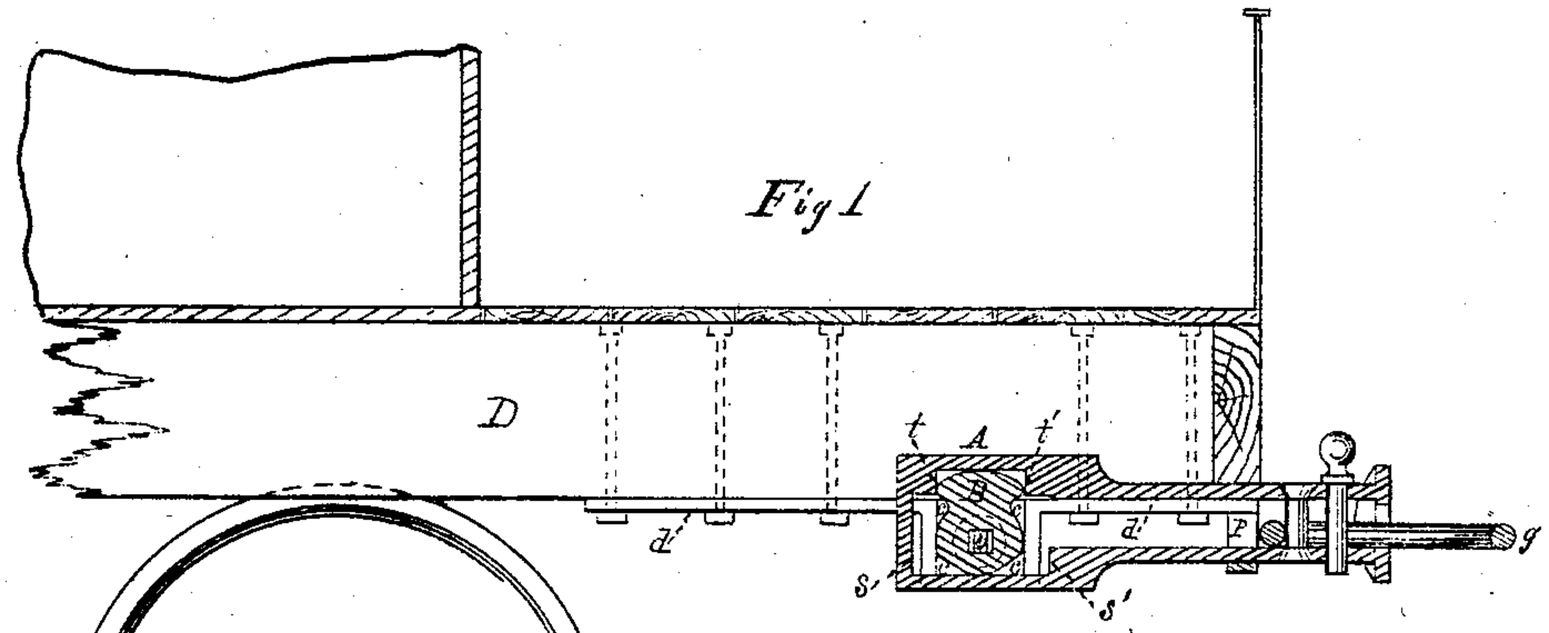
C. W. SALADEE.

Buffer-Springs for Railroad Cars.

No. 135,369. Patented Jan. 28, 1873.



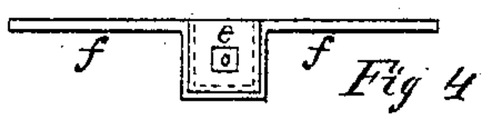


Fig 4

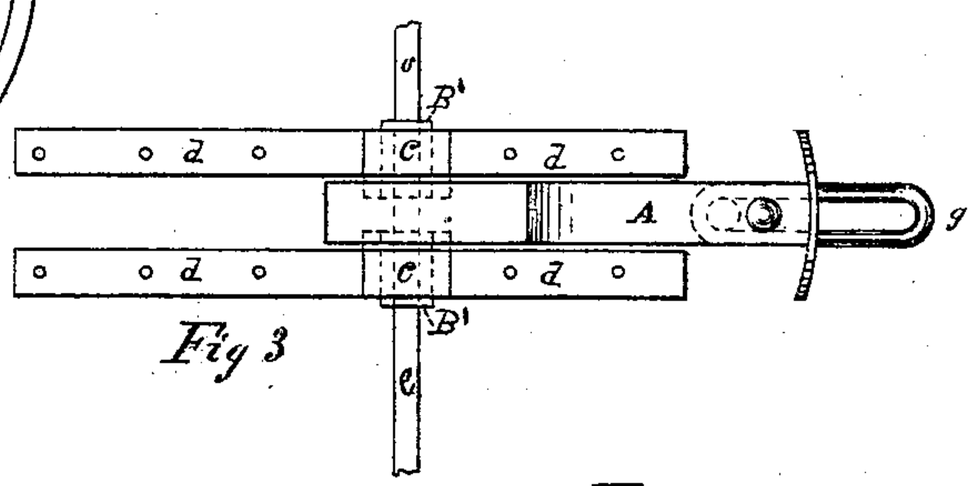


Fig 3

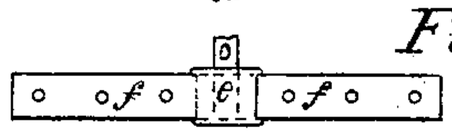


Fig 5

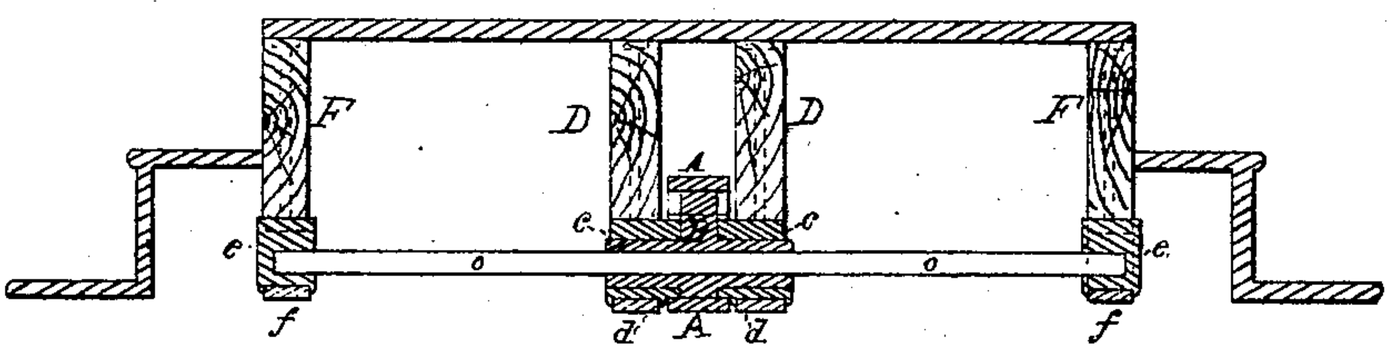


Fig 2

Witnesses:
James McBride
Geo. B Hubbard,

Inventor:
Chas. W. Saladee

UNITED STATES PATENT OFFICE.

CYRUS W. SALADEE, OF ST. CATHARINE'S, CANADA.

IMPROVEMENT IN BUFFER-SPRINGS FOR RAILROAD CARS.

Specification forming part of Letters Patent No. **135,369**, dated January 28, 1873.

To all whom it may concern:

Be it known that I, CYRUS W. SALADEE, of St. Catharine's, in the Dominion of Canada, have invented certain Improvements in Spring-Buffers for Railway Cars, of which the following is a specification embodying my invention:

Nature and Object.

The nature of my invention consists in the application of torsional springs to buffers or coupling for railway cars; and has for its object the construction of these parts with greater strength and permanency than has heretofore been done in the application of any other form of springs adapted for this purpose.

The Drawing.

In the drawing, Figure 1 is a longitudinal section of one end of a car taken through the center of the buffer. Fig. 2 is a cross-section of the platform of the car and buffer taken through the center of the torsional spring O. Fig. 3 is a top view of the buffer and the attachments employed in securing and operating it in position upon the body of the car. Fig. 4 is a side view of one of the boxes or bearings *e*, receiving and rigidly holding the opposite ends of the spring O; and Fig. 5 is a top view of the same.

A is the draw-head now in general use, and which is placed under the end of the platform of the car, the front end of which receives the coupling-link *g*, and the opposite end so formed as to inclose the arm B, through which the spring passes, and is there rigidly held by reason of the square hole through the arm B at its base corresponding with the square of the spring, while the outer ends of the springs are in like manner rigidly held in the boxes *e*. The upper end of the arm B is formed with rounded projections on each side, which fit between shoulders *t* and *t'* in the upper side of the draw-head A. On each side, of the arm B are formed sleeve-bearings or journals B', which fit into boxes C and C secured to the bottom of the timbers D D by means of wrought-iron straps *d d* made to fit around the boxes, the sleeve-bearings rotating in the boxes to accommodate the action of the spring. These boxes C C, it will be seen by the dotted lines in Fig. 3, and the section in Fig. 2, extend into the draw-head far enough on each side to form a stop for the draw-head so as to prevent its movement beyond the required distance either forward or back from its present position.

The spring O is made of a number of plates of steel laid together until the required strength is obtained, or any of the solid forms of torsional springs may be used.

A glance at the drawing is all-sufficient to clearly understand the construction and operation of the draw-head or buffer in combination with the torsional spring O; yet I wish it distinctly understood that I do not limit my claim to any particular combination of parts by which to secure and operate the combined draw-head or buffer and the torsional spring. Neither do I limit my claim to the application of a single torsional spring in combination with the buffer, since two or more may be employed if experience shall demonstrate the necessity of such a degree of increased strength.

Claim.

I claim as my invention and desire to secure by Letters Patent—

A buffer or coupling for railway cars provided with a torsional spring, substantially as and for the purpose set forth.

CYRUS W. SALADEE.

Witnesses:
JAMES MCBRIDE,
FRANCIS TORRANCE.