

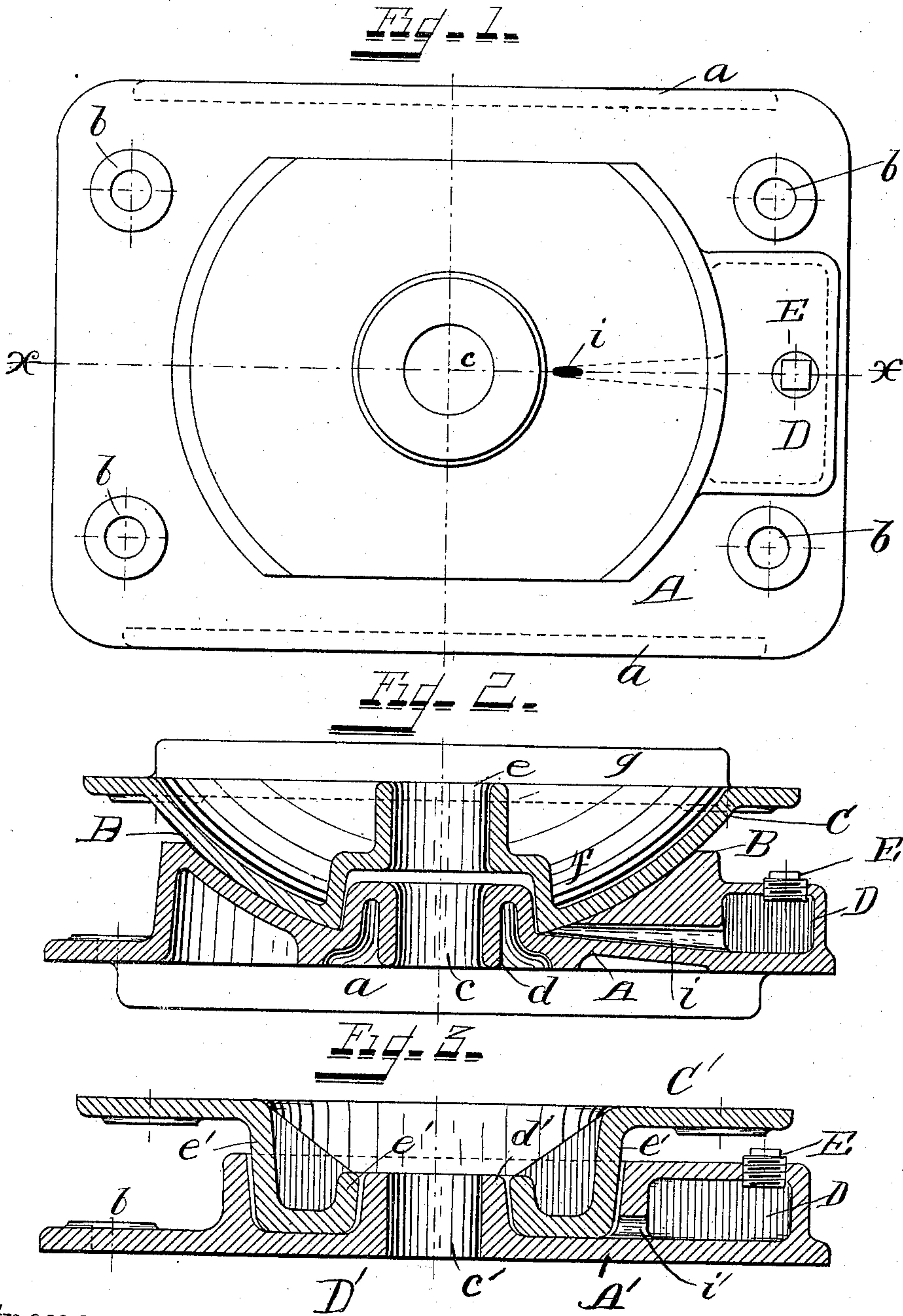
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C. F. STREET.
CENTER PLATE FOR RAILWAY CARS.

(Application filed Apr. 28, 1899.)

(No Model.)



Witnesses.

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CENTER-PLATE FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 641,165, dated January 9, 1900.

Application filed April 28, 1899. Serial No. 714,854. (No model.)

To all whom it may concern:

Be it known that I, CLEMENT F. STREET, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Center-Plates for Railway-Cars, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to center-plates forming the pivotal bearings between the trucks and bodies of railway-cars, which bearings are usually connected by a king or tie bolt; and it has for its object the provision of simple and efficient means for affording a constant lubrication to the bearings of said plates, whereby their wear is prevented and their life prolonged, as well as the provision of such a construction whereby the lubricant is carried in one or more receptacles forming part of or connected to the lower bearing-plate and is thereby rendered easily accessible for refilling and can be conveyed through as many channels as desired to the bearing-surfaces between the plates.

The novelty of my invention will be hereinafter set forth, and specifically pointed out in the claims.

Figure 1 is a plan view of the lower or truck center-plate. Fig. 2 is a longitudinal sectional side elevation of both plates in their connected positions on the dotted line xx of Fig. 1. Fig. 3 is a corresponding view of both plates embodying a modified form of construction.

The same letters of reference are used to indicate identical parts in all the figures.

Except in the particulars to be hereinafter pointed out, the plates themselves and their bearing-surfaces may be of the usual or any suitable construction.

In Figs. 1 and 2 I have shown the lower plate A as substantially rectangular in form, with rounded corners, pendent side flanges a to embrace adjacent sides of truck-sills, and with four corner-apertures b for the passage of bolts whereby it is made fast to the truck. The general surface of this lower plate on its upper side is saucer-shaped to afford a bearing-surface B for the superimposed car-body

plate, and it has at its center an aperture c , surrounded by a collar or boss d , with an outwardly-beveled side, as seen in Fig. 2. This lower plate A for convenience I will term the "female" plate, and it has registering with it and bearing upon it a male plate C, with perforations at its corners for the passage of bolts for uniting it to the car-body. It has a central tubular aperture e for the passage of the king-bolt, and it has an enlarged collar f , conforming on its under bearing-surface with the beveled side of the boss d . Its convex under side conforms to the bearing-surface B, and it is provided with side flanges g to embrace adjacent sills on the under side of the car-body.

The construction thus far described is common and well known, and my invention consists in applying one or more chambers D to the plate A, which chambers contain the lubricant, supplied through a filling-plug E and delivered to the bearing B through one or more channels or apertures i , which channels or apertures preferably open into the bearing near its lower end and from whence by the turning and tilting of the truck under the curvatures and irregularities of the track the lubricant is equally and evenly distributed to all parts of the bearing B, thereby keeping up a constant and proper lubrication of the center-plate bearings and enabling the truck to readily round any curve without imparting friction to the flanges of the wheels or the inner edges of the rails. At the same time by the location of the reservoir for the lubricant on the truck-plate it is rendered accessible for purposes of inspection and refilling, and no more oil is taken up and used than is necessary for the proper lubrication of the parts.

In Fig. 3 I have shown a modification in the construction of the plates, whereby the upper plate C' has an annular flange e' on its under side, which engages an annular groove D' on the upper surface of the plate A'. Between the annular channel and the central boss d' there is a bearing-surface for the two plates, as shown. Lubricant is conveyed from the exterior chamber D into the channel D'. This latter construction, like the one above described, has all the advantages of

giving constant lubrication, with ready access to its lubricating chambers or reservoirs for inspecting or refilling.

Having thus fully described my invention, I claim—

1. In center-plates for railway-cars, the combination of a female truck-plate having a central upwardly-projecting boss and a lubricating-bearing surrounding the same, an interengaging car-body plate having its pivotal bearing both on the boss and surface of the truck-plate, and a lubricating-channel in the truck-plate extending from its exterior to the bearing-surfaces between the two plates with its feeding-opening above the lowest bearings of the two plates, whereby a supply of lubricant is constantly held in readiness for the bearing-surfaces of both plates, substantially as described.

2. In center-plates for railway-cars, the combination of a female truck-plate having a central upwardly-projecting boss and a lubricating-bearing surrounding the same, an interengaging car-body plate having its pivotal bearing both on the boss and surface of the truck-plate, a lubricating-channel extending from the bearing-surfaces between the two plates to an exterior reservoir contained in the truck-plate and having its upper feeding end above the lower bearings of the two plates, substantially as described.

3. In center-plates for railway-cars, the combination of the lower truck-plate provided with a central boss, a lubricating-reservoir surrounding the same, a chamber for the lubricant in the body of the plate near its exterior and a channel between said lubricating-chamber and lubricating-reservoir, and an interengaging car-body plate with a

bearing-surface fitted to the lubricated bearing-surface of the truck-plate, substantially as described.

4. In center-plates for railway-cars, the combination, of a female truck-plate having a central upwardly-projecting boss and a curved dish-shaped bearing-surface extending therefrom and surrounding the same, an interengaging car-body plate having its lower surface curved to engage the curved dish-shaped bearing-surface of the truck-plate, and a lubricating-channel in the truck-plate extending from its exterior to the curved bearing-surfaces between the two plates with its feeding-opening above the lowest bearings of the two plates, whereby a supply of lubricant is constantly held in readiness for the bearing-surfaces of both plates, substantially as described.

5. In center-plates for railway-cars, the combination of a female truck-plate having a central upwardly-projecting boss and a curved dish-shaped bearing-surface extending therefrom, and surrounding the same, an interengaging car-body plate having its lower surface curved to engage the curved dish-shaped bearing-surface of the truck-plate, a lubricating-channel in the truck-plate extending from a point between the bearing-surfaces of both plates to a reservoir contained in the truck-plate, whereby a constant supply of lubricant is kept on hand and in contact with the bearing-surfaces, substantially as described.

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Witnesses:

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