Geo. W. Bennett.

75115 Centre Plate for Cars.

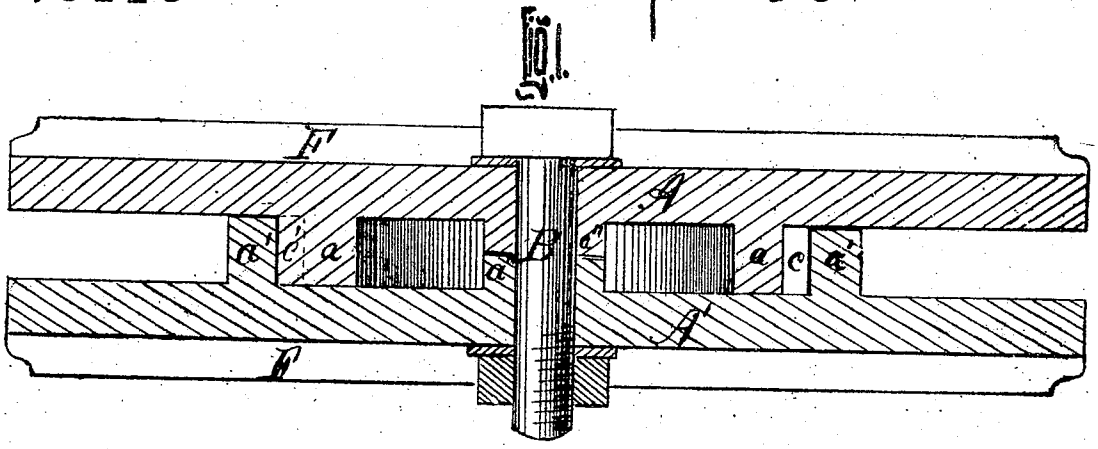
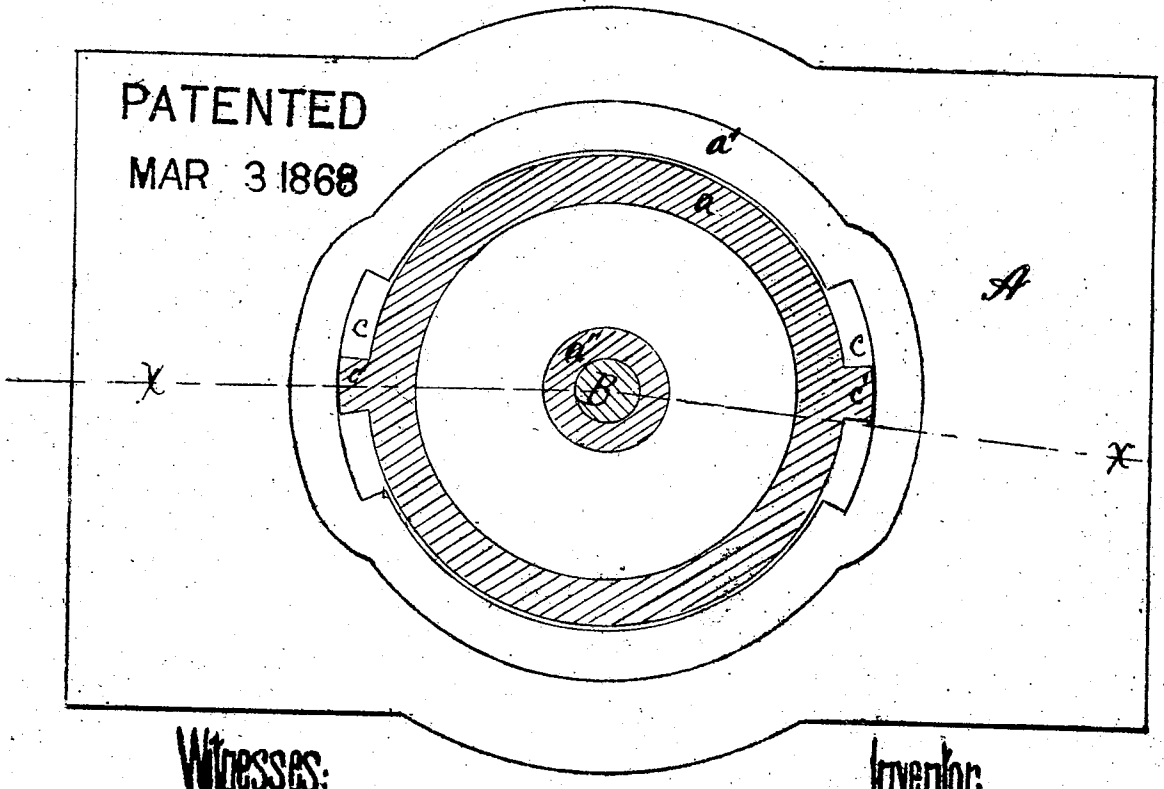


Fig. 2.



Witnesses:

S. C. Lemon.

C. A. Peters

Inventor:

Geo. W. Bennett

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United States Patent Office.

GEORGE W. BENNETT, OF WHITE HAVEN, PENNSYLVANIA.

Letters Patent No. 75,115, *dated March* 3, 1868.

IMPROVEMENT IN CENTRE-PLATE FOR RAILROAD-CARS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, GEORGE W. BENNETT, of White Haven, in the county of Luzerne, and State of Pennsylvania, have invented a new and improved Centre-Plate for Cars; and I do hereby declare the following to be a full, clear, and exact description of the same, sufficient to enable those skilled in the art to which my invention appertains to make use of it, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical section through the line *x x* of fig. 2.

Figure 2 is a horizontal section.

The object of this invention is to provide a centre-plate which will prevent the trucks from shearing off of the road in turning a short curve, and thereby dispense with safety-chains.

The centre-plate is composed of two horizontal plates, A A′, united at their centre by the vertical king-bolt B, upon which they swing through a short arc. Around the king-bolt, and a few inches distant from it, a circular wall or ring, *a′*, rises from the lower plate, A′, and from the upper plate, A, another circular wall, *a*, just large enough to fit inside of the former, projects downward. The upper plate is placed upon the lower one, the ring *a* fitting within the ring *a′*, and the weight of the upper plate, and the bolster which it supports, resting upon the rings, as shown in fig. 1. Collars *a″ a″* are cast at the centre, immediately around the king-bolt, and in contact with it, which support the centre of the plate and strengthen the king-bolt. Recesses *c c* are provided, cut in the inner surface of the outer wall, as shown in fig. 2, and corresponding projections, *c′ c′*, are cast upon the outer side of the inner wall, entering the recesses *c c*, when the plates are in position, and permitting a certain amount of motion, and no more, to the plates A A, and the bolster and truck. The lower plate is attached to the truck, and the upper one to the car, and therefore the swinging of the car upon the truck, and the turning of the latter under the car, are confined within the limits allowed by the motion of the projections in the recesses *c c*. The extent to which the truck will turn can thus be regulated by casting the recesses longer or shorter, and the projections wider or narrower. Flanges F F are cast along the edges of the plates on the upper and under side of the device, which fit closely to the sides of the bolster, and through which the centre-plate may be bolted to the bolster. The space within the outer ring forms a tight cup, which is to be filled with lubricating-fluid.

By the use of this device it is evident that the motion of the trucks may be so limited that the danger of their running off the track in rounding short curves will be materially diminished, so that safety-chains and other similar devices may be dispensed with, and the car be constructed at less expense than heretofore.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination of the rings *a a′*, having the recesses *c c* and projections *c′ c′*, operating in connection with each other when used in a centre-plate for cars, substantially as and for the purposes specified.

Witnesses:

WM. BARKMAN,

JAMES MUNSON.

GEO. W. BENNETT.