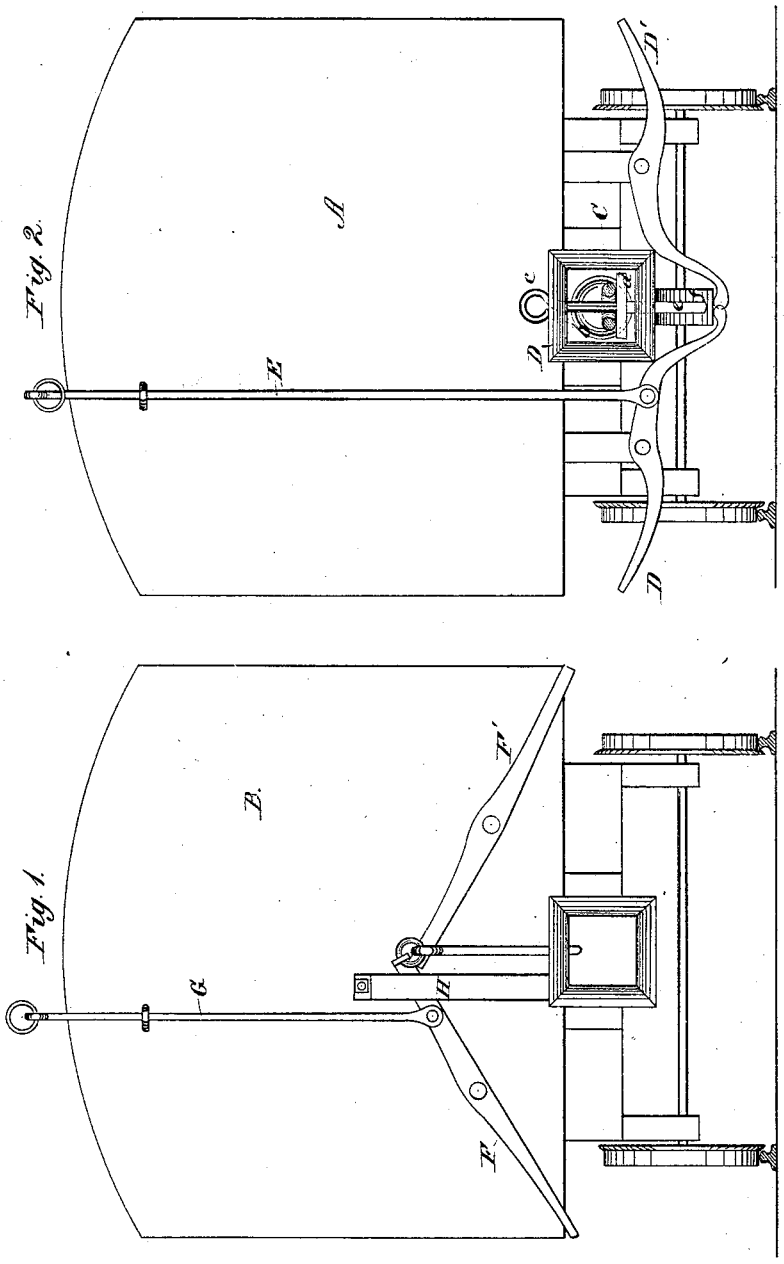
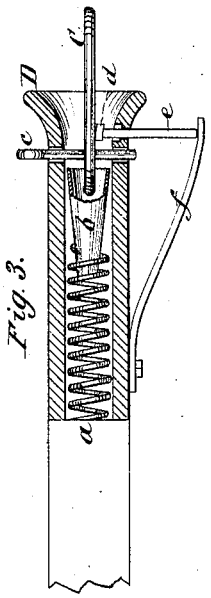
C. AHRENBECK.
Car-Coupling.

No. 217,763. Patented July 22, 1879.





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UNITED STATES PATENT OFFICE.

CHARLES AHRENBECK, OF NAVASOTA, TEXAS.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **217,763**, dated July 22, 1879; application filed May 3, 1879.

To all whom it may concern:

Be it known that I, CHARLES AHRENBECK, of Navasota, in the county of Grimes and State of Texas, have invented a new and Improved Car-Coupling; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is an end view of a car provided with devices for raising and lowering the coupling-pin. Fig. 2 is an end view of a car provided with devices for adjusting the link. Fig. 3 is a vertical longitudinal section of the form of draw-bar shown in Fig. 2.

My invention is an improved car-coupling designed to obviate the necessity and its attendant danger of going between the cars.

The improvement consists in the particular means applied to an ordinary draw-bar for holding and centralizing the ordinary form of link, and elevating the same so as to enter the opposite draw-bar.

In the drawings, A represents one end of a car, which is fitted with devices for operating the link, and B represents the adjacent end of another car, which is fitted with devices for operating the coupling-pin.

For operating the link C, the draw-head D is made hollow and provided with a spiral spring, *a*, upon the front end of which is arranged a conical link-seat, *b*. This spring and link-seat tend to render the link yielding, and serve to guide and centralize the same in its receding movement when it strikes the opposite draw-head. The said spring and seat also, by holding the link pressed forward against the coupling-pin *c*, tend to hold the said link in a more or less horizontal position.

For adjusting the link to any definite position for entrance into a higher or lower draw-head, as well as for steadying the same when the draw-heads are of equal height, I arrange inside of the draw-head, and in the rear of its striking-face, and just in front of the coupling-pin, a cross-head, *d*, attached to a pin, *e*, which latter extends through a hole in the bottom of the draw-head, and is attached to the forward end of a spring, *f*, which spring is permanently fastened to the bottom of the draw-head, and whose tension serves always to hold the cross-head *d* down closely against the bottom of the draw-head. To prevent derangement to this cross-head a depression or seat may be formed in the tapering bottom wall of the draw-head, into which the cross-head may seat itself and be out of the way. Now, by raising this cross-head, it will be seen that it strikes against the under side of the link and raises it to any desired adjustment.

It will be seen that there is peculiar merit in arranging this cross-head or link-lifter, as shown, for the reason that, being in the rear of the striking-faces of the draw-head, it cannot become deranged by the impact of the cars, and as its supporting-pin passes through a hole in the bottom of the draw-head the said cross-head is perfectly guided in its vertical movement.

For giving the desired motion to this cross-head, horizontal levers D D′ are pivoted, one upon one side of the car and the other upon the other side, with their inner ends beneath the spring *f*, and their handles projecting outwardly. By depressing these handles, it will be seen that the spring and attached cross-head are raised from either side of the car, and the link adjusted for entrance into the adjacent draw-head without the necessity of going between the cars.

For operating the devices from the top, as may be necessary in box-cars, a lift-rod, E, is extended from the inner ends of one of the levers D up to the upper level of the car and provided with suitable hand-holds.

For operating the coupling-pin, levers F F′, corresponding to levers D D′, are pivoted to the other car, and a corresponding lift-rod, G, made to extend to the top of the car, the inner ends of the levers being controlled in their vertical movement by a suitable guide, H.

I do not claim, broadly, a lifting device for the link located inside the cross-head; nor do I claim, broadly, the combination, with a set of coupling devices, of levers extending transversely from the draw-head to each side of the car, as these have been before used. I do not know, however, that a cross-head, *d*, has

ever been mounted upon a pin resting upon a spring, and combined with levers D D′, resting loosely beneath said spring, for operating said lifting device. Hence,

Having thus described my invention, what I claim as new is—

The cross-head *d*, mounted upon pin *e*, the spring *f*, sustaining said pin, and the levers D D′, resting loosely beneath said spring, all combined substantially as and for the purpose described.

CHARLES AHRENBECK.

Witnesses:
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