

(No Model.)

J. EDGAR.
WHIFFLETREE.

No. 486,092.

Patented Nov. 15, 1892.

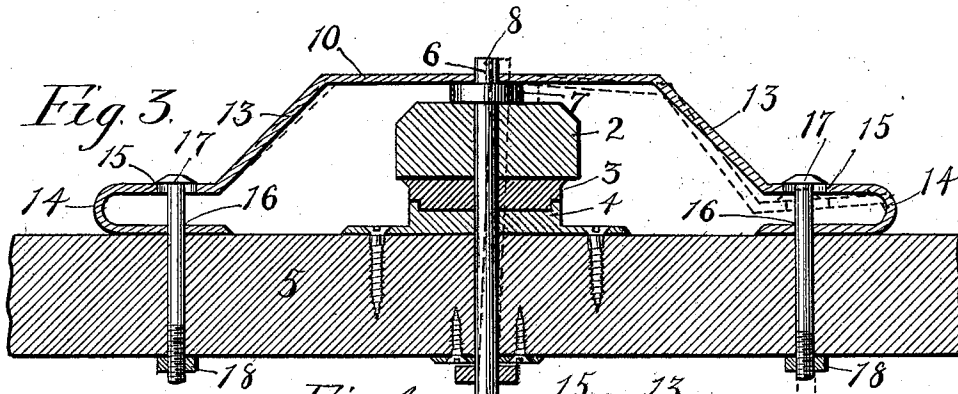
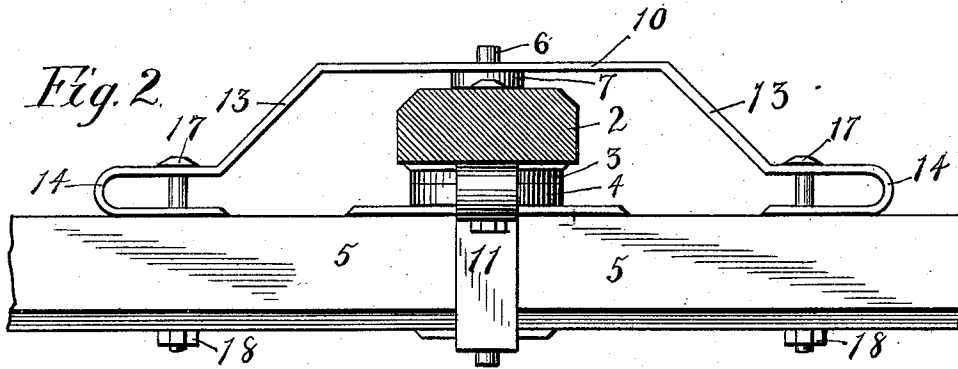
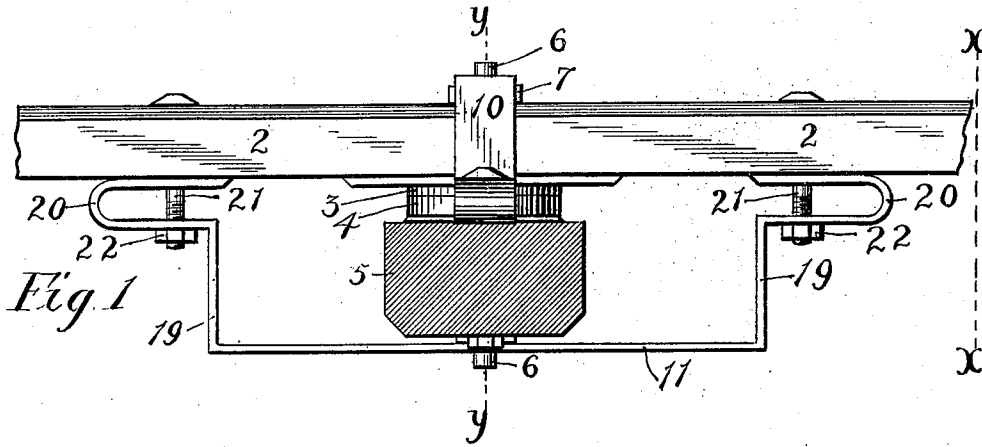


Fig. 4

Witnesses
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UNITED STATES PATENT OFFICE.

JOHN EDGAR, OF ROCHESTER, MINNESOTA.

WHIFFLETREE.

SPECIFICATION forming part of Letters Patent No. 486,092, dated November 15, 1892.

Application filed March 28, 1892. Serial No. 426,641. (No model.)

To all whom it may concern:

Be it known that I, JOHN EDGAR, a citizen of the United States of America, residing at Rochester, in the county of Olmsted and State of Minnesota, have invented certain Improvements in Centers of Eveners, of which the following is a specification.

My invention relates to means for pivotally securing the evener upon the tongue or pole of the vehicle and in such a manner as to render possible the ready adjustment of the center pin to cause the faces of the plates between the pole and evener to bear squarely upon one another and prevent the uneven wearing of the same or the bending or breaking of the center pin; and my invention relates especially to improvements upon the device upon which United States Letters Patent numbered 469,736 were granted me March 1, 1892.

In distinction therefrom my present invention consists in certain constructions and combinations, which are hereinafter described, and particularly pointed out in the claims.

My invention will be more readily understood by reference to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a side elevation of my device, the tongue being shown in section. Fig. 2 is a view on the line $x x$ of Fig. 1. Fig. 3 is a longitudinal vertical section on the line $y y$ of Fig. 1. Fig. 4 shows slot in strap.

As shown in the drawings, the evener 2 has the pivot-plate 3, journaled in the corresponding plate 4, secured upon the top of the pole 5, and the two parts are pivoted by the center pin 6, which is provided with the annular shoulder or collar 7, which rests upon the top of the evener. As shown, the extremities or ends 8 and 9 of the center pin project, respectively, above and below the evener and pole. These ends are engaged and received by the metal straps 10 and 11, respectively, the middle parts of the same being provided with openings for the center pin. The top strap 10 has the downwardly curved or inclined portions 13 and the loop ends 14. Each of these loop ends has in its upper part a slot 15 and in its lower part 16 a round hole of the size of the bolt 17, the head of which rests upon the top of the loop. These bolts

17 extend perpendicularly through the pole and have on their lower threaded ends the nuts 18. The lower strap 11 has the parts 19 bent at right angles to the horizontal portion, and the distance between these parts or legs 19 is preferably greater than that between the parts 13 of the upper strap, so as to permit the free swinging of the evener upon the pole without danger of the vertical parts of the lower strap striking the braces of the tongue. The loops 20 of the lower strap are like unto those of the upper one and are perforated in the same manner. The short bolts 21 extend down through the evener and the lower strap-loop and are provided on their lower ends with the nuts or burrs 22, thus securing the lower strap to the under side of the evener and holding the middle portion of the strap firmly over the end of the center pin. It will be seen that the center pin is held in place against vertical movement by the confinement of its collar 7 between the top of the evener and the upper strap 10. All of the bolt-heads are shown upon the tops of the evener, and the pole and the nuts of the bolts are concealed from view below the pole and evener, thus giving the device a neater appearance than that of the whiffletree shown in the patent referred to.

Heretofore great trouble has been experienced and expense incurred through the pulling forward or tilting of the evener on the pole and the rapid wearing away of the forward sides of the plates 3 and 4, which are common to all such devices; also, by bending of the pin and the final breaking thereof. In my newly-invented devices I overcome these difficulties by adapting the parts to a nice and ready adjustment. It will be seen that a tendency to pull forward the evener and tilt the same with respect to the pole may be counteracted by drawing back the upper end of the center pin to level the evener and the plates 3 and 4. This may be done by tightening the nut 18 of the rear bolt 17, thereby bending down the upper part of the loop 14 and shortening the distance between the bolt 17 and the top of the center pin with respect to the bolt 17 when in its first position. The result of such tightening is depicted by the dotted lines in Fig. 3. A forward throw of the pin may be accomplished by tightening

the forward bolt 17. In like manner the evener may be adjusted so as to move or swing in a plane exactly parallel with a plane including the top face of the pole. I thus
5 provide a connection and one which permits ready adjustment to take up wear between the movable parts or between the same and the center pin and to cause the plates between the pole and the evener at all times to
10 bear evenly upon each other.

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

1. The combination, with two movable parts,
15 of a center pin passing through both, a strap engaging one end of said pin and having loop ends arranged to rest upon the other part, said loop ends being perforated, and bolts passing through the same and through said other part
20 and having adjustable locking-nuts, substantially as described.

2. The combination, with two movable parts, of a center pin passing through both and provided with the collar to engage one of the
25 parts, a strap extending about one of said parts and having a middle portion in engagement with said pin, said strap provided with perforated loop ends to rest upon the other part,

and bolts passing through the same and secured by suitable nuts.

3. The combination, with the pole and evener, of a center pin passing through both, a strap having loop ends bolted upon the top of said pole and having its middle portion
30 arched over said evener and in engagement with the upper end of said pin, a second strap having loop ends bolted to the under side of said evener, and the middle portion of said
35 second strap passing beneath the pole and engaging the lower end of said pin, substantially
40 as described.

4. The combination, with the two movable parts, of a center pin passing through both, a strap having loop ends and a middle part to
45 engage one end of said pin, each of said loop ends having in its outer part a slot and in its inner part a smaller opening, and a bolt passing through the slot and smaller opening of each loop end and having an adjustable locking-nut, substantially as described.

In testimony whereof witness my hand this
50 16th day of March, 1892.

JOHN EDGAR.

In presence of—
R. H. GOVE,
MOSES HURD.