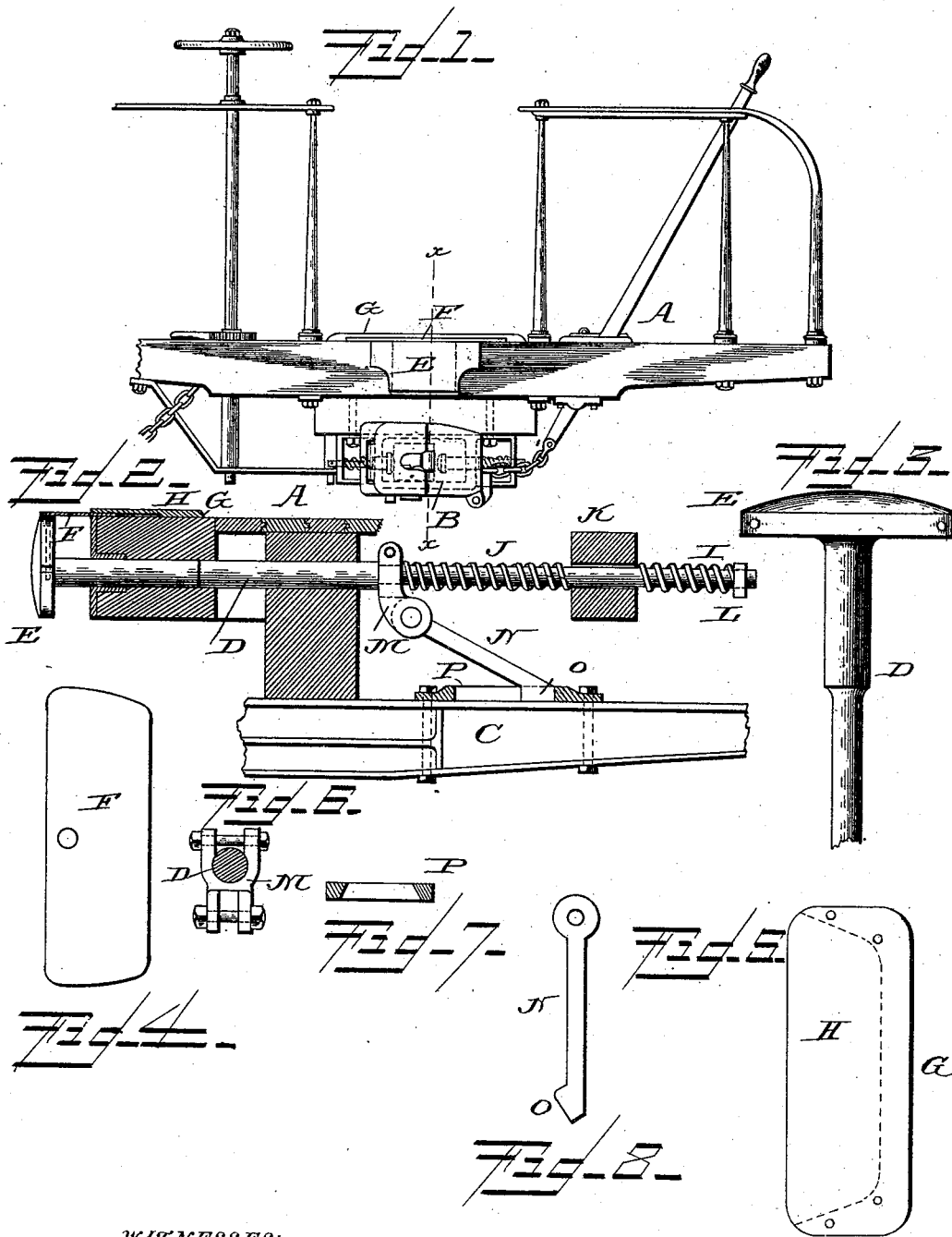


(No Model.)

T. L. McKEEN.  
BUFFER FOR RAILWAY CARS.

No. 490,977.

Patented Jan. 31, 1893.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

THOMAS L. MCKEEN, OF NEW YORK, N. Y., ASSIGNOR TO ISAAC G. JOHNSON & CO., OF SAME PLACE.

## BUFFER FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 490,977, dated January 31, 1893.

Application filed July 15, 1892. Serial No. 440,104. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS L. MCKEEN, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Buffers for Railway-Cars; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a front elevation of the coupling and platform of a passenger coach equipped with my improved buffer; Fig. 2 is a longitudinal sectional view of the same through the vertical plane denoted by the broken line marked  $x-x$ ; Fig. 3 is a view of the buffer, removed from the platform; Fig. 4 is a plan of the movable or false platform secured to and working with the buffer; Fig. 5 is a plan view of the protecting shield or guard-plate which overlaps the false or movable platform; Fig. 6 is a section through the stem of the buffer-head; Fig. 7 is a similar view through the slotted plate secured to the draw bar; and Fig. 8 is a detail view of the push-rod.

Like letters of reference denote corresponding parts in all the figures.

This invention relates to buffers or bumpers for railway cars, and has for its object to utilize the buffer as a support for a false or movable platform which acts in the nature of a bridge (or part of a bridge) to span the open space between the platforms of adjoining cars. In my application Serial No. 435,773, I have described and claimed a somewhat similar device as applied to the improved buffer for which Letters-Patent of the United States No. 302,512, were granted to me under date of July 22, 1884, and my present invention consists in the novel construction and combination of parts hereinafter more fully described and claimed.

Referring to the drawings, the letter A designates one of the platforms of a passenger coach equipped with my improvement, and B denotes the coupling, which may be of any

approved style or pattern. The platform is recessed above and in line with the drawhead C of the coupling to make room for the stem, D, of the buffer-plate or head E; suitable springs I and J being provided for keeping the buffer-head projecting normally some distance in front of and beyond the platform.

To the upper side of, and at right angles to, the buffer-head E is fastened a plate, F, which projects inwardly and horizontally above and in alignment with the platform A, upon which its free or inner end rests and slides. This sliding plate F constitutes the false platform or buffer-bridge, and is covered at its free end, overlapping the fixed platform A, by the guard-plate G, the inner end of which, where it is bolted upon platform A, is made with a shoulder, H, so as to leave an open space between it and the platform for the insertion and free movement of the movable platform F, as will appear more clearly by reference to Fig. 2 of the drawings.

The rear end of the stem D passes through a guide-block K, secured to the car platform and is provided with a head L, against which the spring I abuts. The other spring J, is confined between the block K, and a plate M, secured to the stem D. Pivoted to this plate is an inclined push-rod N, having a dove-tailed foot O, which slides in a correspondingly shaped groove or slot in a plate P, bolted to the draw-bar of the coupling. From this it will be seen, that when the cars come together, with the buffer-heads of opposite platforms abutting against each other, a continuous bridge or platform is formed by the adjacent false or movable platforms F, spanning or bridging the open space between adjacent cars. As the buffers yield, the false platforms will yield with them, sliding under their respective guard-plates G, so that at all times a safe bridge-connection will be formed between the several cars making up a train.

It will be noted that when the drawbars are pushed in, the rod N will slide in the slot in plate P without moving the buffer-head, but when the drawbars are pulled out, the foot O will strike the rear wall of said plate, and cause the bar to pull the buffer-heads outward with a positive movement.

Having thus described my invention, I claim and desire to secure by Letters - Patent of the United States:

5 The combination of the stationary platform and draw-bar, the buffer for sliding in a recess below the same, between it and the coupling, the shouldered guard-plate, and the false platform secured to the top of the buffer-head, and projecting rearwardly into the  
10 recess between the underside of the guard-plate and the top of the stationary platform; the springs, the plate connected with the buf-

fer, and the push-rod connected therewith and sliding in a slot in the plate secured to the drawbar, substantially as and for the purpose set forth. 15

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

THOMAS L. MCKEEN.

Witnesses:

T. F. HASCALL,

M. C. HASCALL.