J. M. GOODKNIGHT.

CAR WHEEL.

APPLICATION FILED SEPT. 26, 1910.

1,001,754.

Patented Aug. 29, 1911.

Fig 1

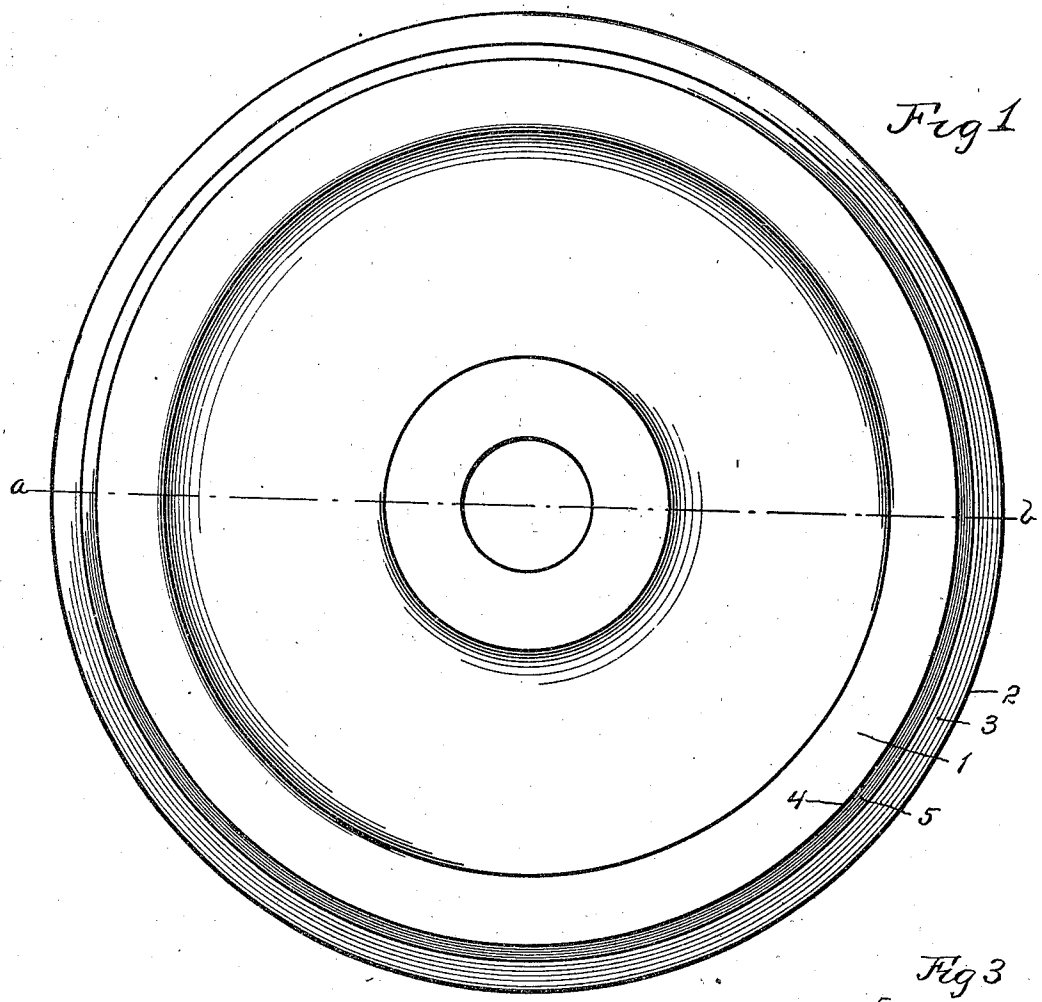


Fig 3

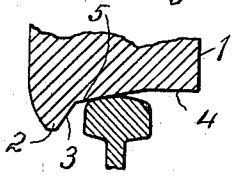
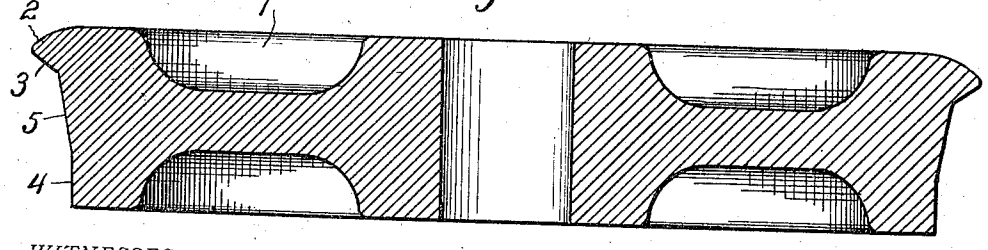


Fig 2



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CAR-WHEEL.

1,001,754. Specification of Letters Patent. **Patented Aug. 29, 1911.**

Application filed September 26, 1910. Serial No. 583,843.

To all whom it may concern:

Be it known that I, JOHN M. GOODKNIGHT, a citizen of the United States, residing at Kansas City, in the county of Wyandotte and State of Kansas, have invented certain new and useful Improvements in Car-Wheels, of which the following is a specification.

My invention relates to improvements in car wheels.

One of the objects of my invention is to provide a car wheel which will track evenly with the opposite car wheel in running along a straight track, and which will round curves and pass switches without danger of dropping between the rails.

Another object of my invention is to provide a flange for a car wheel which when the wheel is rounding a curve will not tend to climb the rail, and which will pass switches safely.

The novel features of my invention are hereinafter fully described and claimed.

In the accompanying drawings illustrating the preferred form of my invention, Figure 1 is an outside elevation of a wheel having my improvements. Fig. 2 is a horizontal section on the line *a*—*b* of Fig. 1. Fig. 3 is a cross section of a rail on which is shown in vertical section a portion of my improved wheel.

Similar reference characters denote similar parts.

1 denotes the body of the wheel which is of the common type and which is adapted to be secured to an axle in the ordinary manner.

The wheel is provided with a flange 2 the outer side of which has a beveled surface 3 instead of the usual rounded surface with which the outer sides of car wheel flanges are generally provided. By having a straight beveled outer surface on the flange 2 the wheel will not tend to climb the rail on rounding curves, as the flange at all points of contact with the rail retains the same angle to the rail.

The outer portion 4 of the tread of the wheel is cylindrical, instead of having the usual beveled surface, and the inner portion 5 of the tread flares from the cylindrical portion 4 toward and preferably to the beveled portion 3 of the flange. The portion 5 is preferably given a greater flare or inclination than the flare or inclination of the ordinary wheel tread. By having the outer portion 4 of the tread cylindrical the wheel will not have a tendency to slip between the rails on rounding curves or passing switches at which places the rails are usually more or less spread, and at which places the wheels are most liable to drop between the rails.

In straight running the wheel will generally travel mostly on the inclined part 5, as shown in Fig. 3. If one wheel gets to running more rapidly than the opposite wheel, not shown, it will tend to cross toward the opposite rail, and will thus, through the intermediacy of the connecting axle, not shown, bring the opposite wheel toward a position in which the rail supporting it will creep up on the incline of said opposite wheel, and will thus cause an increase in the speed of the opposite wheel, thereby effecting even tracking of both wheels.

I do not limit my invention to the structure shown and described, as many modifications, within the scope of the appended claim may be made without departing from the spirit of my invention.

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

A car wheel having a flange at its inner end, the outer side of the flange having a straight beveled surface, the wheel having a tread the outer portion of which is cylindrical and the inner portion of which has a flaring surface extending from said cylindrical portion to the beveled portion of the flange.

In testimony whereof I have signed my name to this specification in presence of two subscribing witnesses.

JOHN M. GOODKNIGHT.

Witnesses:

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