(No Model.)

T. L. McKEEN.

BUFFER FOR RAILWAY CARS.

No. 302,512. Patented July 22, 1884.

Fig. 1.

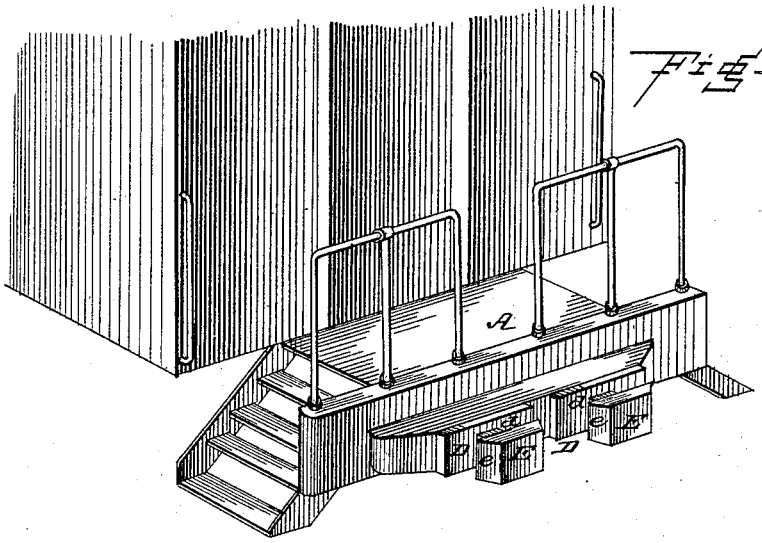


Fig. 2.

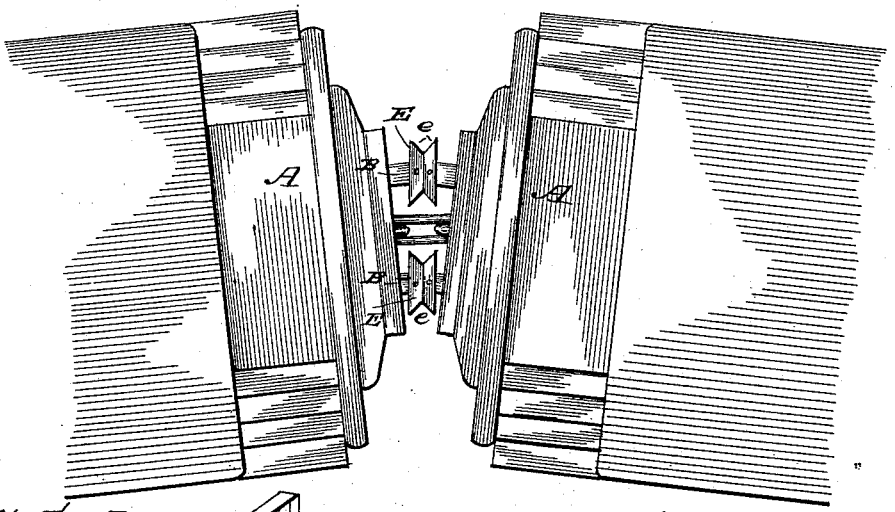


Fig. 3.

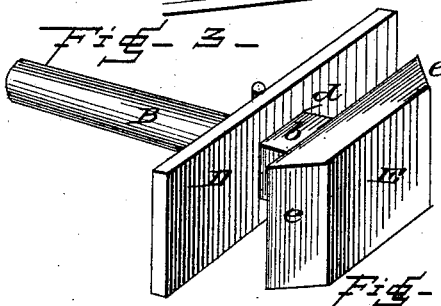


Fig. 4.

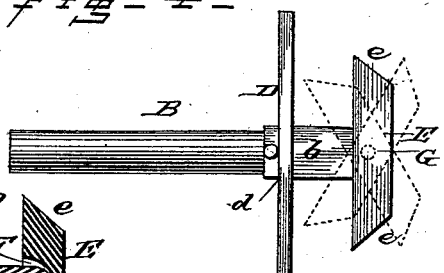
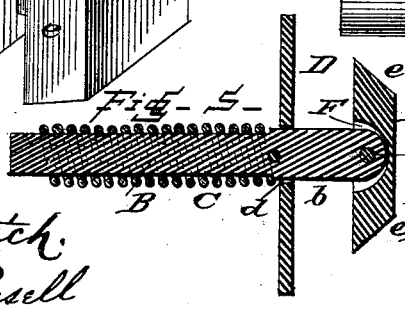


Fig. 5.



WITNESSES:

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BUFFER FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 302,512, dated July 22, 1884.

Application filed April 28, 1884. (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 Easton, in the county of Northampton and State of Pennsylvania, 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 perspective view of the front end of a passenger-car provided with my improved "buffer." Fig. 2 is a top or plan view representing two platforms fitted with my improved buffer, illustrating the manner in which the latter operates in turning curves. Fig. 3 is a perspective view of one of the buffers removed from the platform. Fig. 4 is a top view of the same, and Fig. 5 is a horizontal sectional view.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to that class of buffers or bumpers for railway-cars in which the buffer-plate is pivoted upon the end of the buffer-stem; and it consists in the detail construction and combination of parts of the same, as hereinafter more fully described and claimed.

In the accompanying drawings, A A denote the platforms of two cars which are provided with my improved buffer, which can be used in connection with any desired form of coupling, automatic or otherwise. The buffer consists of the usual stem, B, encircled by a coiled buffer-spring, C, and inserted through the plate D on the front end of the platform. Plate D has a square aperture, *d*, for the insertion of the front end of the stem, which is squared, as shown at *b*. The buffer-head consists of a rectangular plate, E, of any suitable dimensions, the sides of which are cut off slanting or beveled, as shown at *e*.

In the back part of plate E is a recess, F, for the insertion of the outer end or head of the projecting square part *b* of the buffer-stem, which is pivoted in said recess by the bolt G, inserted vertically through the plate and its recess F. It follows that the buffer-plate E has a limited play or motion upon the outer end of the buffer-stem.

From the foregoing description, taken in connection with the drawings, the operation of my improved buffer will readily be understood without requiring extended explanation. No matter in what position the cars may be relative to each other, or at what angle they may be placed, the buffer or buffers of one will always strike those of the car next to it, either upon the flat face of the buffer-plate or upon one of its bevels *e*, thereby tilting the plate to one side or to the other, as indicated by the dotted lines in Fig. 4. As the buffers will yield, they cannot slip past each other and become interlocked by the plate of one slipping past and back of that of one of the buffers on the car next in order. Neither will the buffers cease to operate or become bent or distorted, even on the shortest curves.

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

The combination of the front of the platform having the square perforation *d*, the buffer-stem having the square forward end sliding in the said perforation, the buffer-spring, and the rectangular buffer-plate having its side edges cut off beveled and pivoted to rock in a horizontal plane upon the end of the buffer-stem, as and for the purpose shown and set forth.

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:
AUGUST PETERSON,
ARTHUR L. MORSELL.