(No Model.)

J. A. WEBER.

RAILWAY BUFFER ARRESTER.

No. 581,185. Patented Apr. 20, 1897.

Fig. 1.

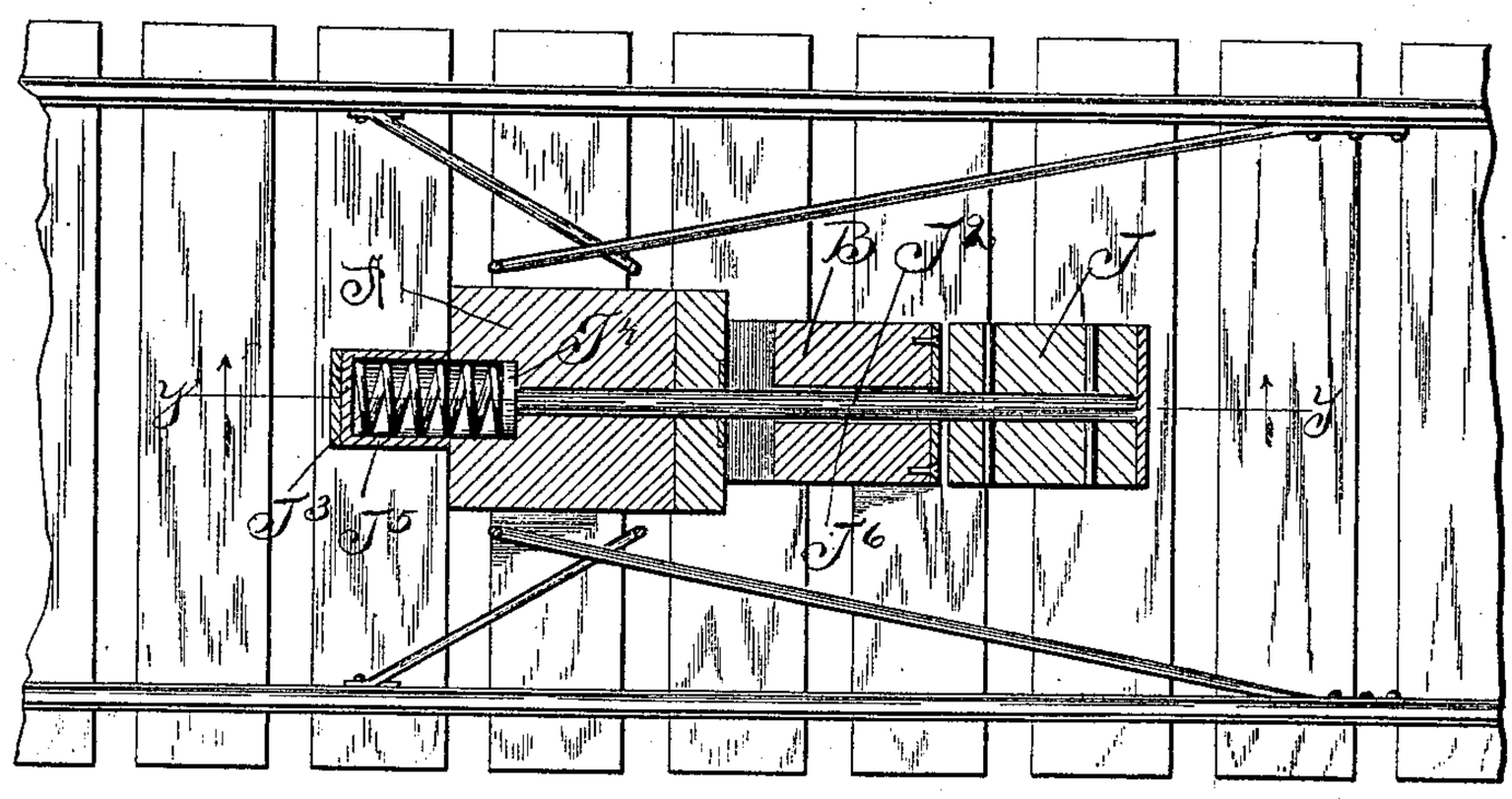

Fig. 2.

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UNITED STATES PATENT OFFICE.

JOHN A. WEBER, OF CHICAGO, ILLINOIS, ASSIGNOR OF FOUR-FIFTHS TO JOSEPH M. WEBER, M. SHINE, F. MECKEL, AND RICHARD BOCHTLER, OF SAME PLACE.

RAILWAY-BUFFER ARRESTER.

SPECIFICATION forming part of Letters Patent No. 581,185, dated April 20, 1897.

Application filed March 7, 1896. Serial No. 582,281. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. WEBER, a citizen of the United States, residing in Chicago, Cook county, State of Illinois, have invented a new and useful Improvement in Railway-Buffer Arresters, of which the following is a full, clear, and exact specification.

My invention relates to certain improvements in a railway-buffer arrester, a patent for which was duly granted to me on the 25th day of February, 1896, and numbered 555,273, and relates more particularly to the use of the arresters at the end of those tracks commonly used for passenger service, although the same may be found desirable for use in freight service.

The patent to which reference has just been made sets forth and describes an arrester having a stationary post and another post hinged thereto, the latter receiving the forcible impact and moving upon its hinge in order to relieve the strain. In moving upon its hinge the movable post at its upper portion travels through the arc of a circle, and should the draw-head of the car impact and bear directly upon the movable post these parts must frictionally yield or the car would be raised slightly from the track as the movable post travels through the arc of a circle.

The object of this my invention is to overcome the necessity of a frictional yielding and tendency to raise the impacting car from the track and to provide means whereby the draw-head impacts against an object which yields in the direct line of travel of the draw-head and to accomplish this result without interfering with the free movement of the hinged post on its pivot.

My invention has certain other objects in view; and it consists in certain features about to be described, reference being now had to the accompanying drawings, in which—

Figure 1 is a sectional plan view on the line *x x* of Fig. 2, and Fig. 2 is a vertical section on the line *y y* of Fig. 1.

The stationary post A is held in a fixed position between the rails and at the end of the track by any suitable means. To this stationary post is hinged the movable post B, which movable post is thus adapted to receive the preliminary shock of the forcible impact and relieve the same by a rearward movement, its upper portion describing the arc of a circle whose center is at the point of hinging of the two posts.

Extended loosely through the two posts A and B is the pull-rod D, having the two sets of springs D^2 and D^3 coiled around it and interposed, respectively, between the faces of the posts A and B and the holding-plates D^4 on the ends of the rod D, these springs serving to return the movable post B into a normally extended or advanced position to receive the impact of the car and acting in opposition to the rearward movement of the upper portion of said post B.

In order that the draw-head of the car may strike against an object or abutment independent of the movable post A, I provide the independent buffer-block J, which is disposed or positioned in advance of or beyond the front face of the movable post B. This buffer-block J is held in position by means of the buffer-block rod J^2, on the outer end of which it is fixedly mounted, the rod J^2 extending through or nearly through the two posts A and B. An extending spring J^3 is interposed between a plate J^4 on the end of the rod J^2 and a cap J^5, held on the rear of the post A. The rod J^2 passes through an enlarged opening in or perforation through the movable post B, (designated at J^6,) and the pull-rod D also extends through a like perforation J^7.

When the buffer-block J receives the blow from the draw-head of the advancing car or other vehicle moving along the track, the strain or stress of the shock is received by said buffer-block J initially and transmitted to the movable post B, the spring J^3 also serving as a cushion for the shock. The movable post B at its upper and lower portions in its movements travels in the arc of a circle on its hinge. It will be observed that by the construction described the buffer-block J and its rod J^2 may have a direct inward and outward movement along a horizontal plane entirely independent of the vibratory movement of the movable post B, and as the draw-head

of the car impacts against the buffer-head J said buffer-head and its rod have a direct horizontal inward movement in the same direction as that of the thrust of the draw-head, thereby avoiding any tendency to lift the car from the track.

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

1. A buffer-arrester for railway-tracks consisting of a stationary post, a movable post hinged to the stationary post and a buffer-block mounted on the stationary post and held in advance of the stationary post which buffer-block has a movement independent of that of the movable post whereby the movable post may travel in the arc of a circle and the buffer-post in the direction of travel of the impacting object.

2. A buffer-arrester for railway-tracks consisting of a stationary post, a movable post hinged to the stationary post, a buffer-block, supporting arms or rods mounted on the stationary post holding the buffer-block in advance of the movable post whereby said buffer-block has a movement independent of that of the buffer-post and resisting means acting in opposition to the movement of the movable post adapted to restore the movable post and the buffer-block into a position whereby to again receive the impact of an object advancing along the track.

3. A buffer-arrester for railway-tracks consisting of a stationary post, a movable post hinged to the stationary post, a buffer-block, a buffer-rod extended through the said posts carrying the buffer-block and holding the same in a position in advance of the movable post and a resisting device acting against the rearward movement of the buffer-block when the same receives the impact of an object moving along the track and means for restoring the movable post to an advanced position.

4. A buffer-arrester for railway-tracks consisting of a stationary post, a movable post hinged to the stationary post, a buffer-block, a buffer-block rod which passes loosely through an enlarged opening in the movable post and a resisting device for said buffer-block adapted to extend the same into an advanced position together with means for normally holding the upper portion of the movable post in an advanced position.

In testimony whereof I have hereunto affixed my signature in the presence of two witnesses.

JOIIN A. WEBER.

Witnesses:
CHAS. C. BULKLEY,
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