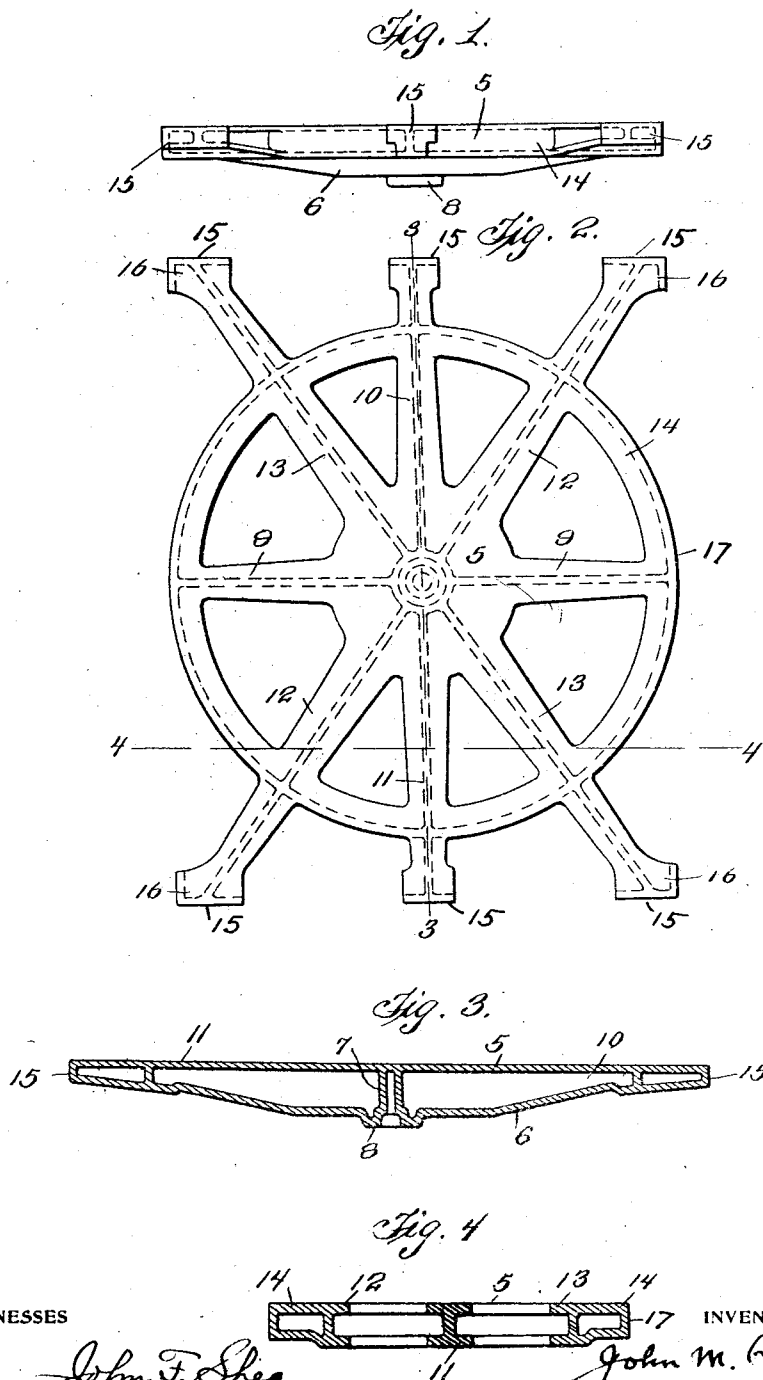


J. M. ROHLFING.
BOLSTER.
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1,052,754.

Patented Feb. 11, 1913.



WITNESSES

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BOLSTER.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN M. ROHLFING, residing at St. Louis, Missouri, and being a citizen of the United States, have invented certain new and useful Improvements in Bolsters, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and to use the same, reference being had to the accompanying drawings, which illustrate the preferred form of the invention, though it is to be understood that the invention is not limited to the exact details of construction shown and described, as it is obvious that various modifications thereof will occur to persons skilled in the art.

In said drawings: Figure 1 is a side view of the cast bolster forming the subject matter of this application. Fig. 2 is a plan view of the bolster. Fig. 3 is a sectional view, the section being taken on line 3—3 of Fig. 2, the vertical, radial flanges being seen in elevation. Fig. 4 is a sectional view, the section being taken on line 4—4 of Fig. 2.

The object of the present invention is to produce an integral cast bolster comprising a platform or grid including center bearing with sill supporting arms radiating therefrom in such manner as to best support the longitudinal car sills.

The invention comprises certain features of novelty all as hereinafter more fully described and specifically pointed out in the claims.

Referring to the parts, 5 is the platform web or top flange of the bolster, 6 is the bottom flange thereof and 7 is the center pin socket. Radiating from the center bearing 8 are arms 9, 10, 11, 12 and 13, each of which is provided with a vertical web. Intersecting the arms 10—11—12—13 and extending across the ends of the arms 9 is a curvilinear connector 14 provided with a flange 17 which, with the said arms, forms a grid provided with the top and bottom flanges 5—6 and the center bearing before referred to. The laterally extending arms 10—11 extend beyond the connector 14, as shown in Fig. 2, and terminate in end portions provided with vertical flanges 15 which serve to connect the web flanges 5—6. The arms 10—11 extend at right angles to the arms 9 and extending at acute angles thereto the arms 12—13 extend beyond the

connector 14, forming cantaliver arms with their end portions in alinement longitudinally of the car with the end portions of the arms 10—11, as best shown in the plan view Fig. 2, all of said arms 10 to 13 inclusive being provided with the end flanges 15 and the arms 12—13 being provided with vertically extending flanges 16 transversely of the car.

From an inspection of the drawings, the utility of the device described herein is easily perceived. The arms 10, 11, 12 and 13 and the curvilinear portion of the connector 14 between the arms 10, 11, 12 and 13 will bear approximately two-thirds of the torsional strain and the weight carried by the cantaliver arms 12 and 13, and consequently the curvilinear portion of the connector 14 between the arm 9 and the cantaliver arms 12 and 13 will bear one-third of the torsional strains and the weight carried by the said cantaliver arms. As the periphery of the curvilinear connector at the point where the arm 9 meets said periphery extends to the same lateral plane transverse of the car as the extremities of the cantaliver arms 12 and 13, or to the plane of the flange 16 it forms a novel means for supporting a portion of the weight and torsional strains intermediate of the extremities of the cantaliver arms 12 and 13, the arm 9 forming a rigid support for this portion of the curvilinear connector. Furthermore, this function could not be accomplished were the arm 9 and the curvilinear portion of the connector 14 omitted from the construction.

What I claim is:

1. A car bolster comprising as an integer, a centrally supported circular trussed frame and a plurality of cantaliver supports for the side sills extending diametrically there-through, and alined longitudinally of the bolster at their outer extremities, the said circular frame being adapted to carry a part of the load and torsional strains between the said cantaliver arms.

2. A car bolster comprising as an integer, a centrally supported circular trussed frame, a plurality of side sill supports comprising diametric cantaliver truss arms, one extending through the lateral diameter of said circular frame and two diagonal to the first and equi-angularly arranged thereto and conforming to a diameter of the said circu-

lar frame all of said cantaliver arms having
their outer extremities alined in the same
plane longitudinally of the car and a truss
arm forming the longitudinal diameter of
5 the said circular frame and supporting the
periphery of said circular frame, the outer
extremities of the diagonal cantaliver arms
and the periphery of the circular frame at
its longitudinal diameter lying in the same
10 lateral plane transversely of the car and

adapted to carry a part of the load and tor-
sional strains of said diagonal cantaliver
arms.

In witness whereof I have hereunto set
my hand in the presence of two witnesses: 15

JOHN M. ROHLFING

Witnesses:

J. H. BRUEGGEMAN,

H. H. DOUGLOS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."