G. W. MORRIS.

SPRING SEATS FOR CAR PEDESTALS.

No. 188,932. Patented March 27, 1877.

Fig. 1.

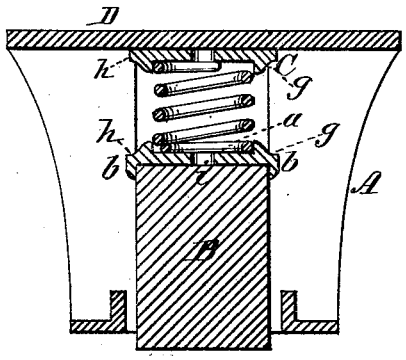


Fig. 2.

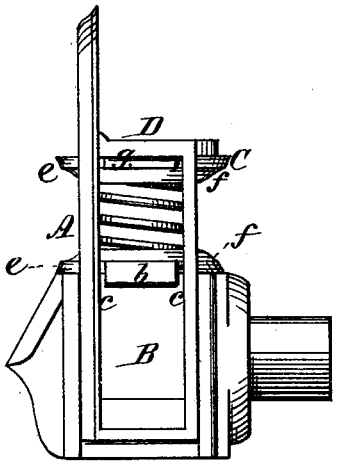


Fig. 3.

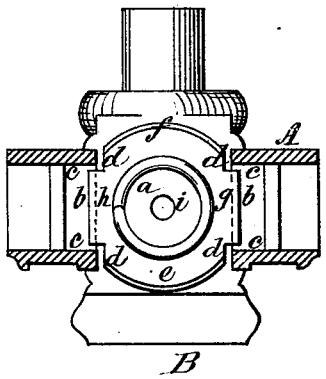
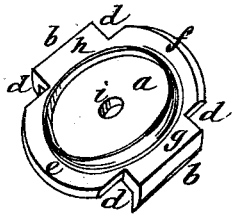


Fig. 4.



Witnesses;
Floyd Norris.
W. E. Hoffer

Inventor;
Geo. W. Morris,
by Johnson & Johnson
Attys

UNITED STATES PATENT OFFICE

GEORGE W. MORRIS, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN SPRING-SEATS FOR CAR-PEDESTALS.

Specification forming part of Letters Patent No. **188,932**, dated March 27, 1877; application filed January 15, 1877.

To all whom it may concern:

Be it known that I, GEORGE W. MORRIS, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Holders for the Springs of Car-Axle Boxes, of which the following is a specification:

I combine with the pedestal, spring, and axle-box a seat plate or plates for holding the spring in its proper place, and in such manner that it cannot become loose and jump out to one side, where it would be liable to be crushed by the sides of the pedestal, as is frequently the case. The seat plate or plates for the spring are of peculiar construction, having a recess or hold for the spring, and means for holding itself in place, both in relation to the journal-box and the open sides of the pedestal. Both ends of the spring may be fitted in such seat-plates, in which case the upper one would rest against the under side of the timber cap-plate and be held in place by projections, which interlock with the pedestal-openings. The lower seat-plate, however, while having such interlocking projections with the pedestal, has also side lips, which embrace the journal-box, and thus render the seat-plate entirely secure.

In the accompanying drawings, Figure 1 represents a vertical section of a car-pedestal and axle-box with my improved seat-plates for the spring applied thereto; Fig. 2, a side view of the same; Fig. 3, a horizontal section, taken above the lower seat-plate for the spring; and Fig. 4, the seat-plate or holder for the spring.

The pedestal A has openings to receive the box B, which is provided with side guides to hold it in place and allow the pedestal to move freely over it. The box may have any approved journal-bearings and means for lubrication; and the spring may be rubber, spiral, or other kind.

The device for holding the spring in place constitutes my invention.

This device consists of a plate having a recess, *a*, on its upper surface deep enough to receive and hold the lower end of the spring securely in place, and downwardly-projecting side lips *b*, for holding the seat-plate in position upon the box. These lips are formed upon opposite sides of the plate and extend over and hug the sides of the box, so that their ends will abut against the inner open sides *c* of the pedestal, and thereby lock the seat-plate to the top of the box, both crosswise and in the direction of the axle.

I find the lips of advantage in giving a better hold for the seat-plate upon the box, but the plate may have corner angular notches *d*, with sides *e f g h* arranged to enter the pedestal-openings, as shown in Fig. 3, and thereby lock the seat-plate directly with the pedestal. These side extensions may be used with and without the lips. One or more holding-lips may be used, as required, to suit different kinds of boxes and pedestals, and keep the spring and its seat-holder in proper position.

The front and back plate extensions *e f* serve to form a wider seat upon the box and give better results. The seat-plate has a center opening, *i*, to adapt it to fit over the boss on the box when the latter is constructed with such boss. I find the box seat-plate sufficient to hold the spring in place, but I may use, in connection therewith, a seat-plate, C, without lips for the upper end of the spring, in which case said seat-plate is fitted and locks, by side extensions in the pedestal-openings, against the under side of the timber cap-plate D, and thus effect a secure hold for the spring at both ends. The seat-plates may also have freedom for slight movement, to allow them to yield with the sudden thrusts and concussions of the axle upon the pedestals, by having slight play in the angular corner and between the lips and the sides of the box; but I prefer to have these plates and lips in close-fitting contact with their locking parts. The pedestals are applied to the car-timbers in the usual way, and they rest upon the springs. The plate-lips may be cast, wrought, or malleable iron, and extend over the box sufficient to make the hold.

I claim—

1. The seat-plate for the spring, having arms *e f g h* at right angles to each other, lips *b* on two of said arms, a central recess, *a*, and a central opening, *i*, and adapted for use with the car-axle box and its open pedestal, as herein specified.

2. The combination, with a car-axle box, its open pedestal and spring, of seat-plates for each end of the spring, each having arms *e f g h* at right angles to each other, and a central recess, *a*, said arms being adapted to fit into and between the open sides of said pedestal, whereby both the spring and its seat-plates are held in place, as described.

In testimony whereof I have hereunto set my hand in the presence of two witnesses.

GEORGE W. MORRIS.

Witnesses:
CALVIN BARTLEY,
WALTER P. HANSELL.