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YOKE FOR DRAFT GEARS.

APPLICATION FILED OCT. 9, 1911.

1,083,335. Patented Jan. 6, 1914.

Fig. 1.

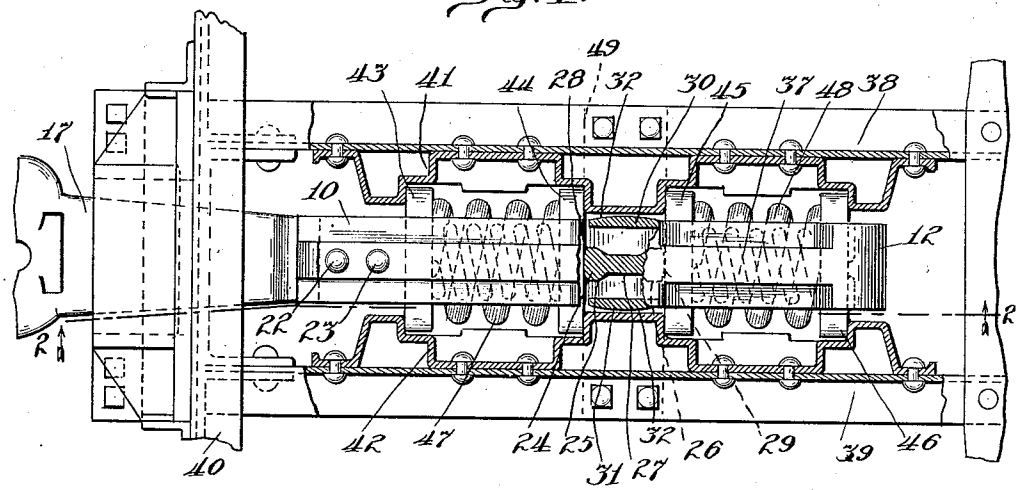


Fig. 2.

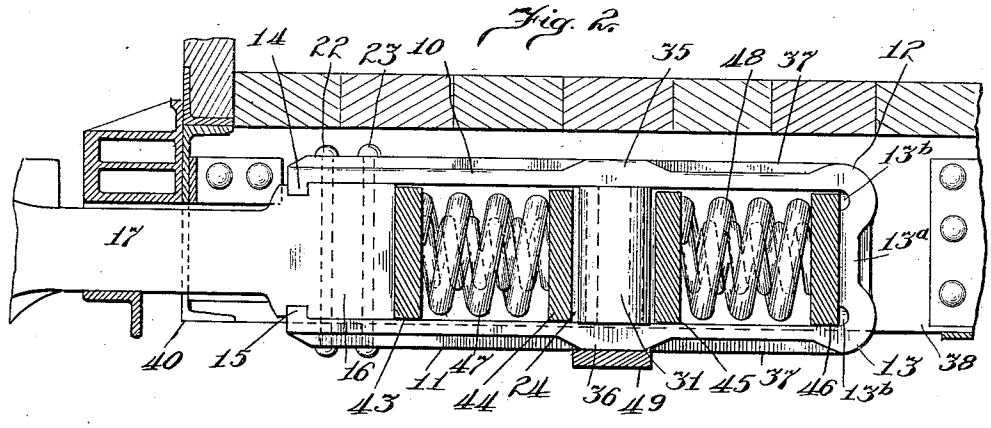
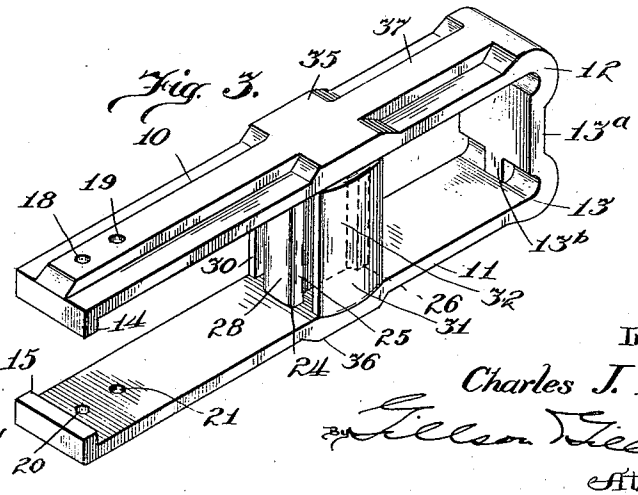


Fig. 3.



Witnesses

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YOKE FOR DRAFT-GEARS.

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To all whom it may concern:

Be it known that I, CHARLES J. NASH, a citizen of the United States, and resident of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Yokes for Draft-Gears, of which the following is a specification, and which are illustrated in the accompanying drawings, forming a part thereof.

The invention relates to yokes for draft gears for railway cars, being the U-shaped or loop-shaped member which incloses the shock-absorbing elements of the gear and to which the coupler bar is attached. More specifically, it relates to yokes adapted for use in connection with the tandem type of draft gears, in which two separate shock-absorbing devices are employed, one being placed back of the other.

The objects of the invention are to secure, in a yoke for service in connection with the type of gear named, great strength coupled with simplicity of construction, and providing for freedom of action of the gear. These objects are attained in the structure hereinafter described, and which is illustrated in the accompanying drawings, in which—

Figure 1 is a detail plan section of a car and a tandem draft gear, with the improved yoke applied thereto; Fig. 2 is a longitudinal vertical section on the broken line 2—2 of Fig. 1; and Fig. 3 is an isometric perspective of the yoke.

The yoke is preferably made of cast steel and is U-shaped, comprising the arms 10 and 11, which are connected at their inner ends. The connecting section of the yoke is in-set, the ends of the arms 10 and 11 being curved inwardly and forwardly, as shown at 12 and 13, the incurved portions being united by a flat web 13^a which serves as the bearing for the rear follower plate. This form of construction of the inner end of the yoke avoids the abrupt angles at the ends of its arms, which have heretofore been the weak points in devices of this character. These curved portions are preferably reinforced, as shown, and within the cavity of each there may be formed a fillet 13^b, affording still greater strength without material increase of weight. At the end of each arm there is provided an instanding lug 14, 15, for engaging forwardly directed shoulders on the butt 16 of the coupler bar 17, and back of these lugs the arms are perforated, as shown at 18, 19, 20 and 21, to receive rivets 22, 23, which secure the yoke to the butt of the coupler.

Approximately midway of their length the arms 11, 12, are united by a bridge 24 integral with the arms, longitudinally disposed with reference to them, and located upon their longitudinal median line. This bridge is thicker adjacent its margins, as shown at 25, 26, than at its central portion 27, as plainly shown in Fig. 1, and its edges are rounded, as shown at 28, 29. The arms 11, 12, are also united by a pair of integral bridges 30, 31, located, transversely with reference to the yoke, in alinement with the bridge 24, and respectively at the two sides of the arms 11, 12. These bridges are somewhat narrower than the central bridge, and their outer faces are rounded, as plainly shown at 32.

In line with the bridges 24, 30 and 31 the arms 11 and 12 are provided with bosses 35, 36, on their outer faces, and preferably each arm is provided with a central longitudinal rib, as 37, on its outer face for the purpose of giving it added strength.

The yoke is shown in Figs. 1 and 2 as applied to a conventional form of draft rigging and to a car. The draft sills of a car are represented at 38, 39, and its end sill at 40. To the inner faces of the draft sills are secured cheek plates 41, 42, with suitable shoulders for engagement by followers 43, 44, 45 and 46. The shock-absorbing means illustrated are springs 47, interposed between the followers 43 and 44, and springs 48 interposed between the followers 45 and 46. The forward follower 43 is engaged by the butt 16 of the coupler bar. The intermediate followers 44 and 45 are engaged by the central yoke bridge 24, and the rearward follower 46 is engaged by the flat end 13^a of the yoke. A tie and supporting strap is shown at 49 uniting the sills and carrying the draft rigging, the boss 36 at the bottom of the yoke riding thereupon. The purpose in providing bosses of this kind on both arms of the yoke is to permit its use either side up.

Lateral swaying of the coupler is permitted by the rounded form of the outer faces of the bridges 31, 32, and by the rounded edges 28, 29, of the central bridge 24, the lesser width of the outer bridges providing the necessary clearance between them

and the follower when such movement takes place.

I claim as my invention—

A yoke for draft gear for cars, comprising a U-shaped body having a longitudinally-disposed bridge uniting its side arms and located on the median line of the body, and a pair of longitudinally-disposed bridges uniting its side arms and located at the margins thereof and being transversely alined with but shorter than the first-named bridge, the outer faces of the pair of bridges being rounded.

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