

S. G. PURINTON.

WHIFFLETREE-ATTACHMENT.

No. 174,298.

Patented Feb. 29, 1876.

Fig. 4

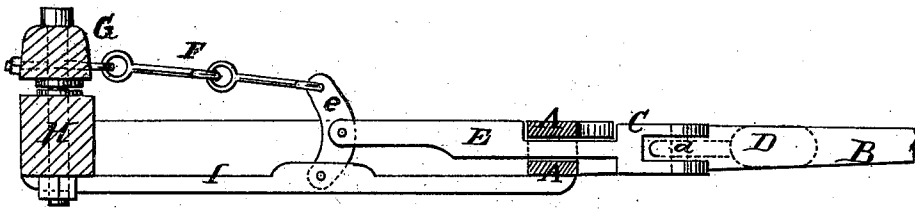
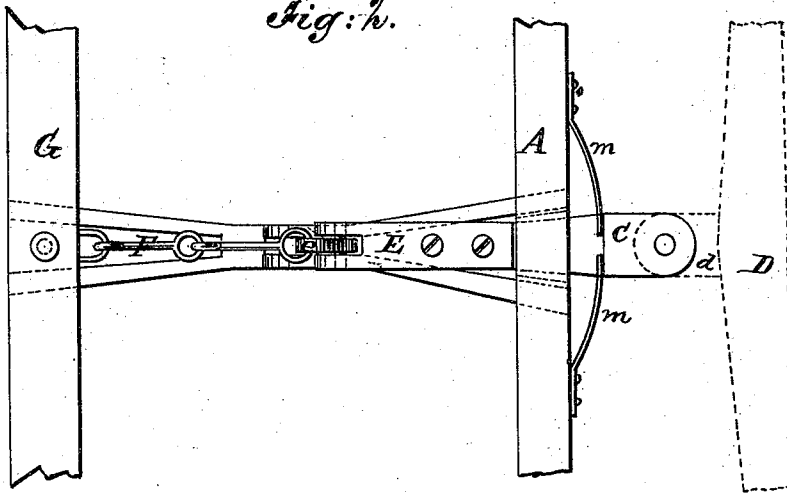


Fig. 5



Witnesses:

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IMPROVEMENT IN WHIFFLETREE ATTACHMENTS.

Specification forming part of Letters Patent No. **174,298**, dated February 29, 1876; application filed June 7, 1875.

To all whom it may concern:

Be it known that I, SAMUEL G. PURINTON, of Somerset, in the county of Bristol and State of Massachusetts, have invented a new and Improved Whiffletree Attachment; and that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

This invention is in the nature of an improvement in attaching whiffletrees to vehicles; and the invention consists in a whiffletree constructed and secured to the vehicle in the manner hereinafter described.

In the accompanying sheet of drawings, Figure 1 is a side view of my invention, partly in section; and Fig. 2, a top view of same.

Similar letters of reference indicate like parts in the several figures.

As is well known, the whole strain in drawing a vehicle is brought upon the transit-bolt, which secures the whiffletree to the cross-bar of the thills, so that when this bolt is broken when driving a vicious horse, great danger occurs to the occupant of the vehicle. To obviate this danger, and at the same time render the whiffletree perfectly adjustable under all circumstances, I divide the cross-bar A of the thills B, transversely, by a horizontal slot, in which is fitted an iron connecting-link C, this link projecting at right angles to the front edge of the cross-bar, as shown in the drawing. The whiffletree D has fitted to its center a stud, *d*, which is secured in the opening in the link C; or the whiffletree may be fitted directly in said opening. Secured to the link C, and extending to the rear, is a rod, E, of metal. To the rear end of this rod is a cross-bar, *e*, to one end of which is secured a draw-rod, F, the other end of said rod extending and affixed to the rocker G. From the axle H extends a draw-rod, I, which is attached to the other end of the cross-bar *e*, and thence to the cross-bar A. The draw-rod I, above described, and the shafts B are rigidly attached to the axle in any suitable manner that will allow of the necessary motions thereof.

My whiffletree being constructed substantially as I have described it, the stud *d* in the whiffletree D is placed within the opening of the link C; and the rod E being secured to the center of the cross-bar *e*, and the draw-rods F and I being affixed to the cross-bar, axle, and rocker, as before described, all the strain that is brought to bear upon the whiffletree by the team is received by the rod E, which conveys it to the cross-bar *e*, and thence the strain is divided between the draw-rods F and I, and is finally borne by the axle H and rocker G, the stud *d* in the whiffletree D acting as a guide and center-pin merely, and the cross-bar *e* acting to some extent as an evenner, tending to equalize the strain in whichever position the whiffletree may assume.

From the foregoing description of the construction and operation of my whiffletree attachment, it will be seen that the strain is so equalized that it would be nearly impossible to break the connection between the whiffletree and vehicle. It will also be observed that the whiffletree has full freedom to move and swing, not only back and forth, but to meet the rise and fall of the shafts. This takes away very largely from the strain generally borne by whiffletrees.

One or more springs, *m*, are placed behind the whiffletree, which are designed to keep the links tight when there is no draft on the whiffletree.

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

1. The combination, with the whiffletree, of the slotted cross-bar, link, and draw-rods, substantially as specified.
2. The combination of the cross-bar A, link C, rods E F, bar *e*, and draw-rod I, substantially as described.
3. The combination of the cross-bar A, link C, rods E F, bar *e*, and draw-rod I with the whiffletree, axle, and rocker G, substantially as and for the purpose specified.

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Witnesses:

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