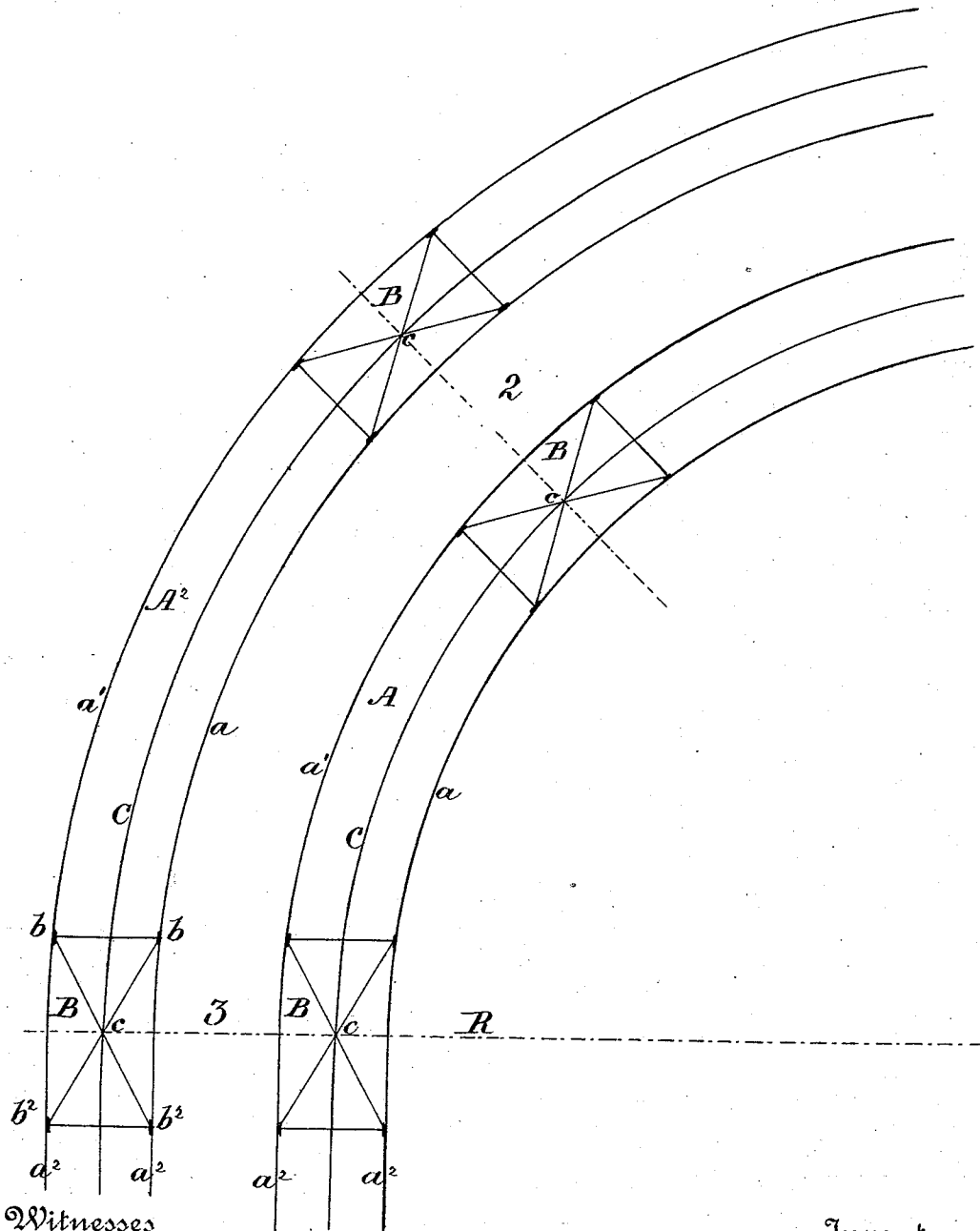


(No Model.)

C. W. PARKS.
RAILWAY TRACK.

No. 479,836.

Patented Aug. 2, 1892.



Witnesses

C. C. Schiller

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UNITED STATES PATENT OFFICE.

CHARLES WELLMAN PARKS, OF TROY, NEW YORK.

RAILWAY-TRACK.

SPECIFICATION forming part of Letters Patent No. 479,836, dated August 2, 1892.

Application filed May 14, 1891. Serial No. 392,654. (No model.)

To all whom it may concern:

Be it known that I, CHARLES WELLMAN PARKS, a citizen of the United States, residing at Troy, in the county of Rensselaer, State of New York, have invented certain new and useful Improvements in Railway-Tracks, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to railway-tracks having, besides the two rails usually employed for the wheels carrying the weight of the car, a central rail to be clutched by the motive power or a central way for the passage of the grip-lever or device of cable-cars or for the passage of the trolley or brush-lever operating in electric conduits or ways; and the objects of my improvement are to prevent excessive friction or strain against one side of the central rail by the clutching-wheels or undue friction of the grip-lever against one side of the groove made for its passage while the car is traveling upon a curved track—as, for example, in turning the corners of streets. I attain these objects by the construction illustrated in the accompanying drawing, which represents in diagram form a double railroad-track with four car-trucks in diagram form placed thereon.

In said drawing, A represents the inner track, and A^2 the outer track. The rail a of the track A presents a curve having a radius of about thirty feet, while the rail a of the track A^2 presents a curve having a radius of about forty feet.

R represents a radius-line passing through the points of junction of the straight rails a^2 with the curved rails $a a'$.

B represents car-trucks in diagram form, the points of contact of one pair of wheels with the rails being represented at $b b$, while the points of contact of the second pair with the rails is represented at $b^2 b^2$. The diagonal lines $b b^2$ are placed in the drawing to indicate at their junction the central point c of the truck, and is the location preferred for the grip-lever in cable-cars or the clutch-wheels in three-rail tracks, and although the drawing is on a small scale it is quite apparent that the central point c of the car is nearer the rail a than to the rail a' when the car is wholly upon the curved portion of the track, as shown at 2, the distance that it is nearer being about two inches for tracks having the radii above stated,

with trucks having their front wheels about six feet in front of the rear wheels. If the front wheels of the truck are more than six feet from the rear wheels, the central rail or groove C should be two and a half or three inches nearer to the rail a and remain parallel thereto the whole length of the curve to the points $b b$ occupied by the front wheels of the trucks B entering upon the track. Said trucks B are shown half-way upon the straight track and half-way upon the curved track, and while the central rail C is two inches nearer the rail a on the line $b b$ said central rail is equidistant of the straight rails a^2 on the line $b^2 b^2$, and between the lines $b b$ and $b^2 b^2$ the central rail converges toward the inner curved rail a , said convergence of the rail C assuming a curve (probably parabolic) between the points of meeting of the lines $b b$ and $b^2 b^2$ with the rail C.

Having now fully described my invention, I claim—

1. In combination with a straight three-rail or three-way track having the central way equidistant from each side way, and a curved track having its intermediate way nearer to the inner rail of the curve by approximately the product of the radius of curvature and the versed sine of the angle formed by two radii of the curve, one such radius passing through an axle of the car upon the curve and the other passing midway between the axles of said car, as set forth.

2. In combination with a straight three-rail or three-way track having the central way equidistant from each side way, a curved track having its intermediate way nearer to the inner rail of the curve by approximately the versed sine of the angle formed by two radii of the curve, one such radius passing through an axle of the car upon the curve and the other passing midway between the axles of said car, and an intermediate way having a curve in one direction gradually approaching the center way of the straight track and in the other direction the off center way of the curved track, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES WELLMAN PARKS.

Witnesses:

E. E. MASSON,
C. C. SCHILLER.