

(No Model.)

H. G. VAUGHAN.
SHAFT ATTACHMENT FOR BUGGIES.

No. 530,251.

Patented Dec. 4, 1894.

Fig. 1.

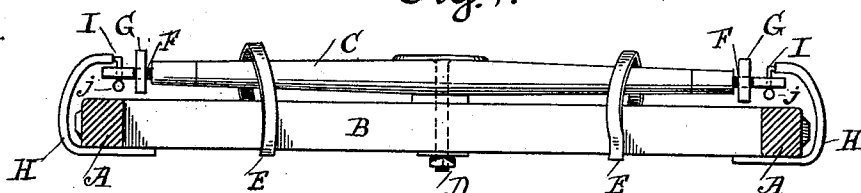


Fig. 2.

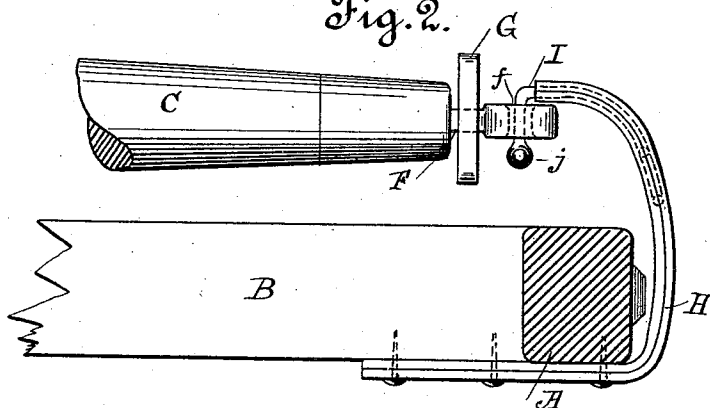


Fig. 3.

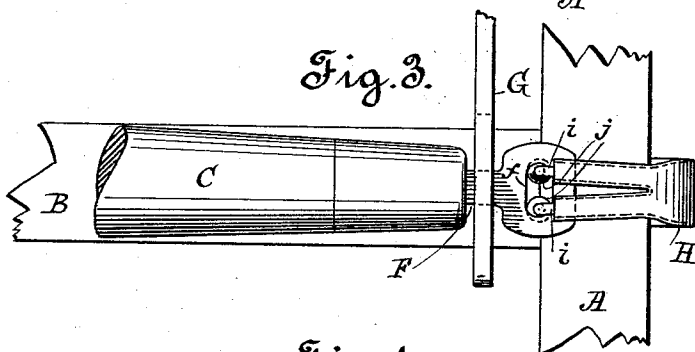
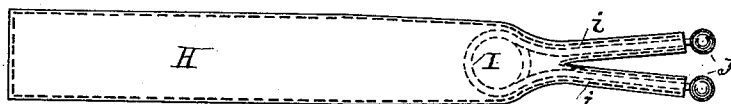


Fig. 4.



Witnesses.

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UNITED STATES PATENT OFFICE.

HIRAM G. VAUGHAN, OF SAN FRANCISCO, CALIFORNIA.

SHAFT ATTACHMENT FOR BUGGIES.

SPECIFICATION forming part of Letters Patent No. 530,251, dated December 4, 1894.

Application filed November 18, 1893. Serial No. 491,333. (No model.)

To all whom it may concern:

Be it known that I, HIRAM G. VAUGHAN, a citizen of the United States, and a resident of the city and county of San Francisco, in the State of California, have invented a certain new and useful Shaft Attachment for Buggies and other Vehicles, of which the following is a specification.

My invention is an improved device for preventing driving lines from slipping under the whiffletree and it consists in certain novel features hereinafter described and claimed.

Referring to the accompanying drawings, which illustrate the preferred mode of construction of my invention,—Figure 1 is a rear elevation, partly in section, of the thills of a light carriage showing my improved device at both sides thereof. Fig. 2 is a broken sectional elevation showing the said device on an enlarged scale. Fig. 3 is a top view of the parts shown at Fig. 2. Fig. 4 is a detailed view of my improved attachment removed from the shafts of the vehicle.

The same parts are indicated by the same letters of reference in the four views.

Let A represent the shafts of a buggy, cart, wagon, carriage, or other vehicle.

B is the cross-bar joining the same, and C, a whiffle-tree secured thereto by the bolt D about which it swings within the limits allowed by the straps E.

F designates the staples at each end of the whiffle-tree to which the traces G are fastened and which are formed, as usual, with end-loops *f* adapted to pass through a slit in the ends of the traces.

My improved attachment is, in this particular instance, connected with both the shafts and the single-tree thereon. It consists of a strap H nailed to the cross-bar B and the thill on either side and carrying a wire spring I that fits in and engages with the loop of either staple. The strap is preferably made of two thicknesses of leather sewed together and arranged to cover most of the wire that forms the spring. The spring has two legs or

branches *i i* each separately covered by the leather forming the strap and each terminating into a small knob or ball *j*. The strap being flexible of its nature, it is easily brought up from under the shaft to which it is attached, and the ends of the spring's branches, which are curved outwardly, as shown at Figs. 1 and 2, are readily inserted through the loop of the staple at the end of the whiffle-tree above. The balls *j* having been pressed together and passed through the loop and then released, the branches of the spring spread apart and the attachment is applied, being now in a position to keep the trace adjoining it in place and ward off external objects. The small leather tongues usually employed to prevent the traces from slipping off the staples may therefore be dispensed with and it becomes impossible for the lines, whether held by the driver or cast loose by the side of the vehicle to slip under the whiffle-tree.

Having now described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. The combination with the shaft and the whiffletree, of a loop secured to the end of the whiffletree, a forked strap secured to the shaft and extending up to the loop, and a coiled spring carried by the strap and having its ends or arms projecting from the forked branches thereof and engaging the loop.

2. The combination with the shaft and the whiffletree, of a loop secured to the end of the whiffletree, a forked strap secured to the shaft and extending up to the loop, and a coiled spring secured within the strap and having its ends or arms extending through the forked branches of the same, engaging the loop and provided with balls or knobs at their extremities.

In testimony whereof I affix my signature in presence of two witnesses.

HIRAM G. VAUGHAN. [L. s.]

Witnesses:

C. W. BASSETT,
A. H. STE. MARIE.