

J. ROBERTSON, Jr.

Car-Couplings.

No. 146,402.

Patented Jan. 13, 1874.

Fig. 1.

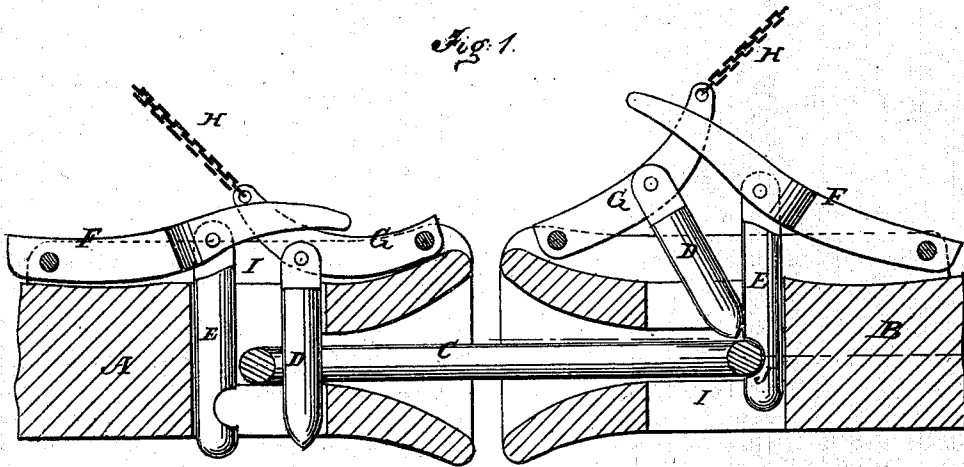
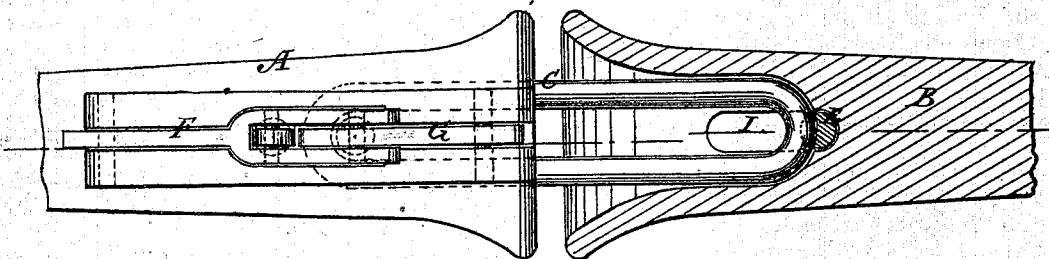


Fig. 2.



WITNESSES:

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JAMES ROBERTSON, JR., OF EAST CAMBRIDGE, MASSACHUSETTS.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **146,402**, dat. d January 13, 1874; application filed December 6, 1873.

To all whom it may concern:

Be it known that I, JAMES ROBERTSON, Jr., of East Cambridge, in the county of Middlesex and State of Massachusetts, have invented a new and Improved Car-Coupling, of which the following is a specification:

The invention will first be fully described, and then pointed out in the claim.

Figure 1 is a longitudinal sectional elevation of a couple of draw-heads or buffers with couplings arranged according to my invention, one side showing the link coupled, and the other side showing the action of the coupling-pin and the locking-pin in coupling. Fig. 2 is a plan of one side, and horizontal section of the other side of Fig. 1.

Similar letters of reference indicate corresponding parts.

A and B represent the draw-heads; C, the coupling-link; D, the coupling-pins; E, the locking-pins; F, the levers by which the pins E are suspended; G, the levers for suspending the coupling-pins; H, chains for raising the coupling-pins, and I the slot-holes for the coupling-pins and locking pins. The coupling-pin is suspended at the front end of the slot to draw against the shoulders thereat, and hold the link when the cars are running. It swings back and strikes the locking-pin by its lower end before it rises high enough to let the link pass. At the same time its lever G strikes lever F, and thus causes the link to force the pins E up by driving under and against the oblique pins, and which causes such friction

on the pin as to gradually arrest its motion and prevent a shock by stopping suddenly. The pin E is partly raised by the action of the point of the coupling-pin D on it, and partly by the upper end of said pin acting on lever F, so that its notch J rises high enough for the end of the link to enter it the moment the coupling has risen high enough to drop back into the link, to lock it against rising any higher, and causes it to prevent the coupling-pin from being thrown out by the blow of the link. The coupling-pin then falls back into the link and completes the coupling, and, as soon as the link is released from pressure against the locking-pin, the latter falls and takes up all unnecessary slack between the end of the link and the coupling-pin, which, owing to the greater than ordinary depth of the socket for the link to allow of this mode of coupling, would otherwise be too great. The chain H will be used for pulling out the link for uncoupling the cars.

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

The locking-pin suspended from the lever F, and arranged to check the pin D when thrown up by the link, and also to take up the slack of the link between the coupling-pin and socket end, substantially as specified.

JAMES ROBERTSON, JR.

Witnesses:

CHARLES H. BARTLETT,
JAMES ROBERTSON, 2d.