

JOHN HALDEMAN.

Improvement in Springs for Railway Car Buffers.

No. 125,191.

Patented April 2, 1872.

Fig. 1.

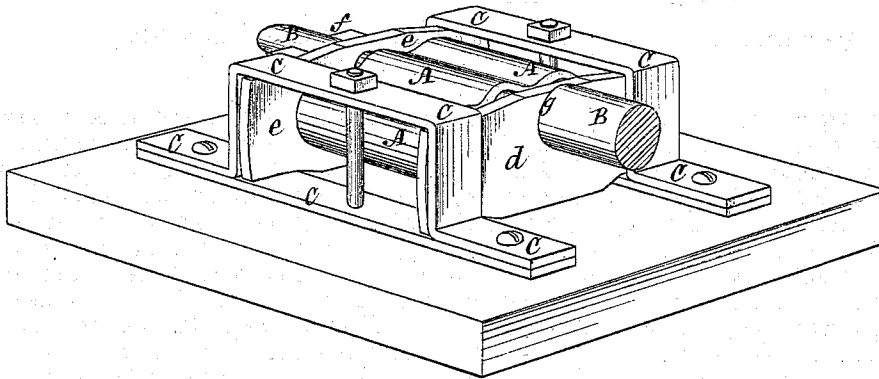


Fig. 2.

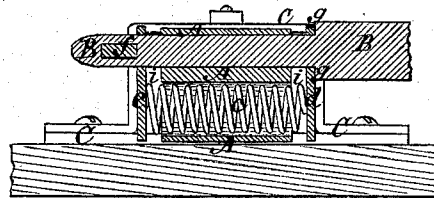
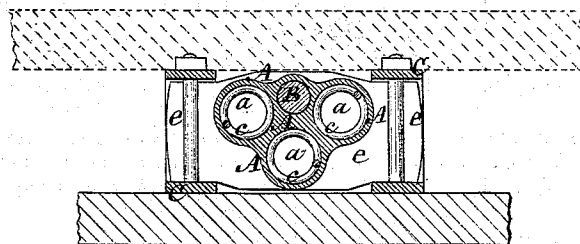


Fig. 3.



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JOHN HALDEMAN, OF WEST POINT, VIRGINIA.

IMPROVEMENT IN SPRINGS FOR RAILWAY-CAR BUFFERS.

Specification forming part of Letters Patent No. 125,191, dated April 2, 1872.

To all whom it may concern:

Be it known that I, JOHN HALDEMAN, of West Point, in the county of King William and State of Virginia, have invented certain new and useful Improvements in Springs for Railroad Cars; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings making a part of this specification, in which—

Figure 1 represents in perspective the mode of arranging and applying my invention, in connection with the draw-bar of a railroad car. Fig. 2 represents a longitudinal section through the same; and Fig. 3 represents a transverse section thereof.

Similar letters of reference where they occur in the separate figures denote like parts of the apparatus or contrivance in all of the drawings.

My invention relates to a mode of holding spiral springs in a case which may be made of cast or malleable iron, or of steel, or of rubber, or other suitable substance, perforated to receive the spirals, which may be of any number, and with a hole through which the draw-bar passes. The case is made so much shorter than the spring that just before the spring or springs are exhausted the blow will be received by the case. The case will keep the springs in line, and will enable plain spirals, or spirals packed with wool or any other substance, to be used in a space the length of the spiral, and with a very much diminished weight of case.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings.

The case A, as represented in the drawings, is of cast metal, with three openings, *a a a*, through it for the reception of the spiral springs *c c c*; there is also a hole or opening through it for the draw-bar B to pass through. In or

by the straps C C that are fastened securely to the car there is held or supported a front and rear plate, *d e*, through which also the draw-bar B may pass, it being, as shown, keyed back of the rear plate, as at *f*, and shouldered, as at *g*, where it comes against the front plate. The case A is somewhat shorter than the space between the front and rear plates *d e*, as shown at *i i*; and said case or the plates may move through this space but no further. The plates *d e* are not fastened in the straps, but are controlled by them; and when the springs are about to be exhausted the strain comes upon one or the other of these plates, and eventually on the straps.

The spaces *a* in which the spirals *c* are placed may be packed with wool or other substance, if so desired. The case A defines the distance that the end plates can move toward it or in that direction; and the straps C C define their extent of movement in the opposite direction, as they also do the movement of the case itself when it moves.

By this arrangement and construction a very light, but very efficient buffer or other spring may be made, used, and applied to railroad cars.

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

As an improvement in buffer and draw-bar springs, the case A, provided with longitudinal recesses or cylindrical chambers for the springs, and arranged on the prolongation of the draw or buffer-bar, the springs extending beyond the case and resting against the movable front and rear plates *d e*, constructed, arranged, and operating substantially as described.

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Witnesses:

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