

(No Model.)

J. EDGAR.
WHIFFLETREE.

No. 469,736.

Patented Mar. 1, 1892.

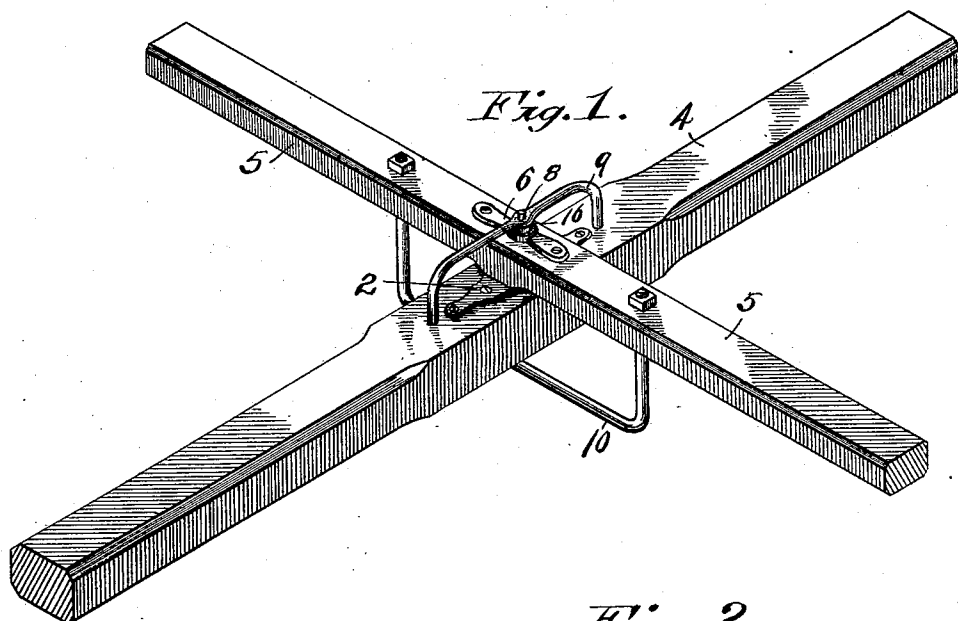


Fig. 2.

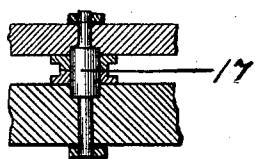
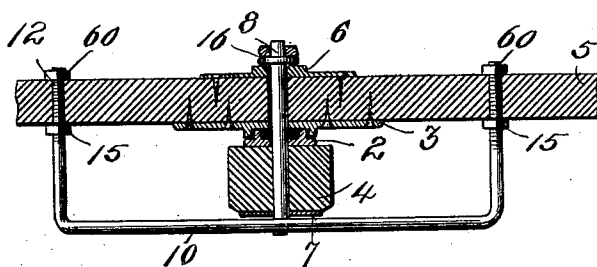


Fig. 4.

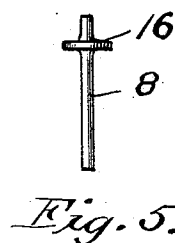
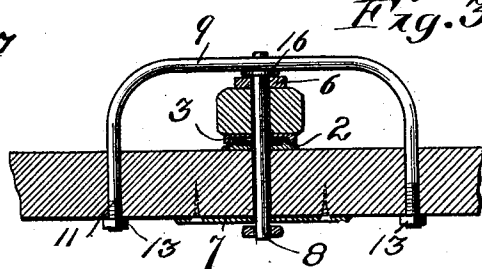


Fig. 5.

Witnesses.

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By Paul Merwin Attys.

UNITED STATES PATENT OFFICE.

JOHN EDGAR, OF ROCHESTER, MINNESOTA.

WHIFFLETREE.

SPECIFICATION forming part of Letters Patent No. 469,736, dated March 1, 1892.

Application filed July 6, 1891. Serial No. 398,591. (No model.)

To all whom it may concern:

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

My invention relates to means for securing together whiffletrees, tongues, and eveners of vehicles; and its object is to provide a device or devices by the use of which the life of the center-pins and the plates between the several parts may be greatly increased.

Heretofore many devices have been employed for retaining the center-pin in a true vertical position with respect to the evener and tongue, whereby the even wear of the plates between the same was sought to be secured. These devices have, however, for the most part failed by reason of the fact that no means were provided for taking up slack in or between the parts and at the same time holding the evener squarely upon the pole.

My invention consists in the combination, with the tongue and evener or the evener and whiffletree and a center-pin adapted thereto, of straps engaging the ends of the center-pin to prevent lateral movement thereof, means for adjusting the centers or arches of said straps either vertically or laterally to take up all slack.

The invention consists, further, in especially-devised means for holding a center-pin in place vertically, and in other details of constructions and combinations hereinafter described, and particularly pointed out in the claims.

My invention will be more readily understood by reference to the accompanying drawings, in which—

Figure 1 is a general isometric view showing a tongue and evener secured by the devices embodying my invention. Fig. 2 is a vertical section taken on a line transverse to the tongue. Fig. 3 is a vertical section on a line passing longitudinally through the tongue. Fig. 4 is a vertical sectional view showing a modified form of center-pin. Fig. 5 is a view of the center-pin having the collar.

As shown in the drawings, the usual plates 2 and 3 are employed on the tongue 4 and evener 5, respectively.

6 is the crown-plate on the top of the evener, and 7 represents the metal strap passing along the under side of the tongue.

The center-pin 8 passes down through the evener and tongue and the ends project above and beneath the same. The ends of the center-pin are held firmly in place by the arched straps or rods 9 10. As shown, the ends of each strap are bent at right angles with the horizontal portion of the same and terminate in the threaded ends 11 and 12, which pass through the tongue and evener, respectively. The ends 11 are fastened in the tongue by the threaded nuts 13, whereby they may be drawn down vertically through the tongue to press the evener firmly against the plate upon the top of the tongue. The ends 12 of the lower strap are threaded to receive a nut upon each side of the evener 5. The nuts 15 are turned down on the rod, while those numbered 60 are tightened, after which the nuts 15 are screwed firmly back against the under side of the evener, to prevent any loosening of the connection between the same. The centers of the straps are provided with the eyes adapted to receive the ends of the pin 8. The collar or enlargement 16 is provided on the pin and preferably arranged between the plate 6 and the strap 9 or the plate 7 and strap 10. This collar, being secured upon and forming a part of the pin 8, prevents any movement thereof except as moved by the tightening of the strap 9 or 10. In place of this collar 16 I may provide the enlarged portion 17 on the center-pin 8, as shown in Fig. 4, the same being included between the movable or pivoted parts, thereby leaving the ends of the pin free.

It will be seen that by drawing down the forward end of the arched strap 9 the center-pin may be tilted forward, as well as forced down slightly, while by tightening the rear nut the pin may be drawn backward and downward.

In case the evener becomes worn or the plates between the evener and tongue wear so that the evener teeters on the pole, the lower strap 10 is drawn up by tightening the nuts 15. It will thus be seen that by a proper adjustment of the two straps the plates between the evener and pole may be made to wear with perfect evenness and the evener kept level thereon. The slightest wear or

looseness in the parts may be easily taken up, thereby preventing damage thereto. The lower arch strap or rod is considerably longer than the one extending over the top of the evener, such length being given the same in order that the evener may swing freely without striking the brace-rods extending from the cross-piece or hounds to the pole; but this lower arch strap may be made of any length or shape suitable to the particular pole on which it is placed.

It is obvious that I may make the center-pin in the same piece with either the upper or lower arched strap, thereby dispensing with the necessity of any shoulder or collar upon the pin. The same results as to tilting the pin and leveling the evener would be attained.

One great advantage of my invention is that, while the parts are firmly secured together, no nut need be used on either end of the center-pin, thus avoiding the trouble always attendant upon the employment of center-pins having tightening-nuts.

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

1. The combination, with the tongue and evener, of a center-pin passing through both of said mentioned parts and fastened therein against longitudinal movement, and an arch strap formed with a central or middle portion adapted to engage the end of said pin and one of said parts and having its legs set at a distance from the said part and passed perpendicularly through holes provided in the other part and secured by adjustable locking-nuts, substantially as described.

2. The combination, with the evener and member to which the same is connected, so that one may move upon the other, of a center-pin for pivotally securing the said two parts together, provided with a fixed collar or enlargement to engage at least one of said parts to prevent the pin from slipping out of the same, and means for locking said evener and member together and preventing the tilting of one on the other, said means consisting of an arch strap having perpendicular and threaded ends passed through one of said parts, and a middle portion to engage the end of said pin, and nuts for adjustably securing the ends of said arch in the part through which they pass for the purpose of throwing said pin into any desired angle with reference to the parts through which it passes, substantially as and for the purposes specified.

3. The combination, with the evener and the tongue, of a center-pin passing through both, an arched strap having a middle portion or eye adapted to embrace the end of said pin and having vertical threaded legs or ends passing through holes provided in the tongue, nuts arranged on the lower ends thereof to engage the lower side of the tongue, a second arched strap having an eye to embrace the lower end of said pin and upwardly-extending legs passing through holes provided in the evener, nuts for adjustably securing said ends in said evener, and means for fastening said pin against vertical movement, substantially as described.

4. The combination, with the tongue and evener, of the center-pin passing through both and provided with a collar or shoulder 16, an arched strap to engage the ends of the pin above the collar, a long arched strap having upwardly-extending ends 12, passing through the evener, and threaded and adjustable locking-nuts 15 and 16 on each end of the strap to engage opposite sides of the evener, substantially as described.

5. The combination, with the evener, of the tongue whereon the same is adapted to be secured, a center-pin passing through said parts, a strap 9, engaging the upper end of said center-pin, a strap 10, engaging the lower end thereof, and the ends of said straps being threaded and carried through the tongue and evener, respectively, and secured therein by locking-nuts, substantially as described.

6. The combination, with the tongue, of an evener, a center-pin having a shoulder or collar engaging the same, plates provided between said evener and tongue, an arch strap 9, having an eye adapted to receive the upper end of the pin and the shoulder or collar thereon, the ends of said strap or rod 9 being secured in the tongue by nuts 13, secured on the threaded ends of the strap, and the arch strap 10, having an eye engaging the lower end of the center-pin and having threaded ends 13, adapted to receive the nuts 15 and 16, arranged upon the upper and lower side of the evener, substantially as and for the purpose specified.

In testimony whereof I have hereunto set my hand this 30th day of June, 1891.

JOHN EDGAR.

In presence of—

D. B. FRANKLIN,
R. H. GOVE.