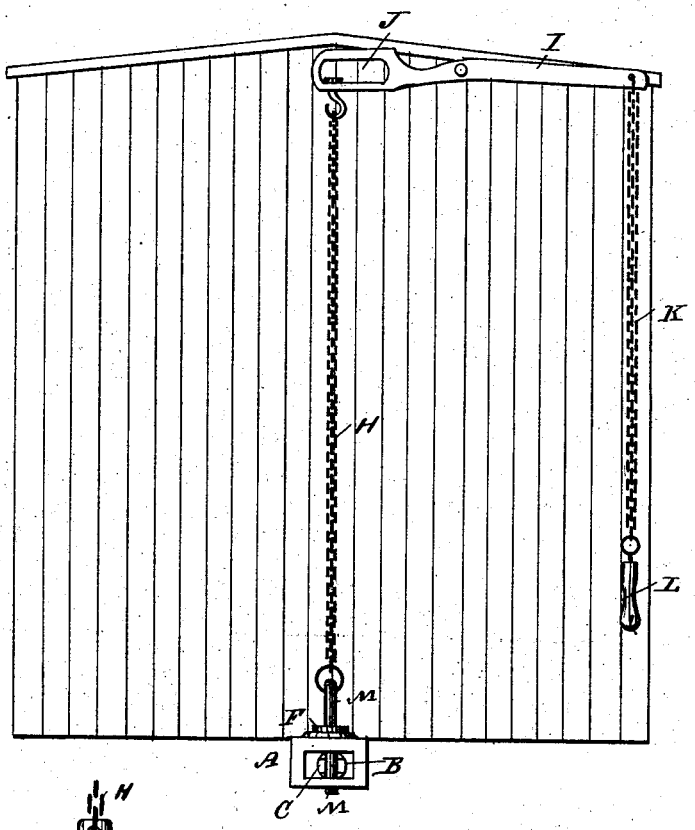
(Model.)

J. H. SMITH.

CAR COUPLING.

No. 260,619. Patented July 4, 1882.

Fig. 1.



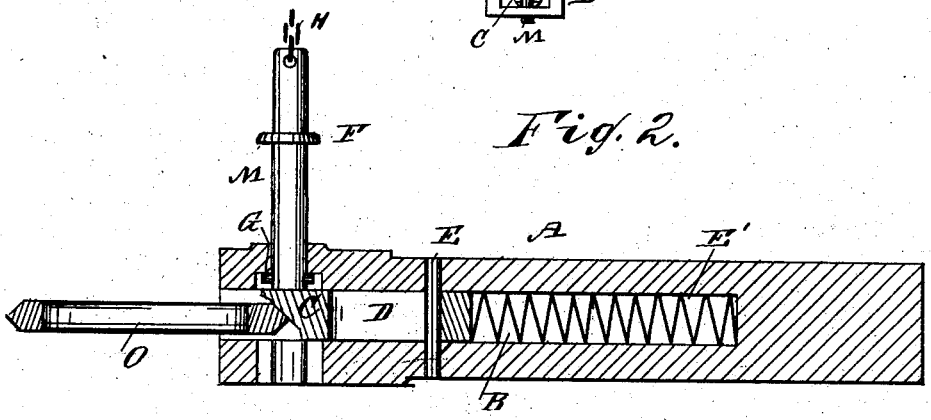
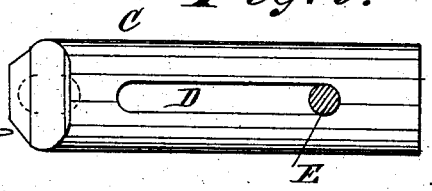


Fig. 2.

Fig. 3.



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UNITED STATES PATENT OFFICE.

JOHN HENRY SMITH, OF FAIRCHILD, WISCONSIN.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 260,619, dated July 4, 1882.

Application filed May 13, 1882. (Model.)

To all whom it may concern:

Be it known that I, JOHN HENRY SMITH, of Fairchild, in the county of Eau Claire and State of Wisconsin, have invented a new and useful Improvement in Car-Couplings, of which the following is a full, clear, and exact description.

This invention relates to improvements in car-couplings of that class employing a spring-sliding support for temporarily holding the coupling-pin in an elevated position preparatory to the passage of the coupling-link into the draw-head; and it consists in the combination and arrangement of parts, substantially as hereinafter more fully set forth.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is an end elevation of a car provided with my improved coupling. Fig. 2 is a longitudinal sectional elevation of the draw-head. Fig. 3 is a plan view of the sliding slotted bolt in the draw-head.

The draw-head A is provided with a longitudinal aperture or recess, B, containing a sliding bolt, C, which is provided with a longitudinal vertical slot, D, through which slot D a vertical pin, E, passes, which is secured in the draw-head. The outer end of the bolt C is beveled from the bottom to the upper edge and from the inner toward the outer end, so that the upper edge will project farther than the lower edge. A spring, E′, is contained in the recess or aperture B between the rear end of the recess B and the rear end of the bolt C.

The coupling-pin M is provided with a collar or shoulder, F, to prevent it from dropping too low, and its lower end is provided with a cross-pin, G, to prevent it from being withdrawn entirely from the draw-head. The coupling-link O has its ends beveled, as shown. A chain, *h*, is attached to the pin M and to the inner end of a lever, I, pivoted to the end of the car, and having a handle-aperture, J, at its inner end. A chain, K, hangs from the outer end of the lever I, and a handle, L, is attached to its lower end.

The operation is as follows: The pin M is raised from the side of the car by pulling downward on the chain K, or from the top of the car by raising the handle end of the lever I. As soon as the pin is raised the bolt C is forced outward until the rear end of the slot C rests against the pin E, so that the front part of the bolt will be under the pin M and will hold the same raised in a vertical position, as shown in Fig. 2. If the link O of the other draw-head now enters the draw-head, it pushes back the bolt C, permitting the pin M to drop through this link. If a link is secured in the draw-head, it will always be held in a horizontal position, as the spring E′ presses the outer beveled end of the bolt C against the inner beveled end of the link, so that the link can easily enter the opposite draw-head.

If the draw-heads are different heights above the ground, bent coupling-links are to be used.

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

1. The combination, with the draw-head A, of the coupling-pin M, the chains H and K, and the lever I, pivoted on the end of the car and provided with a handle, J, at its inner end, substantially as herein shown and described, and for the purpose set forth.

2. The combination, with the draw-head A, of the sliding bolt C, the spring E′, the coupling-pin M, the chains H and K, the handle L, and the lever I, pivoted to the end of the car and provided with a handle, J, at its inner end, substantially as herein shown and described, and for the purpose set forth.

JOHN HENRY SMITH.

Witnesses:
R. C. HINE,
M. RIVARD.