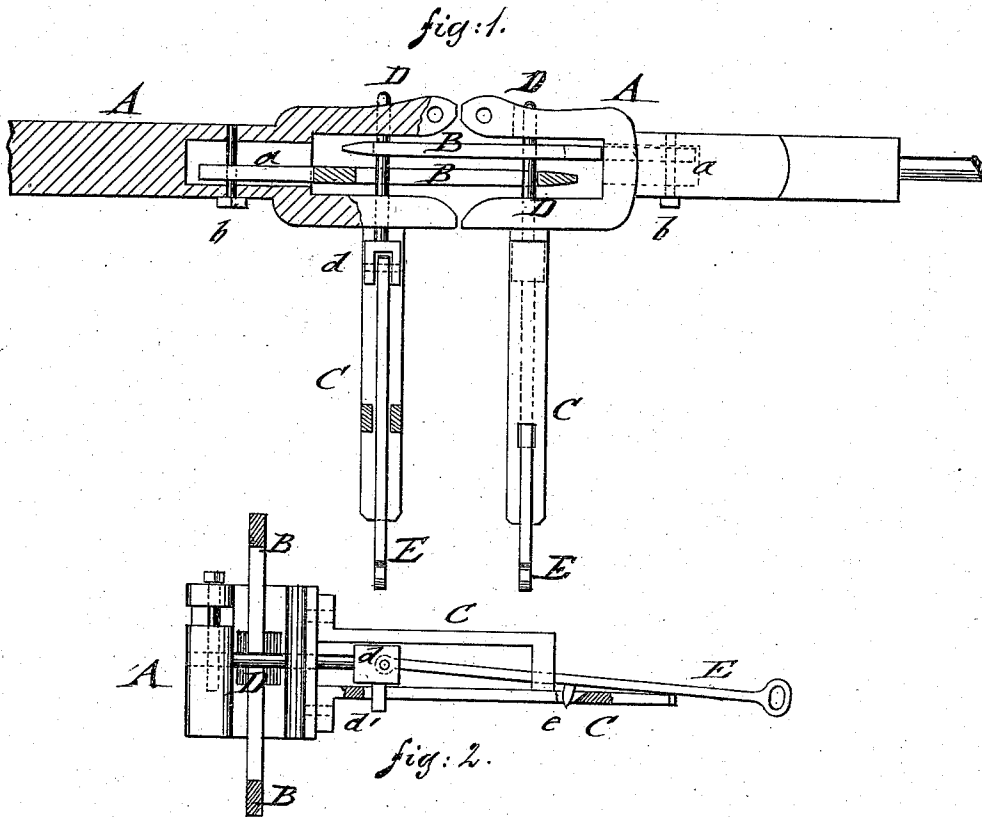


P. C. MURRAY.
CAR-COUPLING.

No. 172,151.

Patented Jan. 11, 1876.



WITNESSES:

Chas. Mota.
Alex. F. Roberts

INVENTOR

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ATTORNEYS.

UNITED STATES PATENT OFFICE.

PETER C. MURRAY, OF SLOATSBURG, NEW YORK.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **172,151**, dated January 11, 1876; application filed November 19, 1875.

To all whom it may concern:

Be it known that I, PETER C. MURRAY, of Sloatsburg, Rockland county, New York, have invented a new and Improved Car-Coupling, of which the following is a specification:

Figure 1 represents a top view, partly in horizontal section, of my improved car-coupling; Fig. 2, a front view of a draw-head with guide for pin-rod; and Fig. 3 is a side elevation of the coupling.

Similar letters of reference indicate corresponding parts.

My invention relates to an improved car-coupling, by which the cars may be coupled from the side or top without danger to the attendant, being specially adapted to cars of different heights, and forming a strong and durable coupling of the same.

The invention consists of a centrally-recessed draw-head, with a stationary link attached thereto, that is coupled by the laterally-sliding cross-pin of the connecting draw-head, the pin being guided and locked in open or closed position by a side standard and pin-rod.

In the drawing, A represents a draw-head that is applied in any approved manner to the bottom-frame of the car. A link-frame, B, of square or oblong form and suitable height and width, is placed in a central recess or cavity of the draw-head, and attached by a rear-extending arm, *a*, locked by a lateral cross-bolt, *b*, to the solid rear part of the draw-head. A sidewise-extending support or arm, C, is firmly attached to the side of the draw-head, and arranged to guide the head *d* of the sliding coupling-pin D, that passes in lateral direction through the draw-head, and enters accurately the pin-hole at the other side of the recess, being guided, jointly, by the head and pin hole at the side of the draw-head to which the guide-arm C is attached. The lower part of the guide-arm C is slotted, a pin or lug, *d'*, of the pin-head sliding therein to define the extent of sliding motion of the pin when setting the

same for coupling. The coupling-pin D is operated by a rod, E, that is pivoted to the head of the pin, and provided with a downward-projecting pin or stop, *e*, that is introduced into the slot of the guide-arm C, as shown in Fig. 2, when the pin is moved across the draw-head for the purpose of locking thereby the coupling-link in position, and preventing its playing out of the link-frame by the vibrations of the cars. The link-frames B are tapered at the front end to pass readily sidewise of each other into the recesses of the draw-head. The pins are then pushed across the recesses, and locked by the pin-rods from the side of the car, so that the link-frames are coupled in twofold manner.

The height of the link gives play in vertical direction, and allows the coupling of cars with platforms of different heights.

The draw-heads may also be applied to the car with the link-frame horizontal, and the guide-arm in vertical position, so that the coupling may be accomplished with the same facility and absence of danger from the top of the cars as in the other case from the side.

The draw-heads may also be arranged for the common pin-and-link coupling by recessing and perforating one of the front ends for the coupling pin and link, to admit the coupling of the cars with the common coupling, when required.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination, with pin-head *d* and slotted support C, of a rod, E, jointed to head, and having bottom stud *e*, whereby it may be both actuated and held in the manner specified.

PETER C. MURRAY.

Witnesses:

PAUL GOEPEL,
T. B. MOSHER.