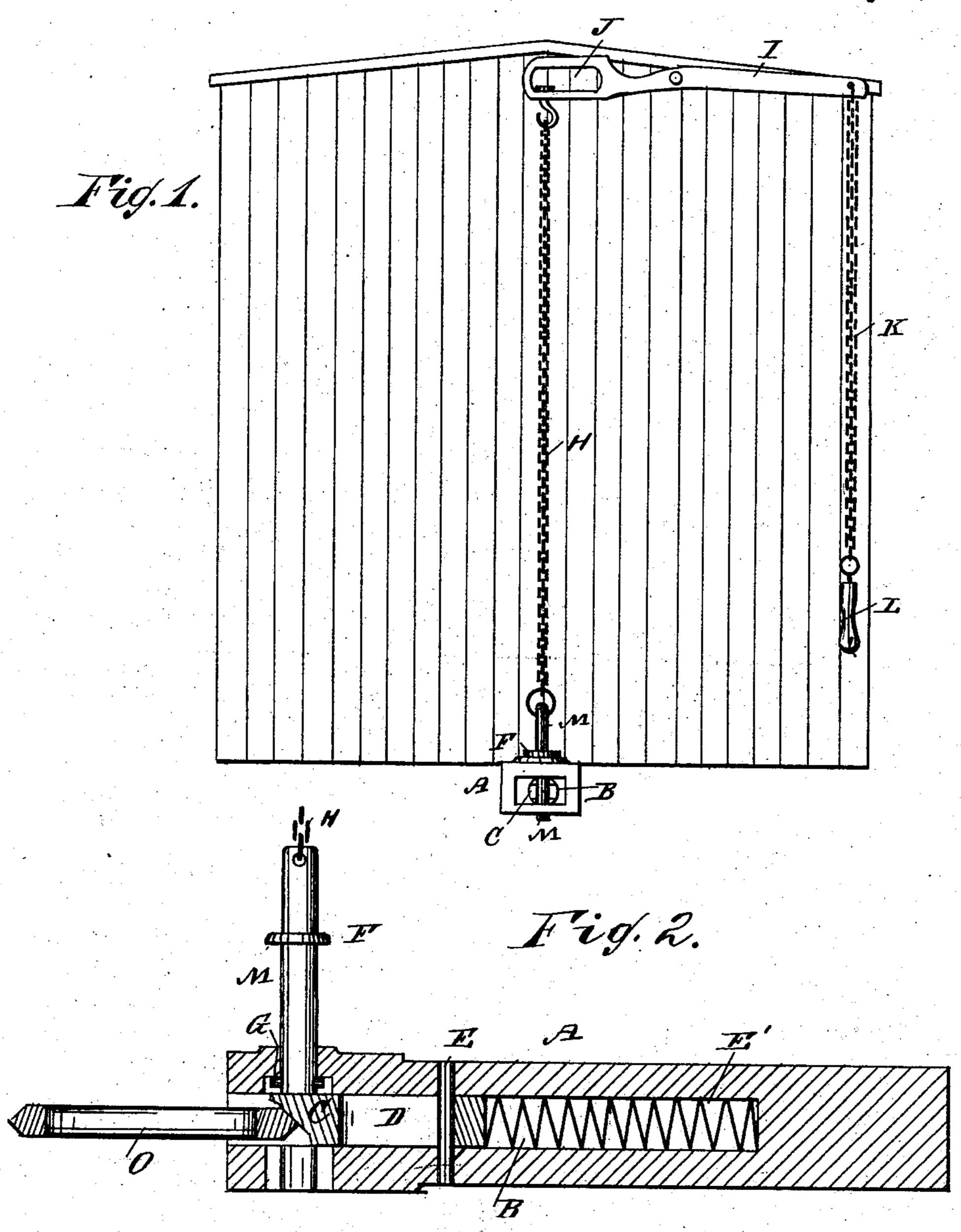
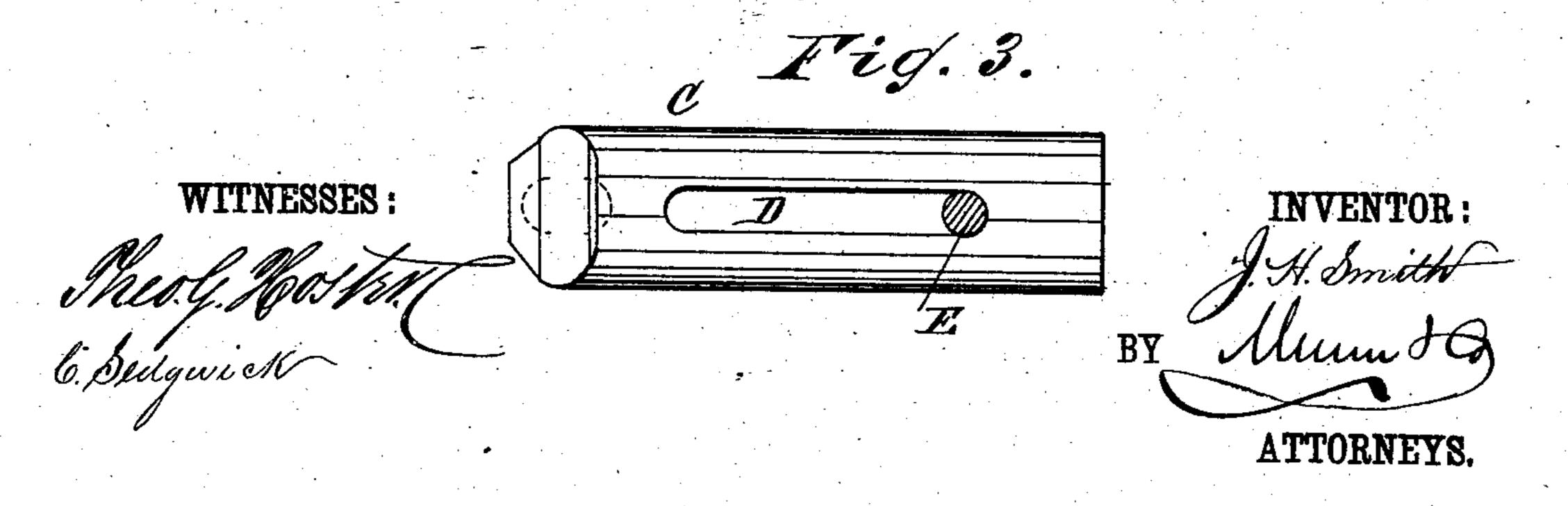
J. H. SMITH.

CAR COUPLING.

No. 260,619.

Patented July 4, 1882.





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 spring10 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 drawhead. 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F, to prevent it from dropping too low, and its lower end is provided with a cross-pin, G, to prevent it from being withdrawn entirely from the draw-head.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 45 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 down- 50 ward 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 55 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 60 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 65 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—70

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, 75 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 80 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.