J. T. WILSON.

Manufacture of King-Bolt Plates for Railway-Cars.

No. 219,333. Patented Sept. 2, 1879.

Fig. 1.

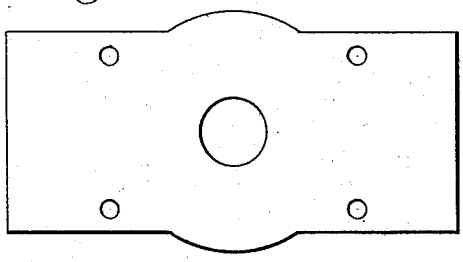
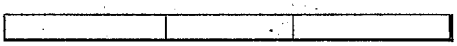


Fig. 2.



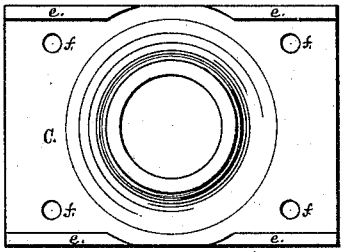


Fig. 3.

Fig. 4.

Fig. 5.

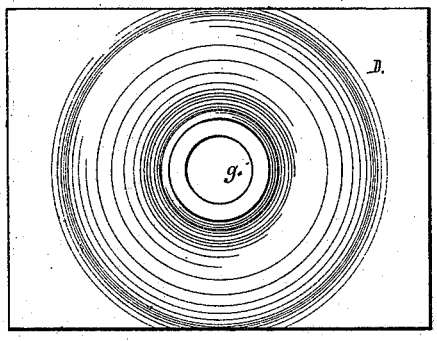
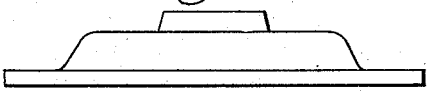


Fig. 6.



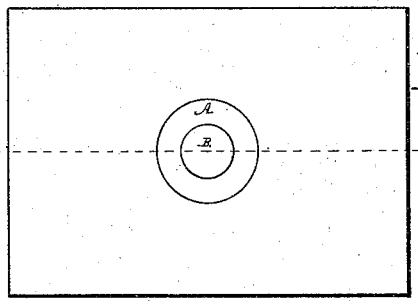


Fig. 7.

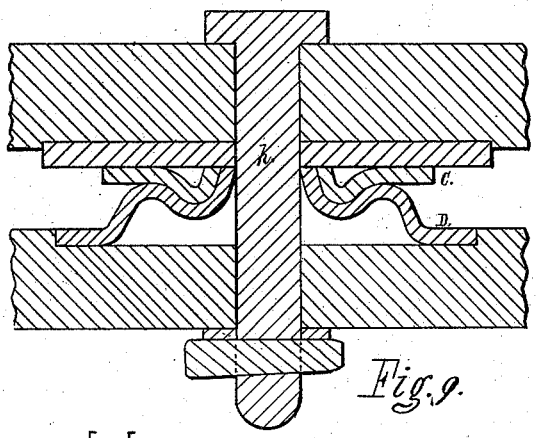


Fig. 9.

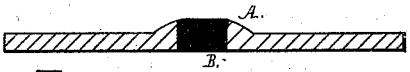


Fig. 8.

Witnesses

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UNITED STATES PATENT OFFICE

JOHN T. WILSON, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO WILSON, WALKER & CO., OF SAME PLACE.

IMPROVEMENT IN THE MANUFACTURE OF KING-BOLT PLATES FOR RAILWAY-CARS.

Specification forming part of Letters Patent No. **219,333**, dated September 2, 1879; application filed June 27, 1878.

To all whom it may concern:

Be it known that I, JOHN T. WILSON, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a certain new and useful Improvement in the Manufacture of Center-Bearings or King-Bolt Plates for Railway-Cars; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to an improvement in center-bearings or king-bolt plates for railway-cars; and consists in constructing them by the method hereinafter described—to wit, swaging blanks into such shape as to form said center-bearings or king-bolt plates of uniform thickness and curvilineal in contour.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the accompanying drawings, which form part of my specification, Figure 1 is a top view of a transom-plate used in connection with the center-bearings or king-bolt plates, and is represented for the purpose of showing their relation to said transom. Fig. 2 is an edge view of the transom-plate. Fig. 3 is a top view of the upper center-bearing plate. Fig. 4 is an edge view of the same. Fig. 5 is a top view of the lower center-bearing plate. Fig. 6 is an edge view of the same. Fig. 7 is a top view of the blank used for forming said center-bearing plates. Fig. 8 is a section of said blank at line *y* of Fig. 7. Fig. 9 is a sectional view, representing the transom-plate and center-bearing plates, and the king-bolt in juxtaposition with relation to the timbers of the railway-car.

The blank represented in Fig. 7 is formed from steel or iron by the rolling process, and cut off into suitable lengths, having an enlargement at A, as shown in Fig. 8, and provided with opening B. This enlargement is to compensate for the stretching of the iron in the process of swaging. The blanks are heated to a proper degree, and then subjected to the action of swaging-dies and swaged out into the forms represented in the accompanying drawings, thereby forming curvilinear plates of the contour indicated in transverse section in Fig. 9.

The upper center-bearing plate, C, is provided with flanges, as shown at *e*, and openings, as indicated at *f*, for the purpose of securing the plates in position by means of bolts. The lower plate, D, is provided with an opening, *g*, the diameter of which is equal to the diameter of the king-bolt *h*, which is of the ordinary construction.

By constructing the center-bearing or king-bolt plates C D as hereinbefore described they will be lighter, stronger, and more durable than the ordinary cast-iron plates now in general use on railway-cars, which are very heavy and liable to break by the constant jar of the running of the cars.

Having thus described the nature, construction, and advantages of my improvement, what I claim as of my invention, and desire to secure by Letters Patent of the United States, is—

The improved method of forming king-bolt plates herein described, consisting in first forming a blank with a central opening with thickened edges, and subsequently, by means of dies, corrugating the plates, and at the same time enlarging the central opening and thinning said edges, so as to produce a corrugated king-bolt plate of substantially uniform thickness, as and for the purpose set forth.

JOHN T. WILSON.

Witnesses:

JAMES J. JOHNSTON,

A. C. JOHNSTON.