No. 895,337. PATENTED AUG. 4, 1908.

M. H. BULLARD.

CAR AXLE.

APPLICATION FILED FEB. 29, 1908.

Fig. 1.

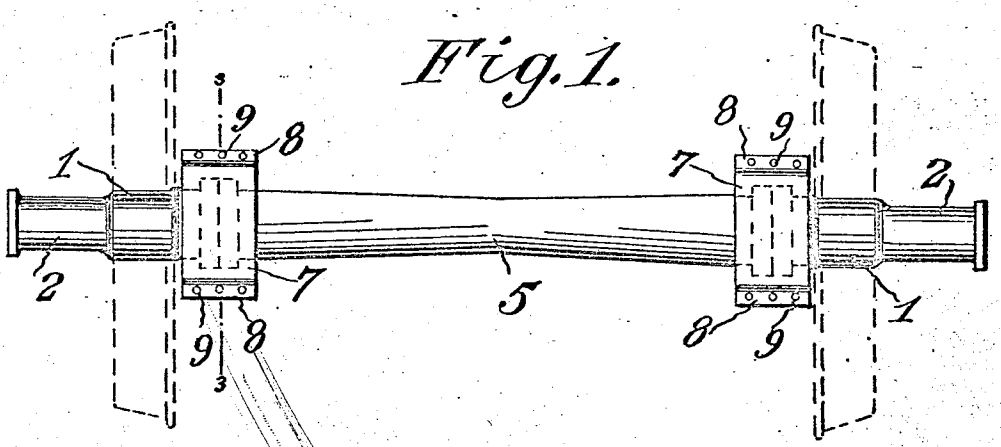


Fig. 2.

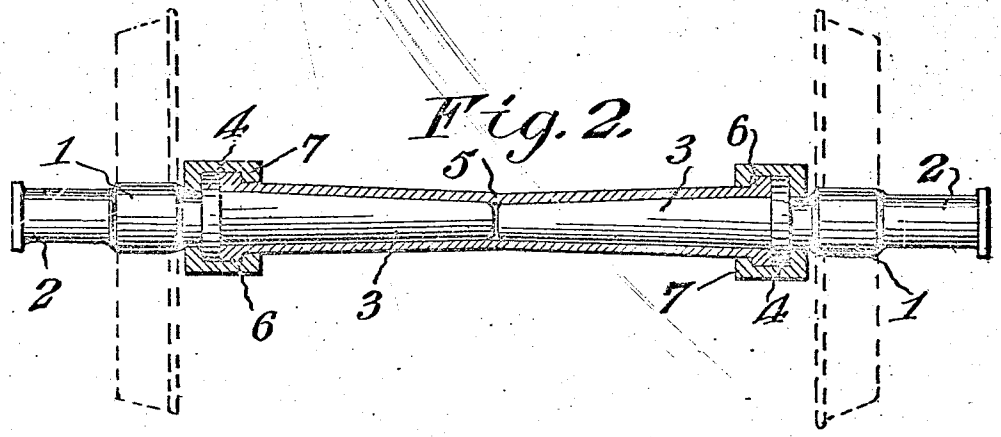
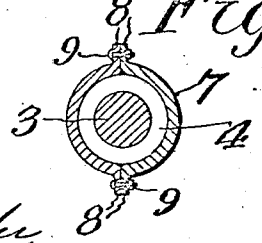


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

MARVIN H. BULLARD, OF OSSIAN, IOWA.

CAR-AXLE.

No. 895,337. Specification of Letters Patent. Patented Aug. 4, 1908.

Application filed February 29, 1908. Serial No. 418,548.

To all whom it may concern:

Be it known that I, MARVIN H. BULLARD, a citizen of the United States, residing at Ossian, in the county of Winneshiek and State of Iowa, have invented new and useful Improvements in Car-Axles, of which the following is a specification.

My invention relates to car axles, and its primary object is the provision of an axle constructed to permit one wheel to revolve independently of the other, thereby preventing the slipping of the inner wheel on a curve.

A further object of my invention is the provision of a car axle which is simple, durable and efficient, and which can be manufactured and sold at a comparatively low cost.

With the above and other objects in view, the invention consists in the construction, combination and arrangement of parts hereinafter fully described, claimed and illustrated in the accompanying drawing, wherein:

Figure 1 is a view in side elevation of a car axle constructed in accordance with my invention. Fig. 2 is a sectional view taken centrally and longitudinally through the casing of the axle, and Fig. 3 is a section on the line 3—3 of Fig. 1.

Similar numerals of reference indicate the same parts in the several figures of the drawing.

The axle comprises two sections consisting of annular enlargements 1 upon which the wheels are adapted to be shrunk, journals 2 adapted to be received by the journal boxes suspended from the car truck, reduced tapered extensions 3 and annular collars 4, the collars being arranged between the enlargements and the reduced extensions 3. The reduced tapered extensions 3 are received by a casing 5, which is tapered to correspond to the taper of the extensions and which abuts at its ends against the collars 4 to retain the wheels in proper relative spaced relation. The ends of the casing 5 are provided with annular flanges 6 of a diameter equal to the diameter of the annular collars 4. Caps 7 fit over the collars 4 and flanges 6 to retain the extensions 3 in the casing, and each consists of sections provided with flanges 8, through which bolts 9 pass to secure the sections assembled. The extensions 3 of the axle are adapted to freely revolve within the casing 5 independently of the other, thereby preventing the slipping of the inner wheel when the train is passing a curve.

From the foregoing description taken in connection with the accompanying drawing, the construction and mode of operation of the invention should be understood without a further extended description.

Changes in the form, proportions and minor details of construction may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

Having fully described and illustrated my invention, what I claim is:

A car axle comprising sections including tapered portions and collars, a casing adapted to receive the tapered portions and abut against the collars, said casing being provided with annular flanges, caps adapted to engage the flanges and collars, said caps being constructed of sections provided with flanges, and bolts passing through the flanges to secure the sections assembled.

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

MARVIN H. BULLARD.

Witnesses:

C. BULLARD,

FRED J. FIGGE.