

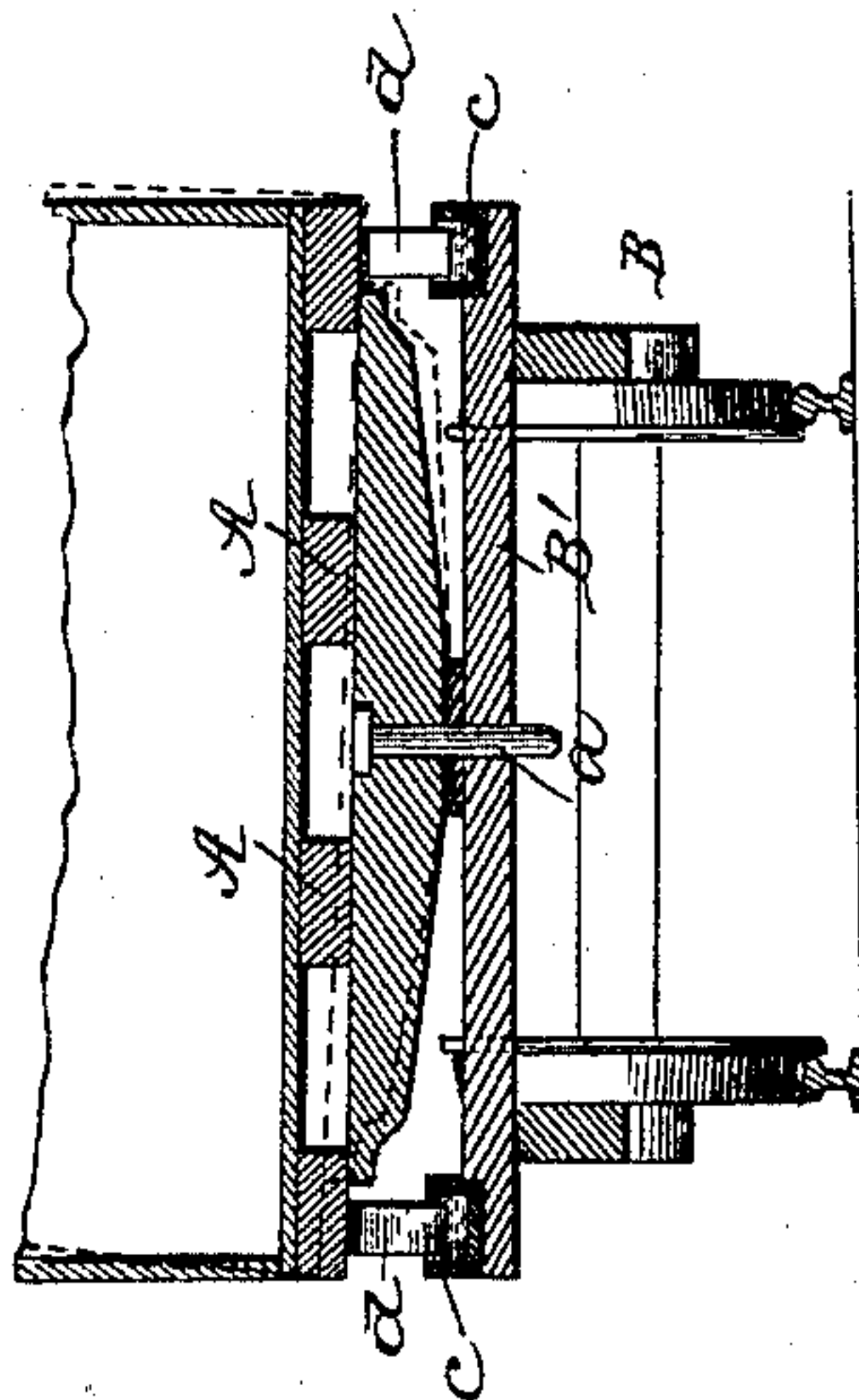
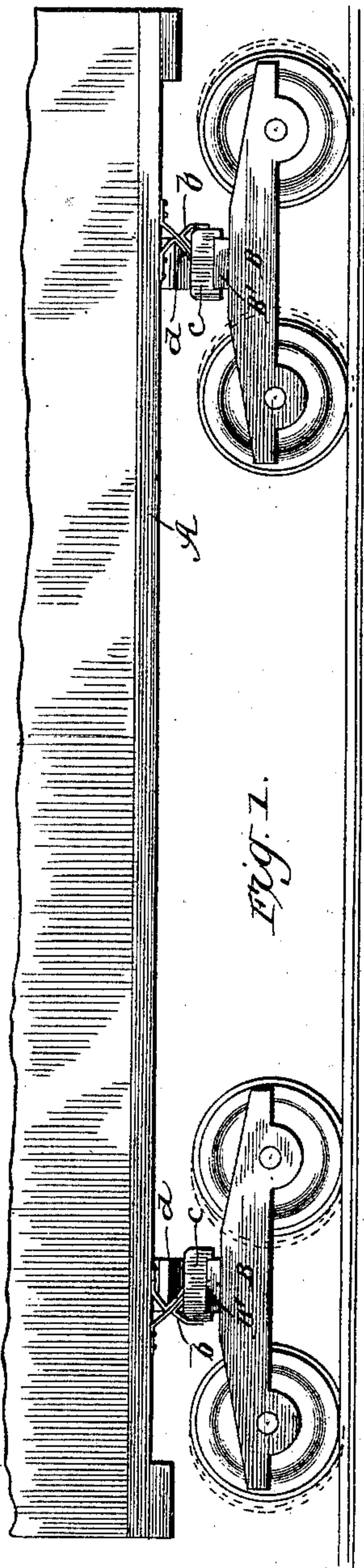
(No Model.)

2 Sheets—Sheet 1.

H. RESLEY.
RAILROAD CAR MOUNTING.

No. 441,976.

Patented Dec. 2, 1890.



WITNESSES:

Fred G. Deterach
Edw. W. Byrny

INVENTOR:

Horace Resley.

BY

Wm. L.

ATTORNEYS

(No Model.)

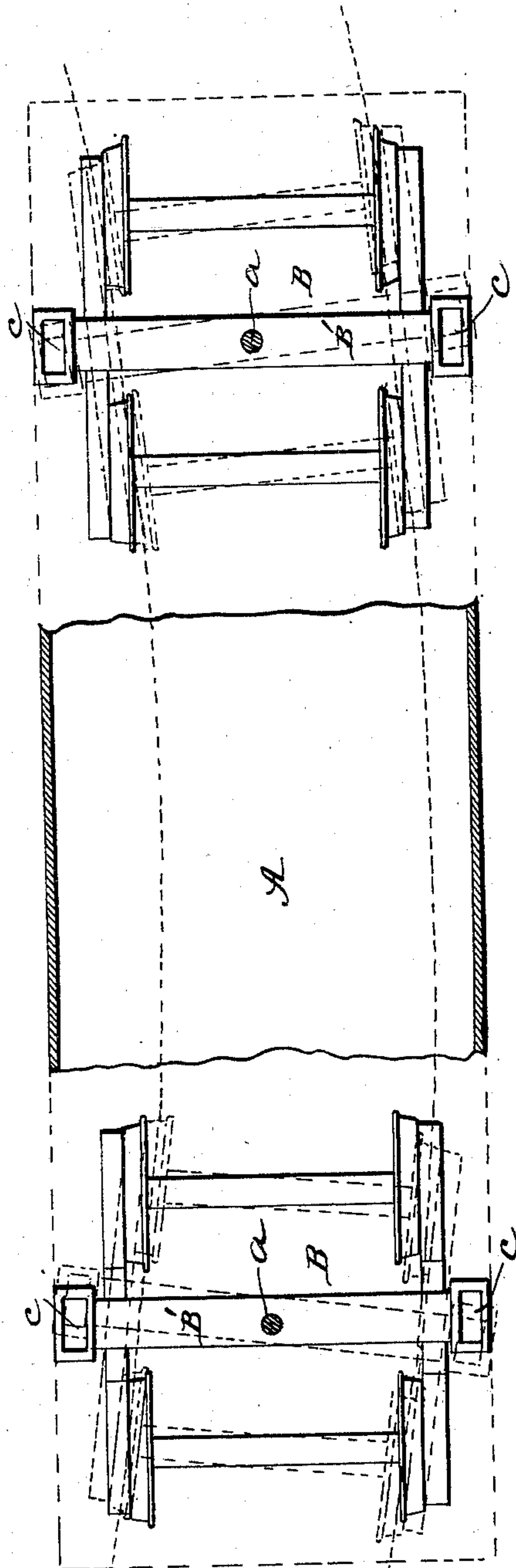
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Fig. 3.



WITNESSES:

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INVENTOR:

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BY *Munn & Co.*

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UNITED STATES PATENT OFFICE.

HORACE RESLEY, OF CUMBERLAND, MARYLAND.

RAILROAD-CAR MOUNTING.

SPECIFICATION forming part of Letters Patent No. 441,976, dated December 2, 1890.

Application filed October 4, 1890. Serial No. 367,136. (No model.)

To all whom it may concern:

Be it known that I, HORACE RESLEY, of Cumberland, in the county of Alleghany and State of Maryland, have invented a new and
5 useful Improvement in Railroad-Car Mountings, of which the following is a specification.

In all railroad curves the outer rail-track must be elevated above the inner rail in proportion to the radius of the curve, in order
10 to compensate for centrifugal action. The extent of this elevation is as much as four inches in a curve whose radius is six hundred feet.

My invention contemplates the utilization
15 of this centrifugal action, and its secondary effects on such curved track to automatically adjust the trucks to the rails, so that their axles shall be positively adjusted to a radial position, instead of being allowed to adjust
20 themselves, which latter results in the grinding of the flanges of the forward wheels of the trucks against the rails, involving a great tendency to run off the track.

The invention consists in means interposed
25 between the trucks and the floor-timbers of the body of the car whereby the motion which takes place between the two in rounding curves is made to adjust the trucks automatically to the curve, as hereinafter fully
30 described.

Figure 1 is a side elevation. Fig. 2 is a vertical transverse section through one of the trucks, and Fig. 3 is a plan view of the trucks and floor-timbers of the car applied to a
35 curved track.

In the drawings, A represents the floor-timbers of the body of the car, and B B its trucks, which have at *a* a strong pivotal connection, so that the trucks can turn in a horizontal
40 plane beneath the car.

Upon each outer end of the cross-bar B' of each truck is mounted a wedge-shaped bearing *b*, and against its inner face or the face next to the middle of the car there bears another wedge-shaped bearing *d*, which is securely fastened to the bottom of the car-body. The latter bearing is slightly curved on its face.

The operation of these devices is as follows: When the car is rounding a curve, the
50 outer edge of the car-body and the outer side

of the trucks approach each other. This is due to two causes: first, the elevation of the outer side of the trucks due to traveling on the elevated outer rail, and, secondly, centrifugal action, tending to throw the car-body over, causes its outer side to be depressed. Now as the outer side of the car-body and outer side of the car-trucks come together the incline facings of bearings *a* on the
55 outer side of the car, pressing upon the inclined faces of bearings *b* on the outer side of the trucks, forces the outer side of the rear truck to the rear and the outer side of the front truck to the front, thus throwing
60 the trucks into diagonal positions reversed to each other, which brings the axes of the wheels into the radial lines of the curve, and adapting the trucks to move smoothly around the curve without grinding against the rails
65 or having any tendency to run off the same. To cause the inclined bearings to move more freely over each other, the lower bearing may have at its base or lower end an oil-cup *c*, which is filled with lubricating-oil, and into
70 which the upper bearing dips so as to keep the adjacent faces of the bearings in a good state of lubrication. This oil-cup is, however, not necessary with chilled bearings.

By means of my invention as thus described trains are not only prevented from leaving the track on curves, but heavier trains can be hauled with less power and greater safety and without excessive wear and tear on the rails and rolling-stock. There is also
85 less jarring and rocking from side to side, and a greater speed may be attained without danger.

My invention is not only applicable to the passenger and freight cars of the train, but
90 may also be applied to locomotives with equal advantages.

Having thus described my invention, what I claim as new is—

1. The combination, with the truck of a
95 car and its body portion pivoted thereto about vertical axes, of a thrust connection interposed between the side edges of the car and the sides of the truck, whereby the approach of these two parts toward each other in vertical
100 directions from the centrifugal tilt of the car on a curve or the elevation of the outer trucks

on a curve is made to adjust the trucks to the curve, substantially as shown and described.

2. The combination, with the trucks of a
5 car and its body portion pivoted thereto about a vertical axis, of two abutting inclined faced bearings, one located upon the truck and the other upon the body of the car, to cause the motion between the two to
10 adjust the trucks to the curve, substantially as shown and described.

3. The combination, with the trucks of a car and its body portion pivoted thereto

about a vertical axis, of two abutting inclined faced bearings, the upper one being 15 located upon the body of the car and the other upon the trucks, and the latter being provided with an oil-cup, into which the upper bearing dips to maintain a constant lubrication, substantially as shown and de- 20 scribed.

HORACE RESLEY.

Witnesses:

DANIEL E. KEAN,

W. M. MCKAIG.