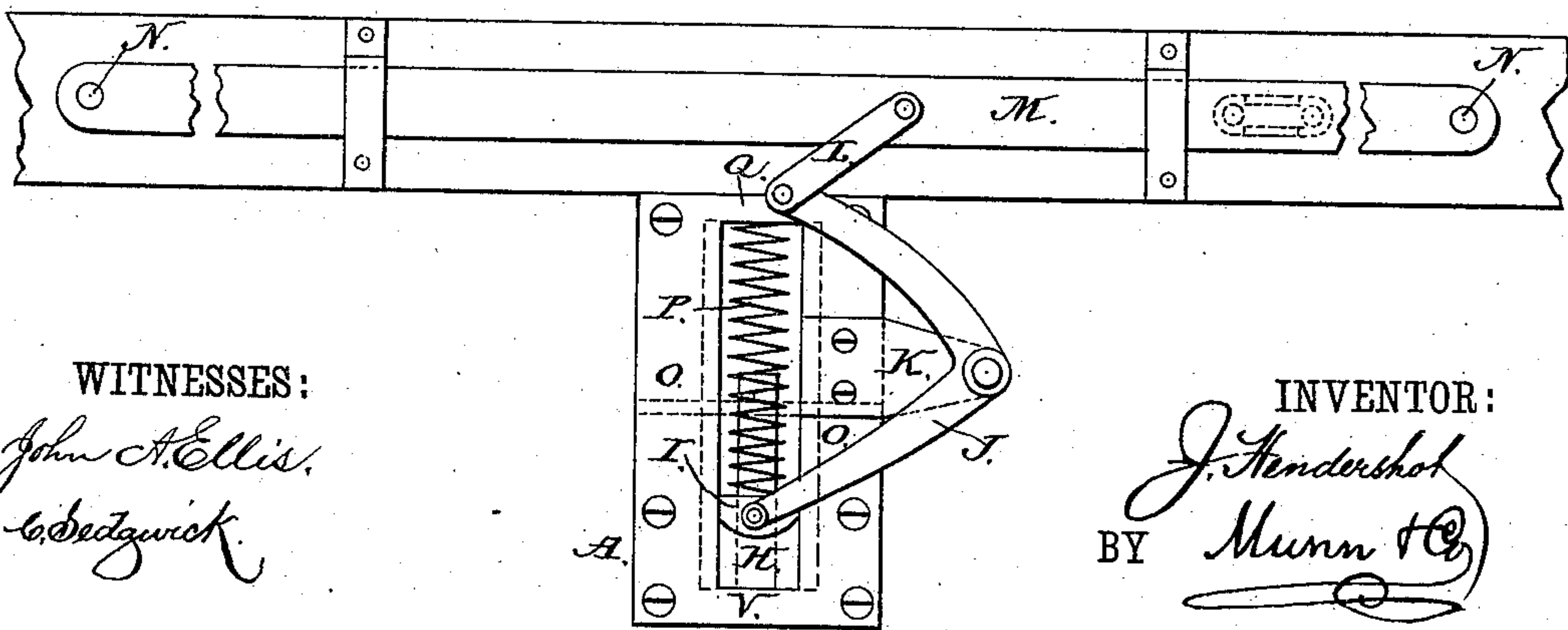
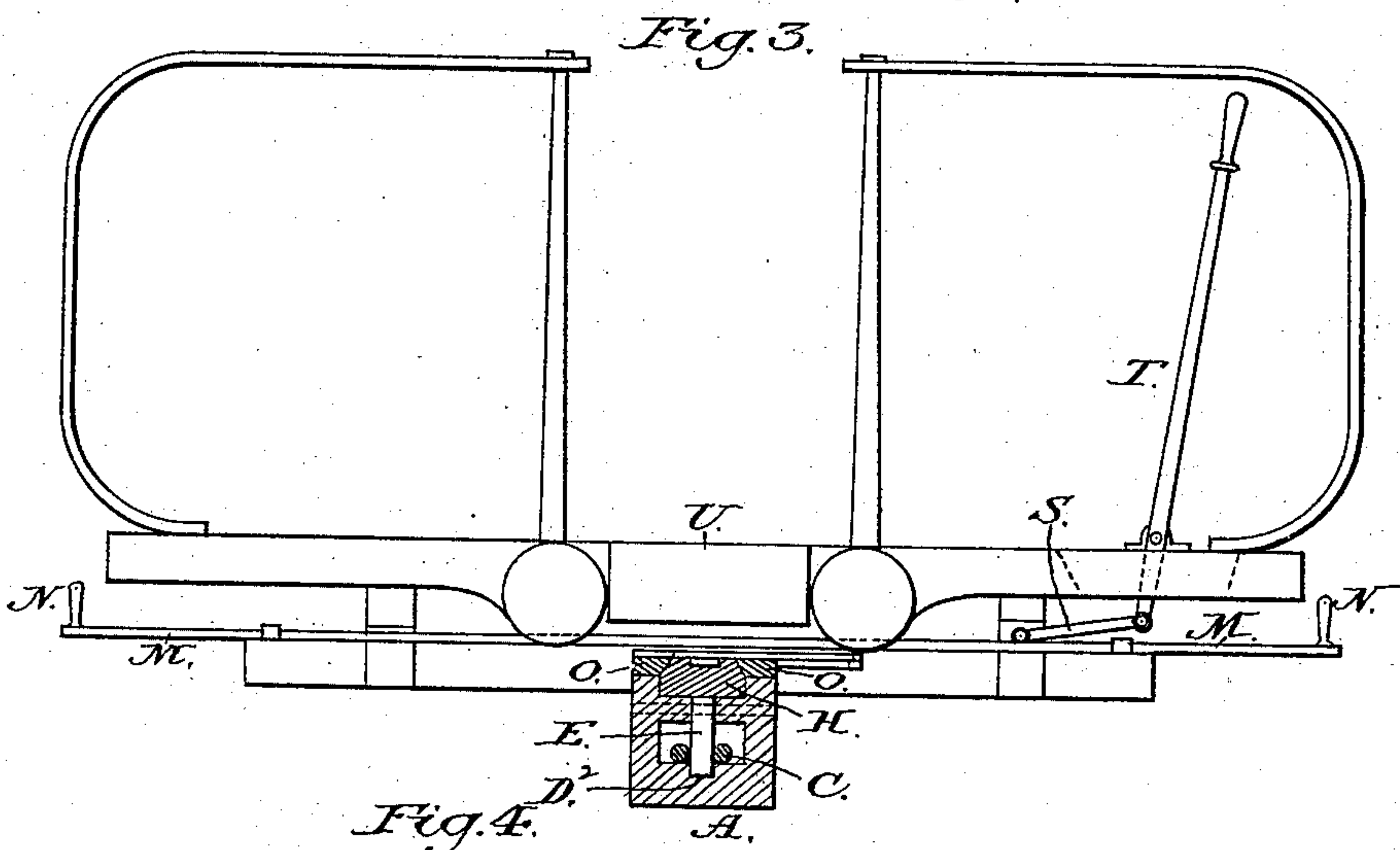
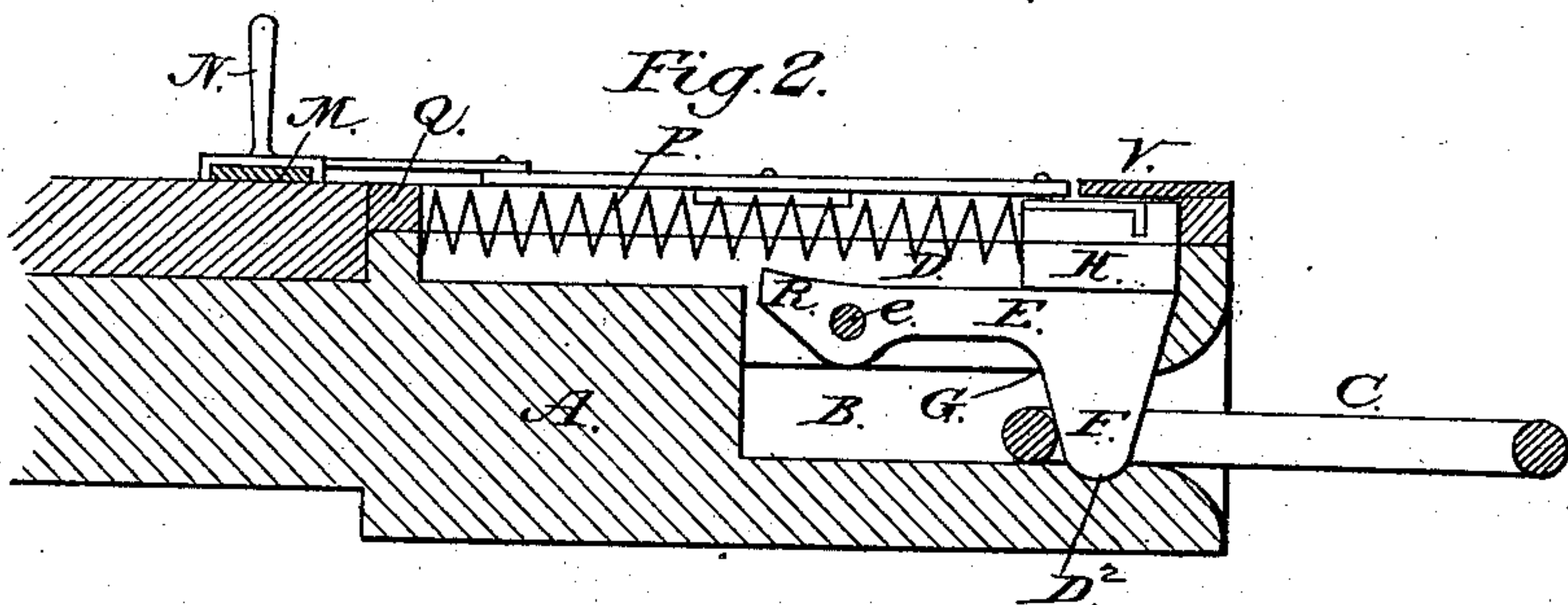
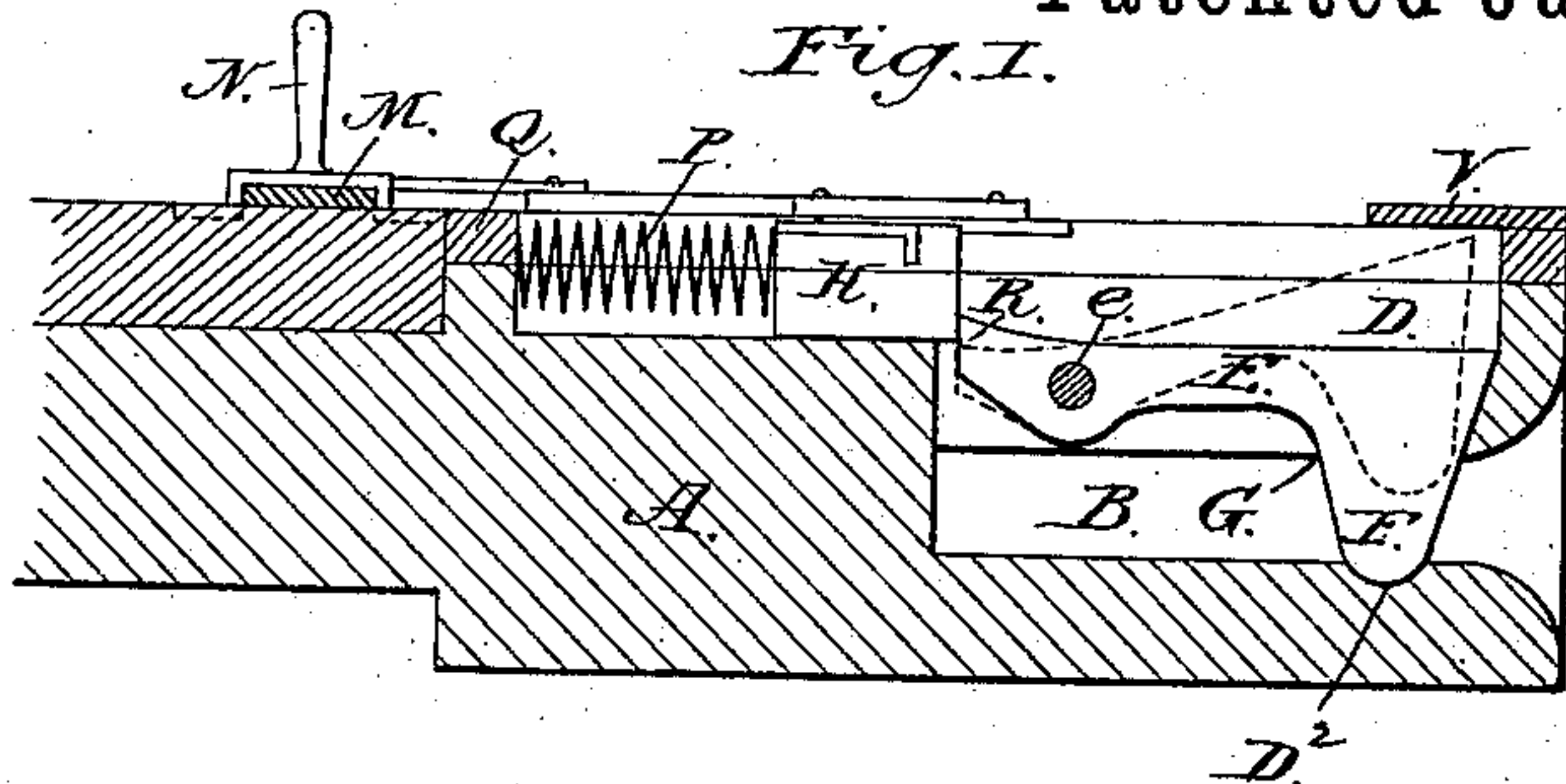


(No Model.)

J. HENDERSHOT.
CAR COUPLING.

No. 376,244.

Patented Jan. 10, 1888.



WITNESSES:

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JONATHAN HENDERSHOT, OF EVELYN, WEST VIRGINIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 376,244, dated January 10, 1888.

Application filed October 11, 1887. Serial No. 252,009. (No model.)

To all whom it may concern:

Be it known that I, JONATHAN HENDERSHOT, of Evelyn, in the county of Wirt and State of West Virginia, have invented a new and useful Improvement in Car-Couplings, of which the following is a full, clear, and exact description.

The invention consists in providing the draw-head of the car with a vertically-swinging member having at its free end a downwardly-projecting coupling-lug, which, after the entrance of the coupling-link, may be locked against upward movement by a block sliding in the top of the draw-head, as hereinafter described and claimed.

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 the several views.

Figure 1 is a longitudinal sectional view of a draw-head having my improved car-coupling applied thereto, showing the position of the latter when ready for coupling with an opposing draw-head. Fig. 2 is a similar view of the same, showing the position of my improved car-coupling when coupled to the link of an opposing draw-head. Fig. 3 is a vertical sectional view of the same and an end elevation of the car platform, and Fig. 4 is a plan view of the same.

The draw-head A is provided with the usual opening, B, to receive the coupling-link C. In the center of the top of the draw-head is formed a longitudinal groove, D, in which is pivoted, at e, a lever or other swinging member, E, having formed on its free end a downwardly-projecting lug, F, which is adapted to pass through a slot, G, in the bottom of the groove D. The end of the lug F enters a recess, D², in the bottom of the link-opening B, so that the strain of the coupled link on said lug will not be entirely borne by the pivot of the swinging member, but will be transmitted directly to the draw-head.

A block, H, held within the groove D, is adapted to slide back and forth over the swinging member, and to the top of said block is pivoted a link, I, which is pivoted to one end of an elbow-lever, J, which is pivoted at its angle to a laterally-projecting arm, K, of the draw-head, the opposite end of said lever

being pivoted to a link, L, which is pivoted to a bar, M, adapted to slide transversely beneath the platform of the car, said bar being provided at each end with a handle, N.

The side edges of the block H are beveled at the top, and plates O, secured to the top of the draw-head and over the beveled edges of the sliding block, serve to hold and guide said block in the groove D. A powerful spring, P, is interposed between the rear end of the block H and a cross-piece, Q, on the top of the draw-head, and acts to throw said block forward, as hereinafter explained. The swinging member E has formed at its rear extremity an upwardly-projecting lug, R, the top of which has a slight bevel, so that when the lug F rests in the recess at the bottom of the draw-head opening the lug R will project slightly above the bottom of the groove in which the block slides, as shown in Figs. 1 and 2 of the drawings.

The sliding bar M is connected by a link, S, to a handle-lever, T, pivoted in the platform U of the car and projecting upward, as shown in Fig. 3 of the drawings. To the top of the draw-head, at its outer end, is secured a cross-plate, V, under which the sliding block rests when the car is coupled.

The operation of my improved car-coupling is as follows: When the cars are uncoupled, the sliding block is at the rear end of the draw-head, and is held in place by the lug at the rear end of the swinging member, as shown in Fig. 1 of the drawings. The entering link strikes against the front edge of the lug at the front end of the swinging member and forces said lug upward until the link passes inward, when said lug drops into the link and enters the recess in the bottom of the draw-head. As said lug is forced upward the lug at the rear end of the swinging member is carried downward sufficiently to release the sliding block, which is then forced forward by the spring to the front end of the draw-head over the lug at the front end of the swinging member, and is held securely between said lug and the cross-plate on the top of the draw-head, as shown in Fig. 2 of the drawings, thus preventing the strain on the lug from forcing it upward and uncoupling the cars. The sliding block is carried to the rear to permit of uncoupling the

cars by moving the sliding bar in the direction of its length by means of the handles on said bar or the handle-lever connected to said bar.

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

1. In a car-coupling, the combination, with a draw-head, A, having a longitudinal groove, D, in its top, of a block, H, adapted to slide in said groove, an elbow-lever, J, pivoted at its angle to a lateral arm, K, on said draw-head and pivotally connected to said block, a bar, M, adapted to slide transversely beneath the car-platform and connected to said lever by a link, L, a handle-lever, T, connected by a link, S, to said bar, and a spring, P, interposed between said block and a cross-piece, Q, on said draw-head, substantially as shown and described, for the purpose herein set forth.

2. In a car-coupling, the combination, with a draw-head, A, having a longitudinal groove, D, in its top, of a swinging member, E, pivoted in said groove, a block, H, adapted to slide transversely beneath the car-platform and provided with a handle, N, at each end, an elbow-lever, J, pivoted at its angle to a lateral arm, K, on said draw-head, one arm of said lever being pivotally connected to said block, and a link, L, connecting the other arm of said lever to said sliding bar, substantially as shown and described, for the purpose herein set forth.

3. In a car-coupling, the combination, with a draw-head, A, having a longitudinal groove, D, in its top, of a block, H, adapted to slide in said groove, an elbow-lever, J, pivoted at its angle to a lateral arm, K, on said draw-head, a bar, M, adapted to slide transversely beneath the car-platform, a link, L, connecting said lever and bar, and a handle-lever, T, pivoted in the car-platform and connected by a

link, L, to said bar, substantially as shown and described, for the purpose herein set forth.

4. In a car-coupling, the combination, with a draw-head, A, having a longitudinal groove, D, in its top, of a swinging member, E, pivoted in said groove and provided at its outer end with a downwardly-projecting coupling-lug, F, a block, H, adapted to slide in said groove, means, substantially as shown and described, for moving said block, and a cross-plate, V, on top of the draw-head at its front end, substantially as shown and described, for the purpose herein set forth.

5. In a car-coupling, the combination, with a draw-head, A, having a longitudinal groove, D, in its top, and a recess, D², in the bottom of its link-opening B, of a swinging member, E, pivoted in said groove and provided with a downwardly-projecting coupling-lug, F, at its outer end adapted to enter said recess, a block, H, adapted to slide in said groove, and means for shifting and securing said block, substantially as shown and described, for the purpose herein set forth.

6. In a car-coupling, the combination, with a draw-head, A, having a longitudinal groove, D, in its top, and a recess, D², in the bottom of its link-opening B, of a swinging member, E, pivoted in said groove and provided with a downwardly-projecting coupling-lug, F, at its outer end adapted to enter said recess, and an upwardly-projecting stop-lug, R, at its inner end, a block, H, adapted to slide in said groove and to be engaged by said stop-lug, and means for shifting and securing said block, substantially as shown and described, for the purposes herein set forth.

JONATHAN HENDERSHOT.

Witnesses:

A. D. HODAM,

A. C. CORBITT.