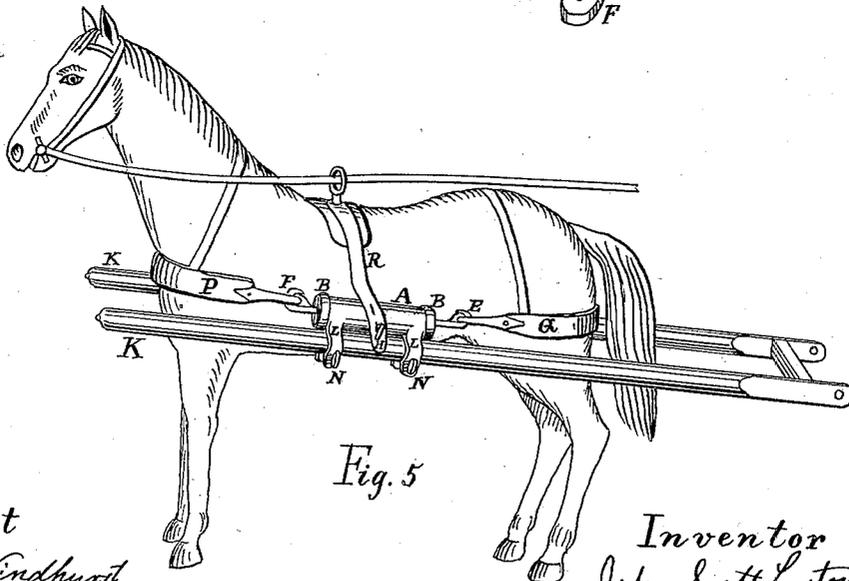
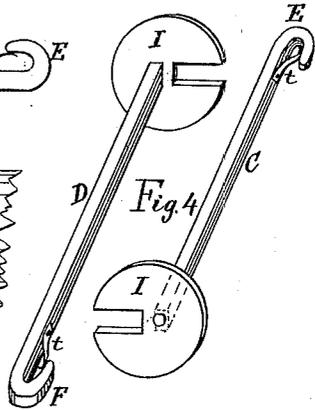
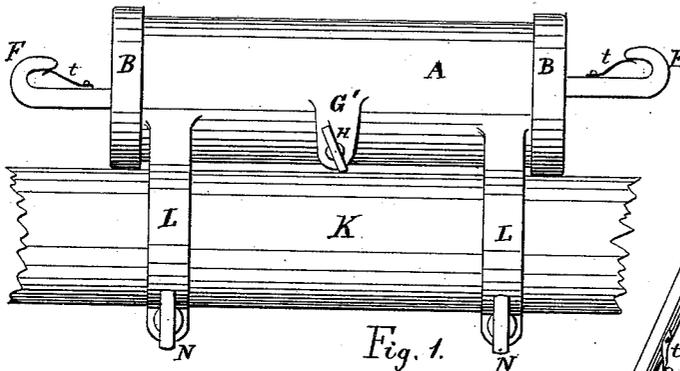
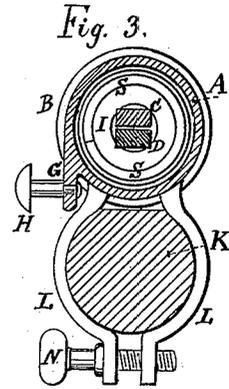
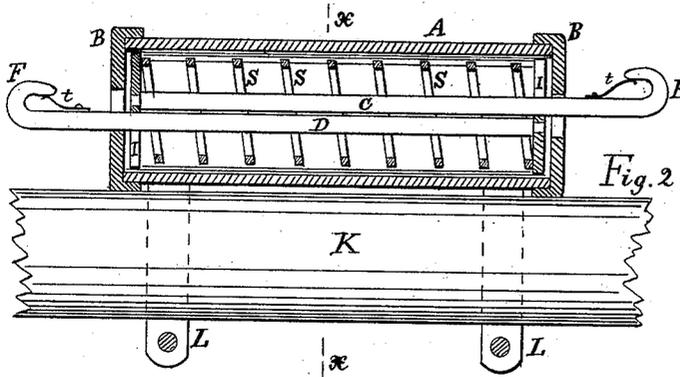


(No Model.)

J. S. LAYTON.  
SHAFT HITCH FOR VEHICLES.

No. 257,346.

Patented May 2, 1882.



Attest  
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Inventor  
John Scott Layton  
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# UNITED STATES PATENT OFFICE.

JOHN S. LAYTON, OF SPRINGFIELD, OHIO.

## SHAFT-HITCH FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 257,346, dated May 2, 1882.

Application filed February 21, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN SCOTT LAYTON, of Springfield, in the county of Clarke, and in the State of Ohio, have invented certain new and useful Improvements in Shaft-Hitching; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

This invention has for its objects to dispense with the whiffletrees and traces or tugs usually employed in hitching draft-animals to vehicles, and to provide certain improved devices for taking up sudden jerks, not only in pulling, but also on suddenly stopping and backing. These objects I attain by the devices and mechanism illustrated in the accompanying drawings, in which—

Figure 1 represents a side elevation of the device applied to one of the shafts of a vehicle; Fig. 2, a longitudinal vertical sectional view of the same. Fig. 3 represents a transverse vertical sectional view on the line *xx* of Fig. 2. Fig. 4 represents a perspective view of the draw-bars ready to be placed together; and Fig. 5 represents the device, showing the same applied to the shaft and harness.

The letter A indicates a box or case, each end of which is closed by means of a head, B, screwed or otherwise fastened thereon. Within the said casing are arranged two independently-operating draw-bars, C and D, which extend through the heads, the projecting ends being provided with snap-hooks E *t* and F *t*, to which the breast and breech straps P G are adapted to be secured. The inner ends of the draw-bars are provided with plates I I, slotted as indicated in Figs. 2 and 4, in order that they may slide upon the draw-bars.

The letter S indicates a spiral spring, which surrounds the draw-bars between the plates I I, against which it bears at opposite ends.

To the case A are rigidly attached, or constructed in one piece with it, the clamp-arms L L, which are adapted to embrace the shaft and hold the case to the same by means of the thumb-screws N.

The letter G' indicates a lug or projection attached to or formed on the case A. This is provided with a swiveled thumb-button, H, by means of which the device can be fastened to the strap R, Fig. 5, which supports the weight of the shafts. The said swiveled button may be attached to any other portion of the case, however, without departing from my invention.

In using my improved device a casing, A, is secured to each of the shafts K, and the strap R is secured to the buttons H. The breast-strap P is fastened to the hooks F and the breeching G to the hooks E.

It will be evident that the strain in both pulling and backing will fall upon the springs, thus obviating jars in both directions, and as the devices are applied at each side of the horse the to-and-fro shoulder movement of the animal is equalized, to compensate for which the whiffletree is generally employed, thus enabling me to dispense entirely with the whiffletree, and to substitute a more durable and cheaper device in its place, which will be more convenient in hitching and unhitching the horse.

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

1. In combination with the casings A, adapted to be secured to the shafts of a vehicle, the independently-movable draw-bars C D, having hooks at their outer ends adapted to be secured to the breast and breech straps of a horse, the plates I I, secured to the draw-bar, and the interposed spring S to take up the strain on said draw-bars, substantially as and for the purpose specified.

2. The combination of the case A, spring S, independent draw-bars C D, plates I, clamps L L, and swiveled thumb-button H, substantially as and for the purposes specified.

In testimony whereof I affix my signature, in presence of two witnesses, this 15th day of February, 1882.

JOHN SCOTT LAYTON.

Witnesses:

L. WINDHURST,  
M. F. WISE.