(No Model.) 2 Sheets—Sheet 1.

T. L. McKEEN.

BUFFER PLATFORM FOR RAILROAD CARS.

No. 601,900. Patented Apr. 5, 1898.

Fig. 1.

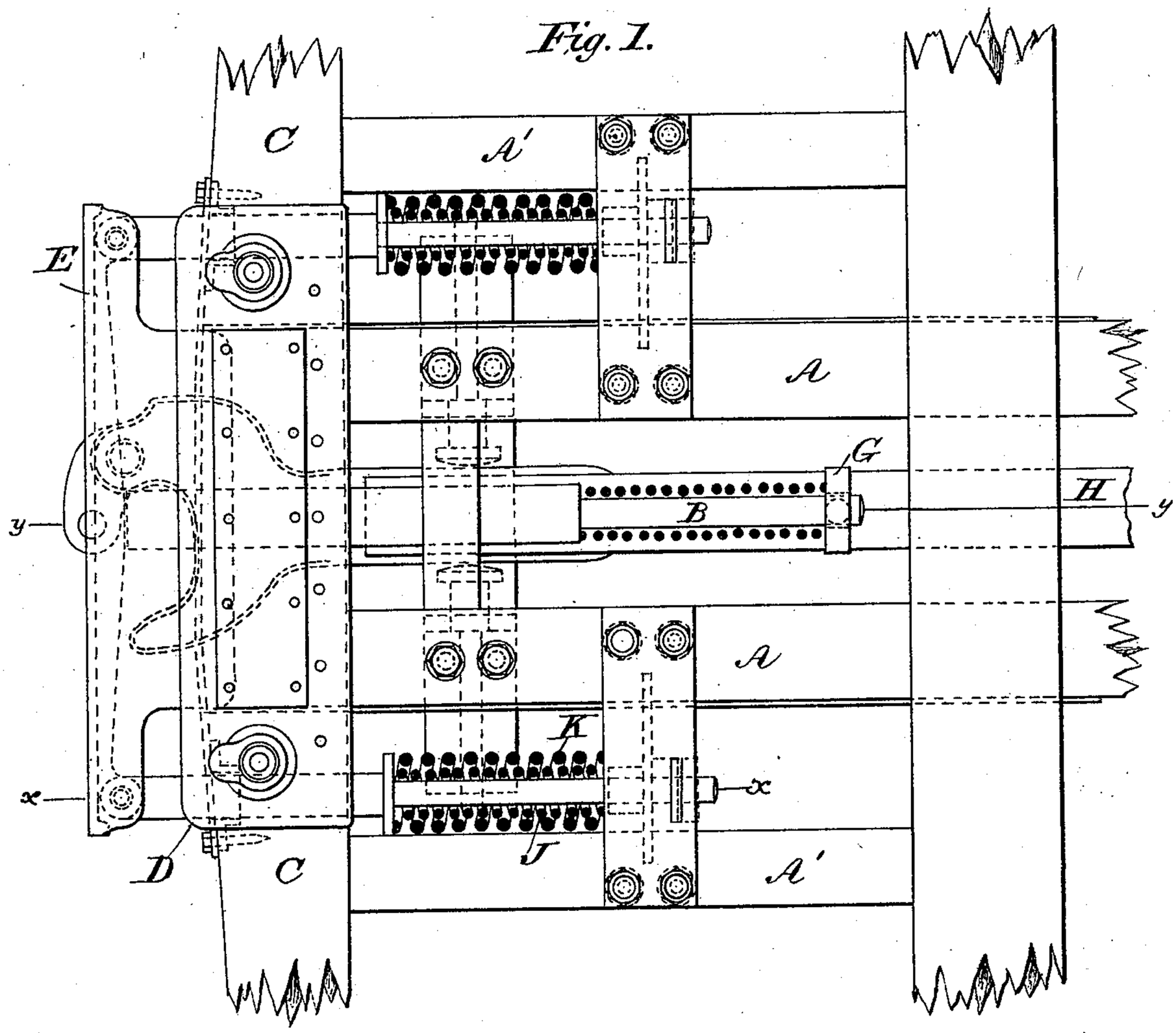
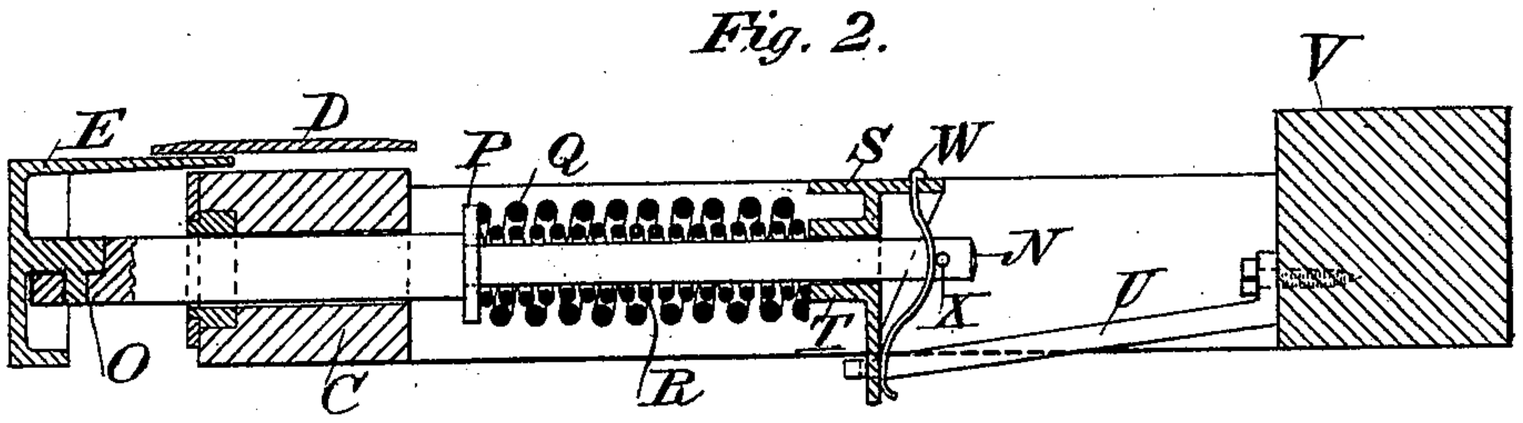


Fig. 2.



Witnesses:
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(No Model.) 2 Sheets—Sheet 2.

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BUFFER PLATFORM FOR RAILROAD CARS.

No. 601,900. Patented Apr. 5, 1898.

Fig. 3.

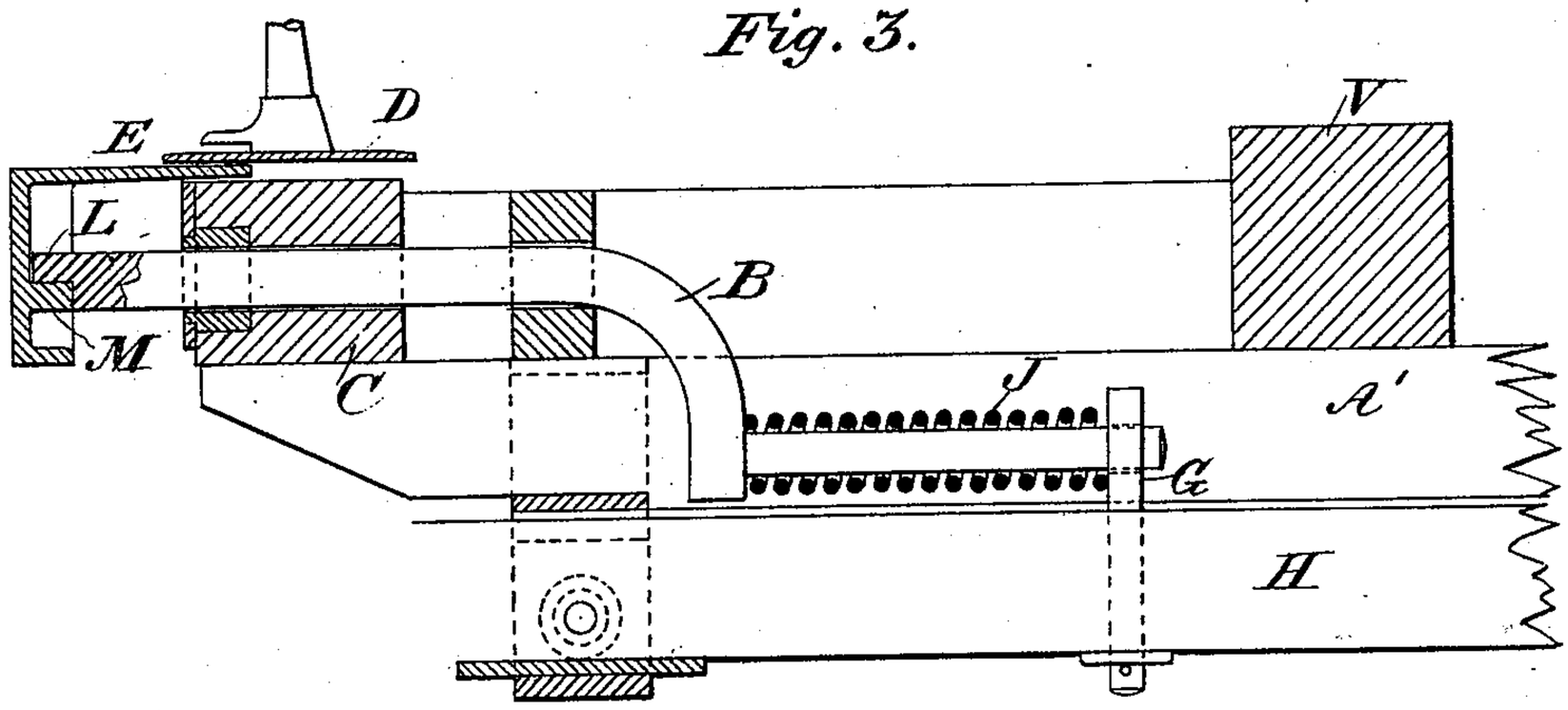


Fig. 5.

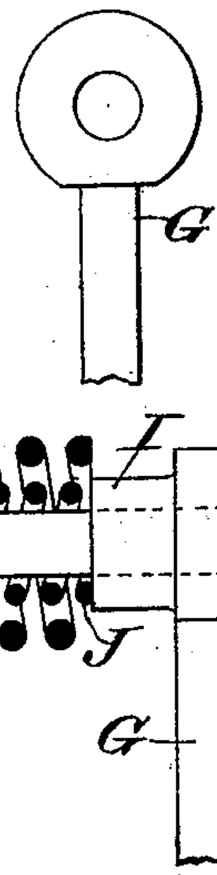
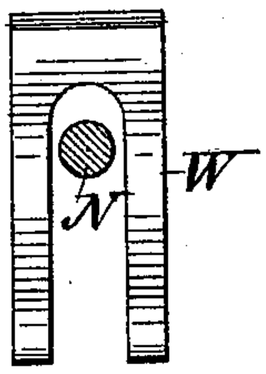


Fig. 4.

Fig. 6.



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UNITED STATES PATENT OFFICE.

THOMAS L. McKEEN, OF NEW YORK, N. Y.

BUFFER-PLATFORM FOR RAILROAD-CARS.

SPECIFICATION forming part of Letters Patent No. 601,900, dated April 5, 1898.

Application filed November 1, 1897. Serial No. 657,075. (No model.)

To all whom it may concern:

Be it known that I, THOMAS L. McKEEN, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Buffer-Platforms for Railroad-Cars; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain new and useful improvements in buffer-platforms for railroad-cars, and particularly to that class shown and described in Letters Patent No. 574,257, granted December 29, 1896, to myself and Alfred H. Renshaw.

My present invention has for its object to simplify the construction shown in the patent referred to by reducing the number of parts and so arranging or assembling the same that they may be placed in proper position with great facility; and with these ends in view my invention consists in the construction and arrangement of parts hereinafter more fully described and claimed.

In order that those skilled in the art may fully understand my invention, I will proceed to describe the same, referring by letters to the accompanying drawings, in which—

Figure 1 represents a plan view, partially in section, of my improvements as applied to the frame and platforms of a car. Fig. 2 is a longitudinal section at the line *x x* of Fig. 1. Fig. 3 is a central longitudinal section at line *y y*, Fig. 1. Fig. 4 is a side elevation of the central buffer-stem and springs and the supporting eyebolt or stop. Fig. 5 is a rear plan view of the eyebolt or stop; and Fig. 6 is a rear or plan view of the retaining-springs employed in connection with the side buffer-stems, the latter being shown in cross-section.

Similar letters of reference denote like parts in the several figures of the drawings.

A represents the ordinary longitudinal sills of the frame of the car, between which is arranged the central buffer-stem B. The head or transverse beam is represented at C and constitutes the support for the ordinary or main platform D, which overlaps the buffer-platform E.

F F are the side buffer-stems.

In the Letters Patent herein referred to the main buffer-stem is formed with a shoulder to bear against the end of an arm extending from a shoe containing coil-springs bearing against a stop secured to the coupler. In my present construction the central buffer-stem B is turned downwardly after passing through the cross-beams and then at right angles and horizontally into a tailing, as it were, and passes through an eyebolt G, secured vertically in the coupler H, which bolt is formed with a cylindrical shoulder I, against which an inner coil-spring J bears, while an outer coil-spring K bears against the surface of the eyebolt in rear of and surrounding the shoulder I, both of the coil-springs at their forward ends bearing against the vertical face of the buffer-stem, as clearly shown at Fig. 4. The front end of the buffer-stem G is mortised to form a lip L, (see Fig. 4,) adapted to overlie a corresponding lip M (see Fig. 3) on the buffer-platform.

The side buffer-stems N are each provided at their front ends with a recess or pocket to receive a teat or pivot O (see Fig. 2) on the casting of the buffer-platform, and thus when the central and two side buffer-stems are in position the buffer-platform is supported horizontally by the two side buffer-stems, with the central buffer-stem overlapping the lip M, and consequently the buffer-platform is practically locked in a horizontal position. Each of the side buffer-stems N is provided with collars P, against which are supported the front ends of an exterior coil-spring Q and an interior coil-spring R.

The rear ends of the side buffer-stems pass through a seat in a bracket S, formed with a collar or extension T, which forms a bearing for the interior coil-spring R, while the base surrounding the collar constitutes a bearing for the outer coil-spring Q. This bracket S is mortised in and constitutes a bridge between the side sills A and A′ of the frame, as clearly shown at Figs. 1 and 2. A brace U extends from the lower end of the bracket S to a cross-beam V and supports the bracket against undue thrust.

W is what I denominate a "pantaloons-spring," (see Fig. 6,) the upper end of which is rigidly connected to the bracket S and the lugs of which straddle the side buffer-stems

and impinge against the rear surface of the lower extremity of the bracket, as clearly shown at Fig. 5, and a cotter-pin X, passing through the end of the side buffer-stems in rear of the spring W, secures said stems in position, so that the springs W operate to prevent the buffer-platform from being projected abnormally when the cars are uncoupled, while, as will be readily understood, when the cotter-pin X is removed from the side buffer-stems the buffer-platform and the side buffer-stems may be moved outwardly a sufficient distance to clear the main platform D and to release the interlocking lips L and M between the buffer-platform and the central buffer-stem, whereupon the buffer-platform may be lifted off the side buffer-stems N.

As the eyebolt G is connected with the coupler and the springs J K are confined between the front face of said eyebolt and the rear vertical face of the central buffer-stem B, it follows that when the coupler is pulled out it will force the faces of the buffers of adjacent cars positively together.

It will be seen that if the teats or pivots on the buffer-platform, which engage with the recesses or sockets in the front ends of the side stems, should at any time become broken the connection between the side stems and the platform may be readily secured by drilling a hole and using a coupling pin or pivot.

As the bracket is embedded in the sills and braced by the brace U, it will be apparent that I am enabled to give great strength to the springs Q R.

Having described the construction and operation of my improvements, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination with the main platform and coupler, and the buffer-platform constructed with a central rear projection or lip M and side teats or pivots O, the central buffer-stem provided with a forwardly-extended lip, and the side buffer-stems with recesses or pockets corresponding with the pivots O, substantially as and for the purpose set forth.

2. In combination with the main platform D, coupler H and buffer-platform E, the central buffer-stem B turned downwardly and then at right angles, the eyebolt G secured to the coupler, and the spring J interposed between the vertical plane of the stem B and the face of the eyebolt G, substantially as and for the purpose set forth.

3. In combination with the main platform D, buffer-platform E, coupler H and central buffer-stem B, the side buffer-stems N, the brackets S, braces U and springs W and cotter-pins X, substantially as and for the purpose set forth.

4. In combination with the side sills A, A′, side buffer-stems N, and springs R, the brackets S bridging the sills A, A′ and braced against the cross-beam V by an intermediate brace-bar U, substantially as and for the purpose set forth.

5. In combination with the side stems N, brackets S, springs R, and cotter-pins X, the pantaloons-springs W, secured to the top plate of the brackets and bearing at their free ends against the vertical arm of the brackets, substantially as shown and described.

6. In combination with the side buffer-stems provided with collars P, and the brackets S formed with the extension-collars T, the coil-springs Q, R, pantaloons-springs W and cotter-pins X, substantially as and for the purposes set forth.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS L. McKEEN.

Witnesses:
CHAS. W. RIECK,
E. P. RUSSITT.