

(No Model.)

A. O. BUCKIUS.
CENTER PLATE FOR CARS.

No. 571,610.

Patented Nov. 17, 1896.

Fig. 1.

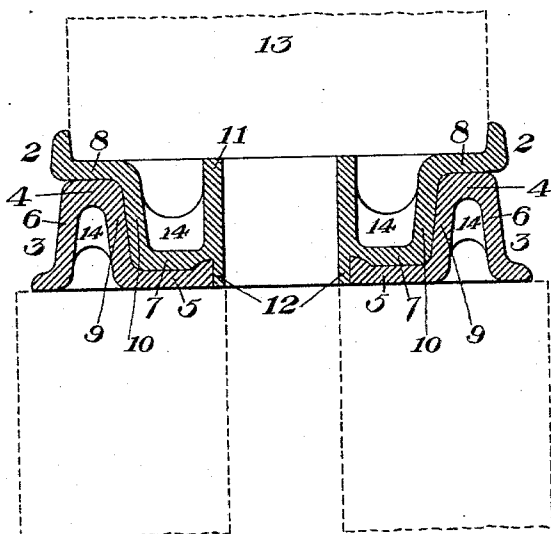
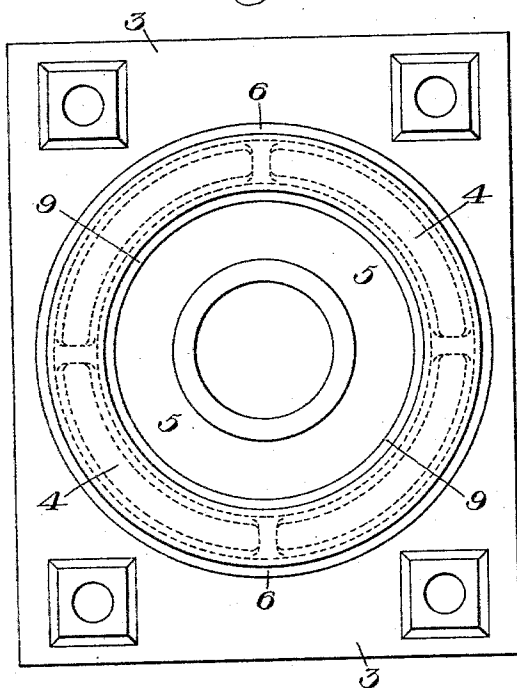


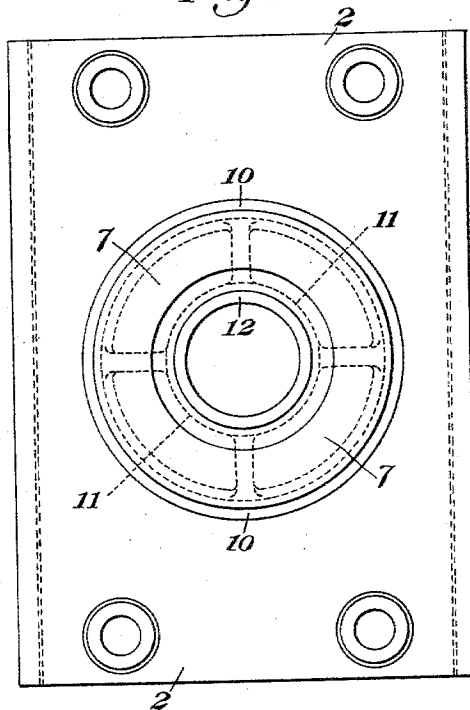
Fig. 2.



WITNESSES

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Fig. 3.



INVENTOR

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UNITED STATES PATENT OFFICE.

ALBERT O. BUCKIUS, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE NATIONAL MALLEABLE CASTINGS COMPANY, OF CLEVELAND, OHIO.

CENTER PLATE FOR CARS.

SPECIFICATION forming part of Letters Patent No. 571,610, dated November 17, 1896.

Application filed February 18, 1896. Serial No. 579,707. (No model.)

To all whom it may concern:

Be it known that I, ALBERT O. BUCKIUS, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Center Plates for Cars, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, in which—

Figure 1 shows in vertical central section the top and bottom center plates constructed in accordance with my invention and fitted together. Fig. 2 is a plan view of the bottom center plate; and Fig. 3 is a plan view of the under side of the top center plate.

In the drawings, 2 is the top center plate, and 3 the bottom center plate. The plate 3 is formed with an annular bearing-face 4, a lower flat annular flange or bearing-face 5, and with a strengthening flange 6, extending downwardly from the outer edge of the face 4, and the center plate 2 is formed with annular bearing-faces 7 and 8, which match the bearing-faces 4 and 5. The bearing-faces 4 and 5 and 7 and 8 are connected, respectively, by tapering or conical connections 9 and 10, which correspond to each other in shape, and when the plates are fitted together the face 8 bears upon the face 4, the face 7 upon the face 5, and the tapering faces 9 and 10 also bear against each other. The plate 3 has a central eye and the plate 2 has a central hub 11, having a flange 12, which fits within said eye.

14 14 are webs by which the plates are strengthened. The transom or block 13 rests upon the upper surface of the plate 2 above the bearing-face 8, and the hub 11 is extended upwardly far enough to bear also against the transom and to take part of the load thereof. When the center plates are in use, they therefore have two broad bearings on horizontal planes one above the other and also an intermediate inclined or conical bearing. The consequence is that the plates wear very evenly, they support the weight of the car steadily, and are very durable. It is also an advantage to have the transom bear upon the central hub as well as upon the upper plate, for it thus takes up its due proportion of the load and transmits the same to the lower center plate, making the pressure uniform and preventing the tendency to distortion of the top center plate which is so common in the case of pressed-steel plates. The central hub

11 also forms a long bearing and a continuous wearing-surface for the king-bolt.

The advantages of my improvement will be appreciated by those skilled in the art. The plates are durable and strong and have not the disadvantage present in many plates heretofore constructed, which often stretch and bend down, thus spreading the thimble fitting in the lower plate and causing the thimble to bind against the walls thereof, so as to prevent its proper swiveling action.

Within the scope of my invention as defined in the claims many changes may be made in the form and construction of the parts, and some of the elements of my invention may be used without the others. If desired, the plates may be reversed, the plate 2 being set below the other plate 3.

I claim—

1. In a center-plate device for cars, upper and lower circle plates, having annular horizontal bearing-surfaces in two horizontal planes above and below, and lateral inclined bearing-faces extending between said annular bearing-surfaces; substantially as described.

2. In a center-plate device for cars, upper and lower circle plates, having annular bearing-surfaces in two horizontal planes above and below, one of said plates having an outer annular bearing against the load and having also an inner central hub which extends into contact with the load on the same side of the plate, whereby said plate will receive and transmit the force of such load uniformly; substantially as described.

3. In a center-plate device for cars, upper and lower circle plates, having annular bearing-surfaces in two horizontal planes above and below, one of said plates having a central hub which affords a long bearing for the king-bolt, and the other of which has a central eye and is unprovided with a hub; substantially as described.

4. Center plates, one of which has a central cylindrical hub in axial line with the eye of the other plate and adapted to transmit to the other plate a portion of the load; substantially as described.

In testimony whereof I have hereunto set my hand.

ALBERT O. BUCKIUS.

Witnesses:

CLAYTON MARK,
OTTO J. FEHLING.