

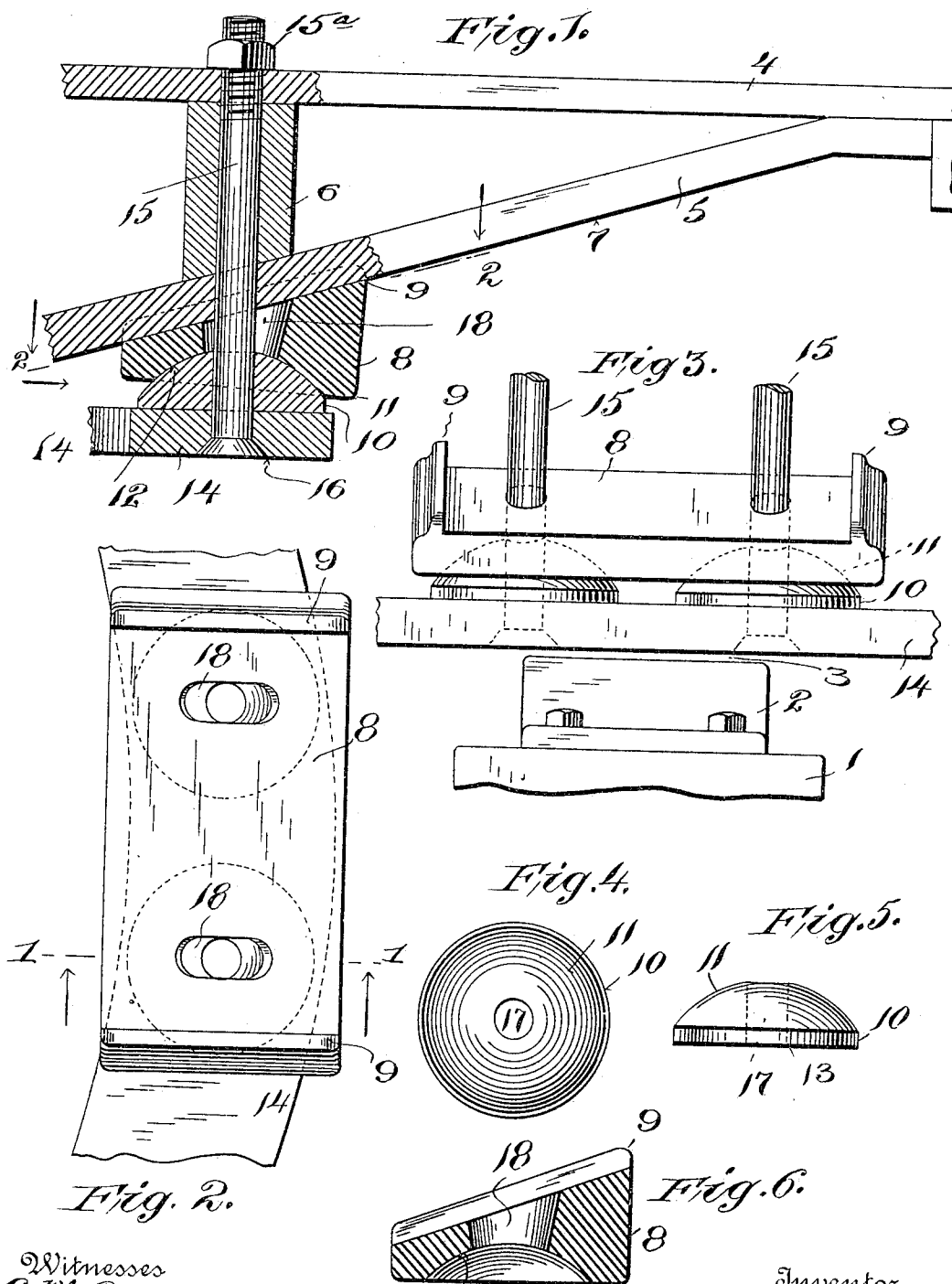
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W. M. SMITH.

SIDE BEARING FOR RAILWAY CARS.

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Specification of Letters Patent.

Patented Oct. 10, 1905.

Application filed January 28, 1904. Renewed January 9, 1905. Serial No. 240,190.

To all whom it may concern:

Be it known that I, WARREN M. SMITH, a citizen of the United States, and a resident of Moore, county of Delaware, and State of Pennsylvania, have invented certain new and useful Improvements in Side Bearings for Railway-Cars, of which the following is a specification.

My invention relates to the construction of the rub-plate and block and its means of attachment used for supporting a car-body.

Heretofore it has been necessary in car constructions to build up the bearing-block or rub-plate on the body-bolster of the car, so that its lower or bearing surface will be parallel with the bearing-surface of the rub-plate on the truck-bolster in order to properly rest thereon. Where a body-bolster having an inclined under side is used, it is necessary on account of the varying widths, which alters the angle of the under side of the body-bolster, where the rub-plate is attached, to make the rub-plate of proper shape in each case. This involves considerable labor and is not always satisfactory.

It is the object of my invention to overcome all the difficulties mentioned by providing a plate and block which will be readily adjustable to any body-bolster.

The further objects of my invention and details of construction will be herein described, and further pointed out in the claims.

In the accompanying drawings, forming a part hereof, in which similar numerals of reference indicate corresponding parts throughout the several views, Figure 1 is a sectional view of one end of the body-bolster with my improved bearing attached, taken on the line 1 1 of Fig. 2. Fig. 2 is plan view of the bearing, taken on the line 2 2 of Fig. 1. Fig. 3 is a perspective view of the bearing removed looking in the direction of the arrows in Fig. 1. Fig. 4 is a plan view of one of the bearing-blocks. Fig. 5 is a side elevation of Fig. 4, and Fig. 6 is a section through the adjusting-block.

For simplicity in construction I have shown only the ends of the truck-bolster and body-bolster, it being understood that they are of any desired form.

At 1 in the views is shown a truck-bolster which is provided at or near its ends with rub-plates 2, which are adapted to receive the car-body bolster. The entire weight of the car

may rest on these plates or, if desired, these plates may be adapted to (in case of the weight being supported at the center of the bolster) receive the weight only during certain conditions, in either of which cases my invention is applicable. These rub-plates may be of any desired construction, having an upper surface 3 to receive the rub-plate of the body-bolster.

The body-bolster to which I have shown my invention applied consists of a horizontal upper beam 4, an under truss-beam 5, and a brace 6 between them, which is preferably placed directly over the point where the rub-plate is attached to the body-bolster. The bolster may be of any desired construction other than that shown herein. Instead of the ordinary rub-plate being attached to the under side of the bolster and necessitating being so made that the lower surface thereof will be horizontal I provide an adjusting-block 8, having upturned flanges 9 at both sides, which is attached to the under side of the body-bolster, the flanges serving to hold the block in its proper place. Instead of the lower surface of this block acting as a rub-plate I provide two separate pieces or bearing-blocks, such as 10, both of which are alike, which are attached to the under side of the block 8 and are provided with a convex upper surface 11. The upper block 8 is provided with a concave recess 12, which receives the convex portions 11 of the bearing-blocks. The under sides 13 of the blocks 10 preferably are flat and secured to which are the rub-plates 14, although the rub-plate and blocks may be made in one. In order to secure the rub-plate, bearing-block, and adjusting-block together and to the bolster, I provide bolts 15, which pass through holes 16 in the rub-plate, holes 17 in the blocks 10, through the elongated holes 18 of the block 8, through the bolster, and terminate on the top thereof, where there is a nut 15^a attached.

The concavo-convex connection of the blocks may be reversed, if desired, so that the upper block will rest in the lower blocks, though I prefer the construction illustrated.

When the device is applied to a bolster having an inclined underside, the adjusting-block is attached therein and by reason of the concavo-convex or ball-and-socket connection of the adjusting-block and bearing-blocks the adjusting-block may take the angle of the

under side of the body-bolster and the bearing-block and rub-plates secured thereto, so that the under surface of the rub-plate will remain in horizontal alinement with the rub-plate of the truck-bolster, the elongated opening in the adjusting-blocks, through which the bolts pass, allowing the adjustment. This compensates for the difference in angle between the upper surface of the block 8 and the under surface of the rub-plates 14 and is readily adjustable to allow for the same.

Having described my invention, what I claim is—

1. A side bearing for railway-cars or similar vehicles, comprising a rub-plate, blocks on the rub-plate and adjusting-blocks mounted on said first blocks, and means for adjustably connecting the rub-plate and blocks together.

2. A side bearing for railway-cars or similar vehicles, comprising a rub-plate, a bearing-block thereon, an adjusting-block mounted on said first block, and means whereby the said adjusting-block may be tilted on said bearing-block.

3. A side bearing for railway-cars or similar vehicles, comprising a rub-plate, blocks, an adjusting-block mounted thereon and means for adjusting the said block and rub-plate to alter the angle of the top of the said adjusting-block and bottom of said rub-plate.

4. A side bearing for a car or similar vehicle, comprising a rub-plate, blocks thereon, an adjusting-block on said first blocks, means for adjusting the said adjusting-blocks at an angle thereon, and means for securing said blocks and rub-plate together.

5. A side bearing for railway-cars or similar vehicles, comprising a rub-plate, having a flat surface, a block on said rub-plate, a second block mounted on said first block, and adjustable means for altering the angle of said surface with relation to said second block.

6. A side bearing for railway-cars or similar vehicles, comprising a rub-plate, blocks thereon, an adjusting-block having recesses therein adapted to receive said first blocks, and means for securing the blocks and rub-plate together.

7. A side bearing for railway-cars or similar vehicles, comprising a rub-plate having a bearing-surface, blocks on said plate having annular projections, an adjusting-block resting on said first blocks, and provided with an annular recess to receive said blocks on said rub-plate.

8. In a side bearing for railway-cars, the combination of a bolster, a rub-plate having

a bearing-surface, convex projections on said plate, a block having concave recesses adapted to receive the said convex projections and means for securing the rub-plate and blocks to the bolster.

9. In a side bearing for railway-cars, the combination of a bolster, a rub-plate therefor, blocks interposed between the rub-plate and bolster, said rub-plate having a hole there-through, the hole in one of said blocks being elongated, and a bolt passing through the rub-plate and blocks to secure them to the bolster.

10. In a side bearing for railway-cars, the combination of a bolster, a rub-plate, blocks interposed between the rub-plate and bolster, one of said blocks having a convex surface and the other provided with a concave recess adapted to receive the said convex surface, and means for securing the blocks and rub-plate to the bolster.

11. In a side bearing the combination of a bolster, a rub-plate, and blocks between the bolster and the rub-plate, provided with a ball-and-socket joint whereby said rub-plate may be adjusted with relation to the bolster, and means for securing the rub-plate and blocks to the bolster.

12. In a side bearing, the combination of a bolster, a rub-plate, adjustable blocks interposed between the rub-plate and bolster, and one of the said blocks being provided with vertical flanges.

13. In a side bearing, the combination of a bolster, a rub-plate, blocks interposed between the rub-plate and bolster, one of said blocks being provided with laterally-elongated hole and a bolt passing through the rub-plate and blocks.

14. In a side bearing for railway-cars, the combination of a bolster, having an inclined under side, a rub-plate having a superimposed block with convex top portions, a second block adapted to be secured against the inclined side of said bolster, and provided with concave recesses to receive said first-mentioned block, and provided with a laterally-elongated hole, and a bolt passing through said rub-plate, blocks and bolster.

Signed in the city and county of Philadelphia, State of Pennsylvania, this 25th day of January, 1904.

WARREN M. SMITH.

Witnesses:

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