

(No Model.)

J. EDGAR.
WHIFFLETREE CENTER.

No. 499,217.

Patented June 13, 1893.

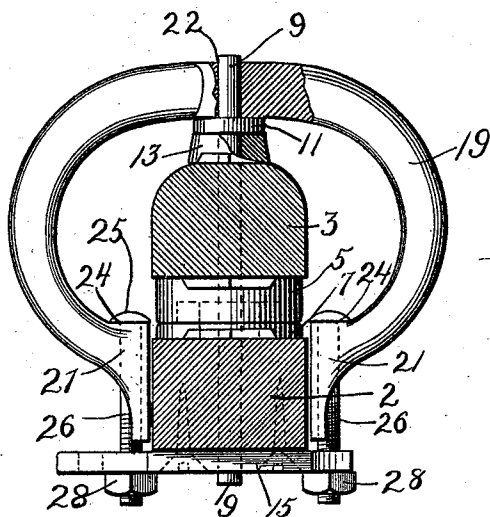


Fig. 1.

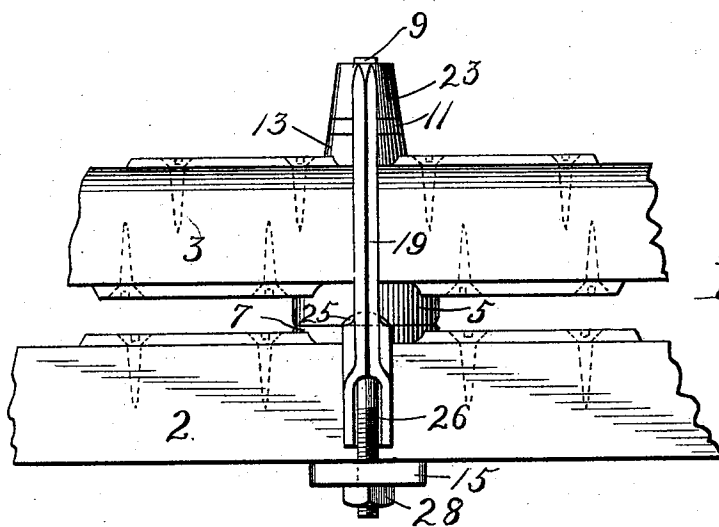


Fig. 2.

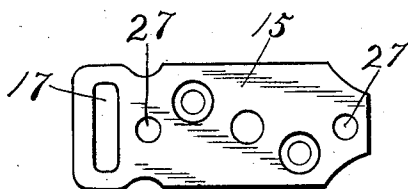


Fig. 3.

Witnesses

S. C. Purple
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Inventor

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By Paul Mervin His Atty.

UNITED STATES PATENT OFFICE.

JOHN EDGAR, OF ROCHESTER, MINNESOTA.

WHIFFLETREE-CENTER.

SPECIFICATION forming part of Letters Patent No. 499,217, dated June 13, 1893.

Application filed September 8, 1892. Serial No. 445,332. (No model.)

To all whom it may concern:

Be it known that I, JOHN EDGAR, of Rochester, county of Olmsted, State of Minnesota, have invented certain Improvements in Centers for Whiffletrees, of which the following is a specification.

The object that I have in view is to provide a whiffletree center that will be simple and inexpensive in construction, so that it can be applied to all kinds of vehicles as cheaply as the ordinary centers now in use, and at the same time will be capable of taking up the wear that occurs between the evener or whiffletree and the center bolt or pin, and in the plates between the whiffletree and the evener or the cross bar upon which it is pivoted.

To this end, my invention consists in the construction and combination hereinafter described and particularly pointed out in the claims.

In the accompanying drawings forming part of this specification: Figure 1 shows an end elevation of an evener or cross bar with a vertical section of a whiffletree pivoted thereon by my improved center, a portion of the double reinforcing pin or bracket being broken away to show its connection with the center pin. Fig. 2 is a side view of a complete device. Fig. 3 is a plan detail from beneath, of the cross or bottom plate having the strap loop.

In the drawings, 2 represents the evener or the cross bar upon which the whiffletree 3 is supported. These parts may be of any ordinary or preferred construction, and they are provided with the usual plates 5 and 7 arranged between them to receive the wear that occurs from the oscillation of the whiffletree upon its support. A central opening is provided through both the whiffletree and the evener or cross bar, and the pin 9 is placed in this opening, said pin being provided at a point near its upper end, but not close to the end, with a collar 11. This collar preferably rests upon the cap plate 13, secured to the top of the evener by suitable screws. Beneath the doubletree or cross bar is the cross plate 15 provided preferably with a hole in each end, and also preferably provided with a loop 17 to receive the usual strap.

To prevent the center pin from tilting forward I secure the upper end thereof by an arch loop fastened upon the evener. For this

purpose I have heretofore employed a loop of wrought metal having threaded lower ends, which it has been my practice to adjustably fasten in the cross plate by threaded nuts. This arrangement however, I found to be quite expensive owing to the fact that the loops must be drop forged and owing to the difficulty of afterward threading the lower ends of the loop. To obviate these difficulties and greatly lessen the manufacturing cost I so construct the arch loop device as to make the arch proper and the ends thereof independently. The arch 19 as shown in the drawings has the general oval form calculated to allow full space for the free movement of the whiffle-tree upon the evener, and with its bracket feet 21 is made of malleable cast iron, preferably. In the top of the arch I provide the opening 22 to receive the upper end of the pin 9, and the lower side of the arch is enlarged as shown at 23 to rest upon the collar 11. The inner sides of the bracket portions 21 are parallel and straight and stand quite close to the sides of the evener, a small space however being preferably left to permit the tilting of the loop backward or forward to adjust the position of the center pin. The tops 24 of the brackets are flat to receive the heads 25 of the independent bolts 26, which are slipped down through holes or perforations in the feet. These bolts are threaded and pass through the holes 27 in the projecting ends of the cross piece 15, being adjustably secured therein by the nuts 28. It will be noticed that the lower ends of the feet stand some distance above the top of the cross plate so that a considerable wear in the plates 5 and 7 may be taken up before the ends of the loop are so far lowered as to strike the cross plate, at which time my device becomes practically inoperative, so far as possibility of nice adjustment is concerned.

Thus it will be seen, I provide a device which is fully as strong and cheap as any of those now employed upon vehicles and which possesses the advantage of easy and accurate adjustment to throw the center pin into any desired position required for properly taking up wear between the parts, such adjustment being made by simply tightening one of the nuts to tilt the pin backward, or by tightening both nuts if the middle plates chance to have worn evenly.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination with the movable parts, 5 of a center pin passing through both, an arched loop extending over one of said movable parts, and engaging the upper end of said center pin, said loop terminating in upright bracket feet having perforations or bolt holes, and 10 separate bolts passing through said feet and adjustably connected with the other movable part, whereby said feet, and hence said loop and center pin, are made adjustable to take up wear between said parts, substantially as 15 described.

2. The whiffletree center, comprising a center pin passing through both of the movable parts and an arch loop, the lower ends of which 20 loop terminate in bracket feet, the inner sides of which conform substantially to the form of the lower movable part, and separate bolts passing through said feet, and adjustably secured to a plate arranged upon said lower part, for adjusting said loop both laterally 25 and vertically, substantially as, and for the purpose specified.

3. The combination, with the whiffletree and an evener or cross bar, of a center pin 30 passing through both and projecting above said whiffletree, a cross plate provided on the lower side of the evener or cross bar, a metal

loop engaging the upper end of said pin and provided with bracket feet having parallel inner sides projecting down the sides of the evener, said feet provided with bolt holes, separate bolts passing through the same and 35 through said cross plate, and nuts arranged on the lower ends of said bolts whereby said arch loop and therewith the center pin, are made adjustable, substantially as and for the 40 purpose specified.

4. The combination, with the whiffletree and evener or cross bar, of a center pin 9 passing through both and projecting above the whiffletree, said center pin having a collar to 45 engage one of said parts, the cross plate 15 secured on the bottom of the evener, the iron arch loop 19, engaging the upper end of said pin and provided with the inwardly projected bracket feet extending down the sides of the 50 evener and perforated, separate bolts passing through said feet and through said cross plate, and nuts 28 on the bolts and beneath the cross plate, substantially as and for the purpose specified.

In testimony whereof I have hereunto set my hand this 2d day of September, 1892. 55

JOHN EDGAR.

In presence of—

R. H. GOVE,

JOS. A. BEAR.