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C. E. HAVENS.

SIDE BEARING FOR RAILWAY CARS, &c.

APPLICATION FILED FEB. 20, 1902.

NO MODEL.

FIGURE 1.

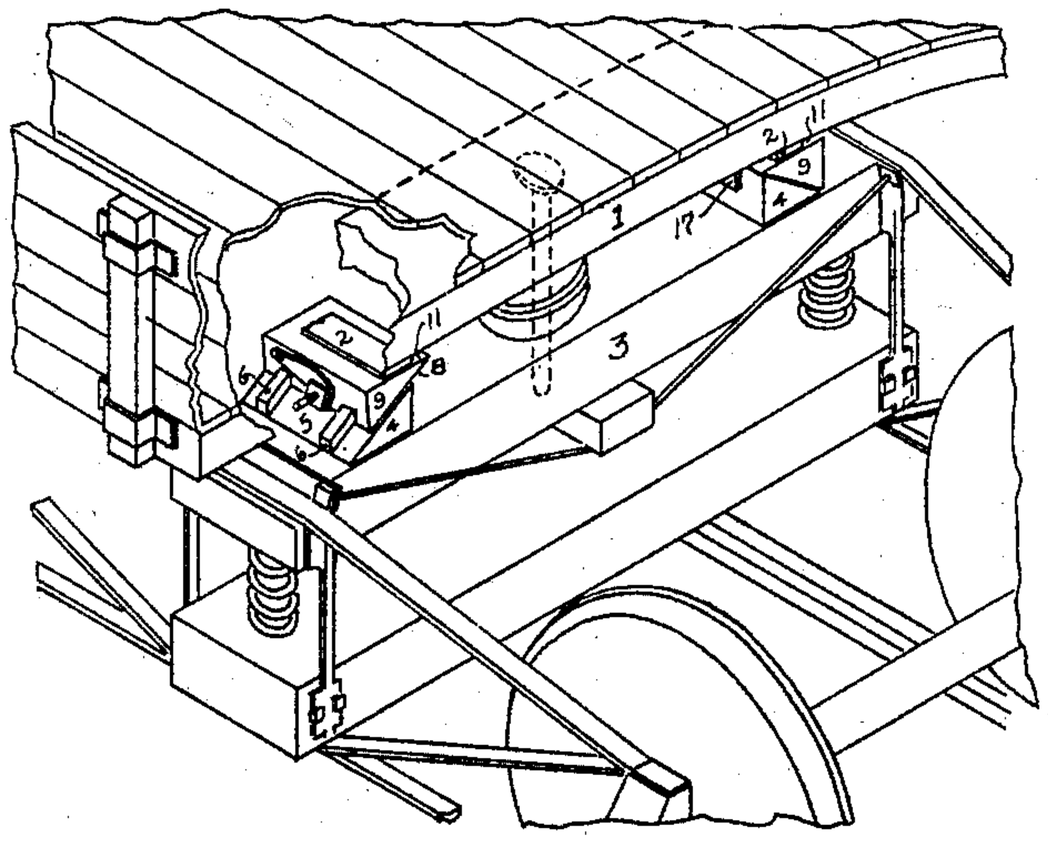
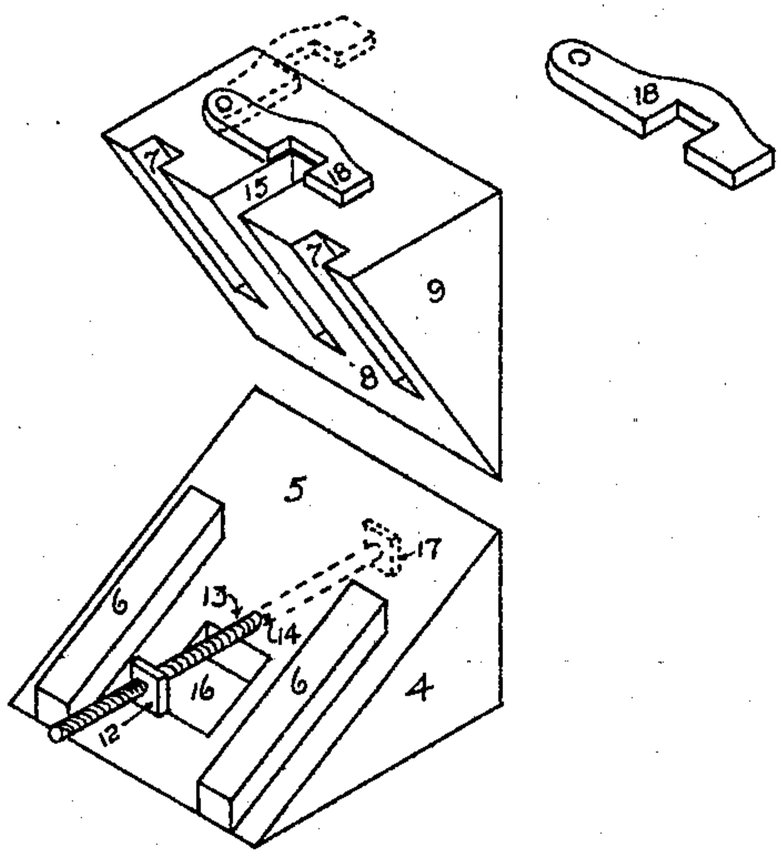


FIGURE 2.



WITNESSES:

Thomas J. McDermott.

George K. Browning.

INVENTOR.

Charles E. Havens

BY

Frank P. Haines

ATTORNEY.

UNITED STATES PATENT OFFICE.

CHARLES E. HAVENS, OF ZANESVILLE, OHIO.

SIDE BEARING FOR RAILWAY-CARS, &c.

SPECIFICATION forming part of Letters Patent No. 719,589, dated February 3, 1903.

Application filed February 20, 1902. Serial No. 94,999. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. HAVENS, a citizen of the United States, and a resident of the city of Zanesville, in the county of Muskingum and State of Ohio, have invented a new and useful Side Bearing for Railway-Cars and Similar Structures, of which the following is a specification.

My invention relates to improvements in railway-car side bearings in which one of said side bearing-plates is located on the under side of and toward the end of a body-bolster and one on the truck-bolster immediately beneath said plate located on said body-bolster, said upper and lower side bearing-plates forming a clearance-space between themselves, thereby adapting a car's trucks so to change their positions to the body of their car by turning on their respective king-bolts that their car can pass around a curve; and the object of my invention is to reproduce conveniently such a clearance-space between the upper bearing-plate and the lower bearing-plate of a set of such bearing-plates when because of the bending of a body-bolster an originally-constructed clearance-space becomes closed, thereby causing the bearing members constantly to bear upon each other, so that the car turns a curve with greater difficulty, has a greater tendency to leave the rails, and more readily wears away both the rails and the car-wheels. I attain this object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the end of a railway-car with parts broken away, showing my new adjustable car side bearing adjusted to different levels. Fig. 2 is a detailed view in perspective of my invention.

Similar numerals refer to similar parts throughout the several views.

1 is a body-bolster fixed beneath and toward the end of a car-body, and to which bolster on its under side and toward its ends, respectively, metal plates 2 are fixedly attached.

3 is the truck-bolster, on the upper side of which, toward its respective ends, plates 4, having inclined surfaces 5, are fixedly attached. Plates 4 are each provided with lugs or guides 6 on inclined surfaces 5, which lugs or guides enter corresponding slots or grooves 7, provided in the inclined surfaces 8 of plates 9, thereby preventing plates 9 from moving longitudinally as to plates 2 and 4, but adapting said plates 9 to be adjusted vertically as to said plates 2 and 4 by properly moving the inclined surfaces 5 and 8 transversely on each other, thereby increasing or decreasing bearing clearance-spaces 11. Plate 9 descends inclined surface 5 of plate 4 by its own weight; but its descent is impeded, and it is fixed from further descent at any desired level by screwing nut 12 on or off of bolt 13, which passes through orifice 14, one end of which orifice opens out into inclined surface 5 of plate 4, and which said bolt 13 also fits up into slot 15, which slot opens out in its full length into inclined surface 8 of plate 9, thus allowing plate 9 to be adjusted to its highest position by running nut 12 onto bolt 13 until said nut reaches the inner surface of nut-clearance space 16 and also allowing plate 9 to descend inclined surface 5 until the upper surface of slot 15 becomes seated on bolt 13. The head 17 of bolt 13 is angular and countersunk into plate 4, thereby preventing it from turning when nut 12 is turned.

18 is a nut-lock for nut 12, which nut always can be turned far enough to be locked by said nut-lock 18 without making side-bearing clearance-spaces 11 either too large or too small.

The operation of my invention is as follows, to wit: When body-bolster 1 bends, as shown in its right end in Fig. 1, so that plate 2 would descend and constantly bear on plate 9, bearing clearance-space 11 is conveniently reproduced, as shown in the right set of bearings in Fig. 1, by turning nut 12 off of bolt 13 sufficiently to allow plate 9 by its own weight to slide down inclined surface 5 of plate 4 a proper distance.

The construction of my invention can be varied. For example, plate 9 can be substituted for plate 2, in which case plate 4 can be attached to truck-bolster 3, so that said plate 4 can be longitudinally adjusted on said bolster 3, thereby increasing or decreasing inclined clearance-space formed in this construction by plates 4 and 9, and instead of employing nut 12 and bolt 13 and slot 15 to

adjust plates 9 a lever or any other suitable mechanism can be used and not depart from my invention.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a car, the combination with a body-bolster and with a truck-bolster of a set of car side bearings, a member of said set comprising two plates having respectively an inclined surface; one of said plates having a bolt-slot opening into its inclined surface, and the other of said plates having a bolt corresponding with said bolt-slot passing through said plate and its inclined surface, and adapted to enter said bolt-slot and to adjust one of said plates to increase the clearance-space between the upper and lower members of said set of car side bearings, substantially as described.

2. In a set of car side bearings a member comprising two plates having respectively an inclined surface; one of said plates having a bolt-slot opening into its inclined surface, and the other of said plates having a nutted bolt corresponding with said bolt-slot, said bolt passing through said plate and its inclined surface, and said inclined surface having a nut-clearance space therein, and said bolt being adapted to enter said bolt-slot, and to adjust one of said plates to increase the clearance-space between the upper and lower members of said set of car side bearings, substantially as described.

3. In a set of car side bearings, a member comprising two plates having respectively an inclined surface, one of said plates having a bolt-slot opening into its inclined surface, and the other of said plates having a nutted bolt corresponding with said bolt-slot and passing through said plate and its inclined surface, and adapted to enter said bolt-slot and to adjust one of said plates to increase the clearance-space between the upper and lower members of said set of car side bearings, said slotted plate having a nut-lock adapted to lock said nut on said bolt substantially as described.

4. In a set of car side bearings, a member comprising two plates having respectively an inclined surface, one of said plates having a bolt-slot opening into its inclined surface, and the other of said plates having a nutted bolt corresponding with said bolt-slot and passing through said plate and its inclined surface and adapted to enter said bolt-slot and to adjust one of said plates to increase the clearance-space between the upper and lower members of said set of car side bearings, said slotted plate having a nut-lock attached thereto out of the center of said nut-lock, thereby adapting said nut-lock to fall of its own weight and to lock said nut on said bolt, substantially as described.

5. In a set of car side bearings, a member comprising two plates having respectively an inclined surface, one of said inclined surfaces having guides, and the other of said inclined surfaces having slots corresponding with said guides and into which slots said guides are adapted to enter; and one of said plates having a bolt-slot opening into its inclined surface, and the other of said plates having a nutted bolt corresponding with said bolt-slot and passing through said plate and its inclined surface and adapted to enter said bolt-slot and to adjust one of said plates to increase the clearance-space between the upper and lower members of said set of car side bearings, substantially as described.

CHARLES E. HAVENS.

Witnesses:
FRANK P. HAINES,
JULIOUS D. GRAY.