No. 716,553. Patented Dec. 23, 1902.

W. KELSO.

BUFFING MECHANISM FOR CARS.

(Application filed May 27, 1901. Renewed Nov. 13, 1902.)

(No Model.)

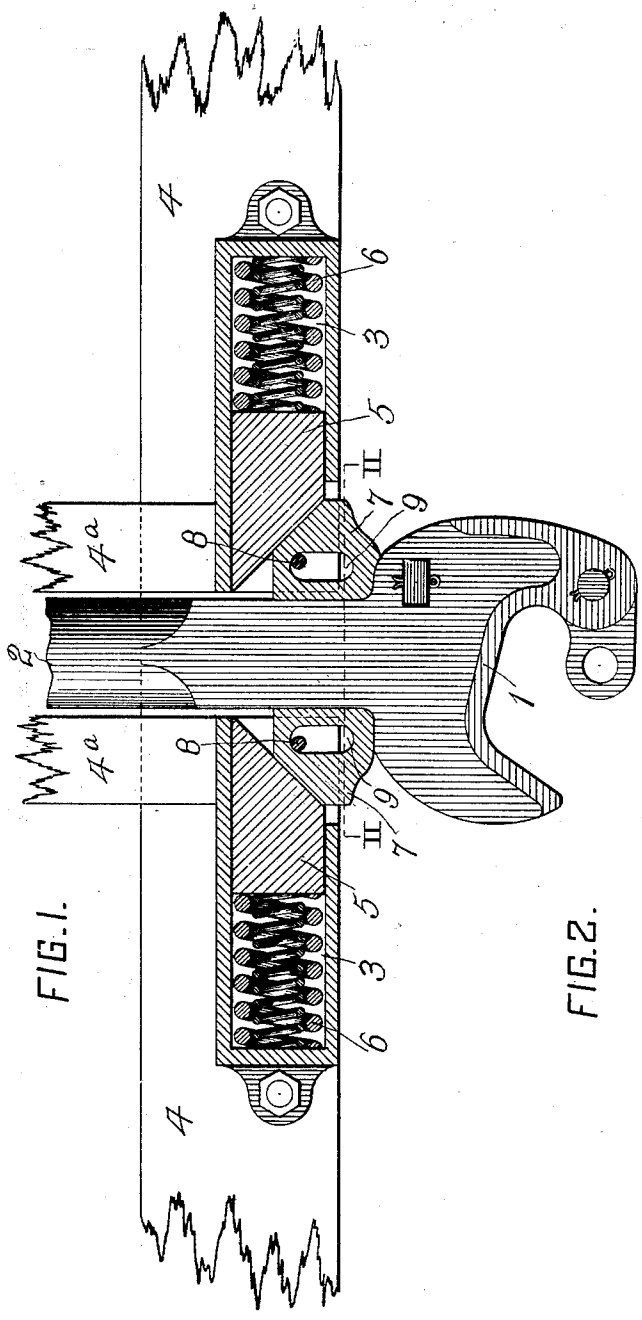


FIG. 1.

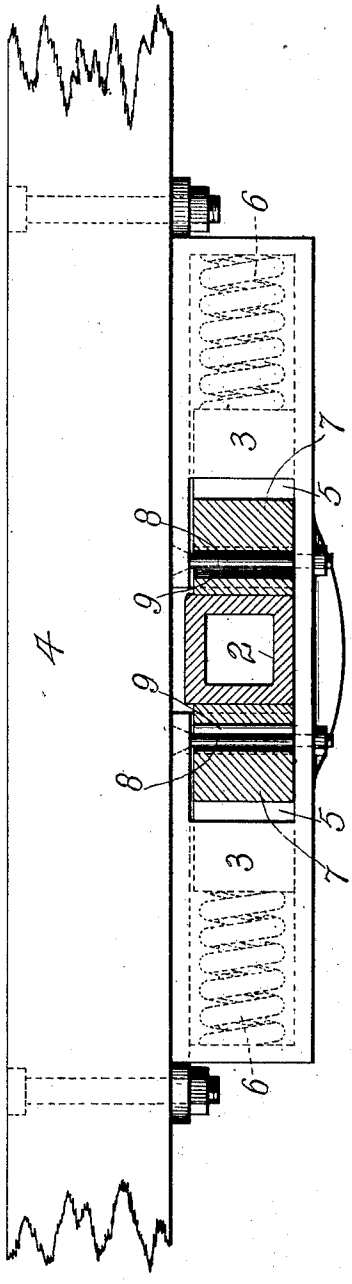


FIG. 2.

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UNITED STATES PATENT OFFICE.

WILLIAM KELSO, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO THE McCONWAY & TORLEY COMPANY, OF PITTSBURG, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

BUFFING MECHANISM FOR CARS.

SPECIFICATION forming part of Letters Patent No. 716,553, dated December 23, 1902.

Application filed May 27, 1901. Renewed November 13, 1902. Serial No. 131,266. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM KELSO, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented or discovered certain new and useful Improvements in Buffing Mechanism for Cars, of which improvements the following is a specification.

The invention described herein relates to certain improvements in buffing mechanism for cars, and has for its object an arrangement of elements whereby frictional and spring resistance is presented to the inward movement of the coupler-head.

The invention is hereinafter more fully described and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a sectional plan view illustrating my improvement and the manner of applying it to a car; and Fig. 2 is a sectional elevation on a plane indicated by the line II II, Fig. 1.

In the practice of my invention the coupler-head 1, with its stem 2, is constructed and secured to the car in the usual and any suitable manner, with the usual or any suitable construction and arrangement of draft and buffing springs and connections. (Not shown.) Sockets 3 are secured to the end sill 4 at angles to the axis of the coupler. It is preferred that these sockets should be arranged under the end sills, so that the sockets will bear against and be supported laterally by the ends of the draft-sills 4^a, which are cut off, so that the outer walls of the sockets will be flush, or nearly so, with the outer faces of the end sills. Movable blocks 5 are arranged within the sockets and bear at their outer ends against springs 6, interposed between the end walls of the sockets and the movable blocks 5. The inner ends of the blocks are beveled or inclined to correspond with wedge faces carried by the coupler. It is preferred to form the wedge faces on blocks 7 interposed between the stem of the coupler and the inclined inner ends of the blocks 5 and bearing against the stem and the rear wall of the coupler-head 1. When the blocks 7 are formed independent of the coupler, they are held in position in the sockets by means of pins 8, passing through slots 9 in the blocks and having their ends secured in upper and lower walls of the sockets 3. By the action of the springs and the inclined faces of the blocks 5 and 7 the blocks 7 are forced out against the coupler-head except when the latter is subjected to a pull. When the coupler is forced inwardly, the wedge faces carried thereby will slide transversely off the inclined ends of the blocks 5, forcing them outwardly against the springs 6. The inward movement of the coupler will be resisted by the springs, and its momentum will be taken up in overcoming the friction between meeting faces of the blocks 5 and 7 and the resistance of the springs.

It is characteristic of my invention that the buffing mechanism can be applied to any standard form of coupling mechanism without any change or reconstruction thereof. The application of the buffing mechanism to cars now in use involves only the cutting away of short sections of the draft-sills and the bolting of the sockets to the end sills. It will be observed that the arrangement of the buffing mechanism is such that the strains and shocks are transmitted directly from the coupler-head to the buffing mechanism, so that the neck portion at the junction of the stem and head is not liable to injury.

I claim herein as my invention—

1. The combination of a coupler, springs arranged on opposite sides of the coupler adjacent to its head and at an angle to its axis, wedge-blocks arranged in the rear of the coupler-head and adapted to be shifted by the head when forced inwardly, and blocks interposed between the springs and the wedge-blocks, substantially as set forth.

2. A buffing mechanism for cars having in combination a socket, a block movably mounted in the socket and having an inclined end, a spring interposed between the block and a stationary wall or abutment, and a wedge movably mounted in the socket and adapted to be shifted transversely of the block by the inward movement of the coupler-head, substantially as set forth.

3. The combination of a coupler, springs arranged on opposite sides of the coupler and

adjacent to the head of the latter, wedge-blocks interposed between the coupler and the springs and bearing against the rear wall of the coupler-head and adapted to be shifted by the coupler-head in a direction at an angle to the axes of the springs to compress the latter, substantially as set forth.

4. The combination of a coupler, springs arranged on opposite sides of the coupler and supported by the end sill of the car, wedge-blocks bearing against the rear wall of the coupler-head and blocks interposed between the springs and the wedge-blocks, substantially as set forth.

In testimony whereof I have hereunto set my hand.

WILLIAM KELSO.

Witnesses:
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