

No. 725,380.

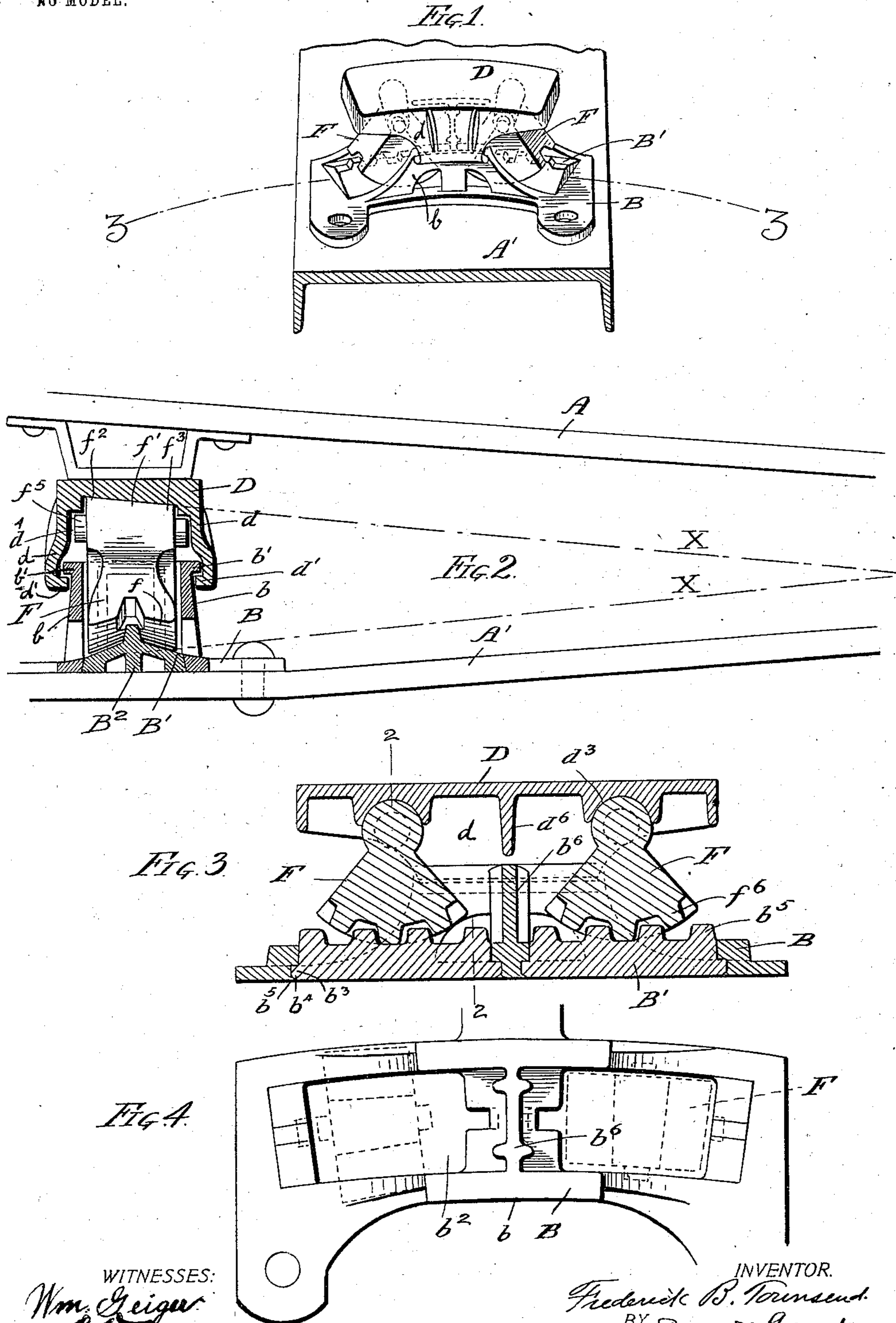
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ROCKER SIDE BEARING FOR RAILWAY CARS.

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NO MODEL.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

FREDERICK B. TOWNSEND, OF CHICAGO, ILLINOIS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO W. H. MINER COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

## ROCKER SIDE BEARING FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 725,380, dated April 14, 1903.

Application filed December 31, 1902. Serial No. 137,264. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERICK B. TOWNSEND, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Rocker Side Bearings for Railway-Cars, of which the following is a specification.

My invention relates to improvements in rocker side bearings for railway-cars, and more particularly to improvements upon the gravity-rocker side bearing forming the subject of United States Patents No. 646,986, of April 10, 1900, No. 668,642, of February 26, 1901, and No. 715,577, of December 9, 1902.

The object of my invention is to provide a rocker side bearing in which the base or bottom plate and reciprocating top plate are secured together by interfitting guides or flanges and which will at the same time admit of the rockers being inserted in position between the top and bottom plates after the top and bottom plates are assembled and locked together by their interfitting guides or flanges.

My invention consists in the means I employ to practically accomplish this object or result—that is to say, it consists, in connection with the base or bottom plate, reciprocating top plate, and a pair of gravity-returning rockers, in providing the bottom plate with openings therein through which the rockers may be inserted in position between the top and bottom plates, said openings in the bottom plate being closed by separate sections which are adapted to be fixed in place after the rockers are in position.

My invention further consists in the novel construction of parts and devices and in the novel combination of parts and devices herein shown or described.

In the accompanying drawings, forming a part of this specification, Figure 1 is a perspective view of a rocker side bearing embodying my invention. Fig. 2 is a vertical section on line 2 2 of Fig. 3. Fig. 3 is a vertical section on line 3 3 of Fig. 1. Fig. 4 is a detail plan of the base or bottom plate.

In the drawings, A represents the body-bolster, and A' the truck-bolster, of a railway-car.

B is the bottom or base plate of the side bearing, the same or its tread B' being curved on the arc of a circle whose center is the king-bolt on which the bolster turns. The bottom plate B is provided with upright side guides b, having projecting flanges b'.

D is the reciprocating top plate of the side bearing, the same having downwardly-projecting side guides d and flanges d', the guides and flanges d d' interfitting and engaging with the guides and flanges b b' to hold the top and bottom plates together, while permitting the top plate to reciprocate in respect to the bottom plate.

To adapt the rockers F F to be inserted upwardly through the bottom plate into position between the top and bottom plates, the bottom plate is provided with openings b<sup>2</sup> large enough to admit the rockers through the same. These openings b<sup>2</sup>, one for each rocker, are closed by removable sections B<sup>2</sup>, having flanges b<sup>3</sup> with rounded corners b<sup>4</sup>, so that after the rockers are inserted and the sections B<sup>2</sup> in place they may be secured in position by upsetting the marginal edges b<sup>5</sup> of the openings b<sup>2</sup>. The gravity returning rockers F F have each a large curved lower bearing-face f and a small curved upper bearing-face f', the bearing-faces being concentric with each other. The rocker-tread B' of the bottom plate is formed on the removable sections B<sup>2</sup> B<sup>2</sup> and is convex or double inclined, as illustrated in the drawings, to prevent lodgment of dirt or cinders thereon. The outer end f<sup>2</sup> of each rocker is larger than its inner end f<sup>3</sup>, thus giving the rocker a somewhat tapering or conical shape, as indicated by the broken lines X X in Fig. 2, to compensate for the curvature of the tread B' about the king-bolt as a center. The top plate D is provided with curved segmental sockets or bearings d<sup>3</sup> to receive the upper small bearing-faces f' of the rocker. The side guides d of the top plate D are provided with recesses d<sup>4</sup> to receive the projecting ends or studs f<sup>5</sup> of the rockers and by which in connection with the curved sockets or bearings d<sup>3</sup> the reciprocating top plate is connected to the gravity-rockers and caused to return to position when the rockers return to their normal or

central position by the gravity action of their large lower bearing-faces. The rockers F F are each provided on its lower bearing-face  $f^6$  with a central row of teeth  $f^6$ , which mesh  
 5 with corresponding teeth  $b^5$  on the separate section  $B^2$  of the base or bottom plate. The top plate D is provided with a central transverse web  $d^6$  and the bottom plate with a central transverse web  $b^6$ .

- 10 To assemble my rocker side bearing, the top plate is first slid or telescoped onto or over the bottom plate. The rockers F F are next inserted upwardly through the openings  $b^2$  in the bottom plate and the separate  
 15 or removable sections  $B^2$   $B^2$  put in position and then secured in place by any suitable means—such, for example, as upsetting the marginal edges  $b^5$  of the opening  $b^2$ . After the movable sections  $B^2$  are thus fixed in po-  
 20 sition all the parts of the rocker side bearing are securely united together, so that they cannot become separated in use or lost.

I claim—

1. In a rocker side bearing, the combina-  
 25 tion with a bottom plate of a reciprocating top plate, said plates being provided with interfitting guides and flanges, rockers interposed between the top and bottom plates, said bottom plate being provided with open-  
 30 ings through the same through which the rockers may be inserted in position, substantially as specified.

2. In a rocker side bearing, the combina-  
 35 tion with a bottom plate of a reciprocating top plate, said plates being provided with interfitting guides and flanges, rockers interposed between the top and bottom plates, said bottom plate being provided with open-  
 40 ings through the same through which the rockers may be inserted, and separate sections closing the openings in the bottom plate, substantially as specified.

3. In a rocker side bearing, the combina-  
 45 tion with a base or bottom plate having openings through the same for the insertion of rockers and provided with separate sections for closing said openings, of a reciprocating top plate and interposed rockers, substan-  
 tially as specified.

4. In a rocker side bearing, the combina- 50  
 tion with a bottom plate having openings through the same for the insertion of rockers, of separate sections closing said openings, rockers, and a reciprocating top plate, said  
 55 top and bottom plates having interfitting guides and flanges to hold the plates together while permitting the top plate to reciprocate, substantially as specified.

5. In a rocker side bearing, the combina- 60  
 tion with a bottom plate having openings through the same for the insertion of the rockers, separate tread bearing-sections closing said openings, rockers, and a reciprocating  
 65 top plate, substantially as specified.

6. In a rocker side bearing, the combina- 65  
 tion with a bottom plate having openings through the same for the insertion of the rockers, separate tread bearing-sections closing said openings, rockers and a reciprocating  
 70 top plate, said top and bottom plates having interfitting side guides and flanges, substantially as specified.

7. In a rocker side bearing, the combina-  
 75 tion with a bottom plate having openings through the same for the insertion of the rockers, separate tread bearing-sections closing said openings, rockers and a reciprocating  
 80 top plate, said top and bottom plates having interfitting guides and flanges, and said rockers and said separate tread-sections of the bottom plate being provided with inter-  
 meshing teeth, substantially as specified.

8. In a rocker side bearing, the combina-  
 85 tion with a bottom plate having openings through the same for the insertion of the rockers, separate tread bearing-sections closing said openings, rockers and a reciprocating  
 90 top plate, said top and bottom plates having interfitting side guides and flanges, and said separate tread bearing-sections of the bottom plate having rounded marginal edges  
 and being secured in the bottom plate by upsetting the marginal edges of the openings  
 therein, substantially as specified.

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Witnesses:

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