

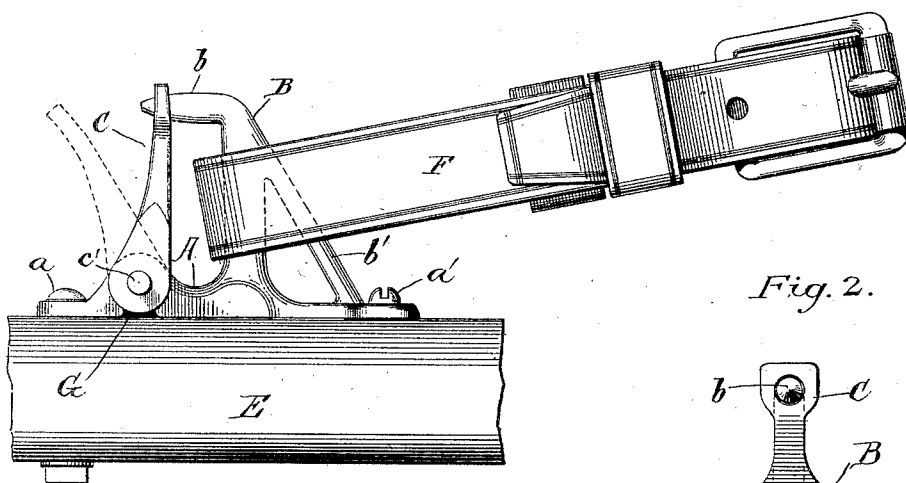
(No Model.)

J. F. TAIT.  
HOLDBACK FOR VEHICLES.

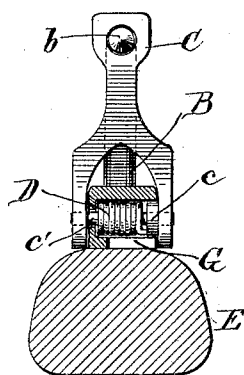
No. 476,839.

Patented June 14, 1892.

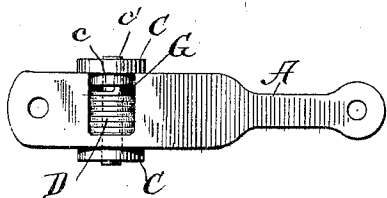
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses:

*John A. Kelly*  
*James Kelly*

Inventor:

*James F. Tait*  
*By Gillson and Benjamin*  
*His Attorneys.*

# UNITED STATES PATENT OFFICE.

JAMES F. TAIT, OF EVANSTON, ILLINOIS.

## HOLDBACK FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 476,839, dated June 14, 1892.

Application filed September 28, 1891. Serial No. 407,071. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES F. TAIT, a citizen of the United States, residing at Evanston, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Holdbacks; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in holdback-irons for vehicle-shafts; and it consists in a novel construction of such irons so that the quarter-straps of the harness may be readily engaged therewith and will be automatically released when the horse is detached from the vehicle.

In the accompanying drawings, Figure 1 shows a side elevation of my improved holdback-iron attached to a vehicle-shaft and having secured to it an ordinary quarter-strap. Fig. 2 is a transverse vertical section of the same, partly in elevation; and Fig. 3 is a bottom plan view of the iron.

My improved iron comprises a base-plate A, adapted to be secured to the top of the vehicle-shaft E by means of a bolt a through its forward end and a screw a' through its rearward end. Projecting upwardly from the base-plate A is a hook B, which is intended to stand substantially perpendicular, and terminates in a forwardly-projecting tip b. The hook B may be strengthened by a supporting-brace b' at its rearward side. The parts A B and b' are preferably cast integrally of malleable iron.

A spring tongue C is pivoted in the base-plate A, forward of the hook B, so as to swing longitudinally, and is of sufficient length to come in contact with the point b of the hook B, thereby closing the opening of the hook B, and tending to prevent the disengagement of the quarter-strap F. I prefer to form the tongue C with an aperture near its upper end to receive the point of the hook B.

A spiral spring D is wound upon the pivot pin c' of the tongue C, one end of the spring

being secured to the base-plate A and the other end thereof to the tongue C, and the normal tendency of the spring being to force the tongue against the hook B.

The base-plate A is recessed transversely from one side, as shown at G, for the accommodation of the spring D. The base of the tongue C is forked, so as to set astride the base-plate A. For the purpose of preventing lateral motion of the tongue C, a circular boss c is formed upon the inner side of one of its arms, so as to engage within the recess G, which is also circular in form.

The use of my improved holdback-iron obviates the necessity of wrapping the quarter-strap about the shaft, thereby preventing the wearing of the latter by the rubbing of the strap, a very common source of injury to wagon and buggy shafts. The quarter-strap may be permanently buckled to the breeching-ring, and in hitching is simply caught over the hook B, the tongue C being pushed forward to admit of its entrance, as indicated by the dotted lines, Fig. 1.

The spring D should be of sufficient tension to firmly hold the tongue C against the hook B, so as to prevent all possible danger of the quarter-strap being accidentally disengaged.

When the traces are unhooked, it will be seen that the horse may be led out of the shafts and as he moves forward the strain of the quarter-strap will fall upon the tongue C, depressing it and permitting the release of the strap.

Common accidents to buggy-shafts arising from forgetfulness in releasing the quarter-straps, and thus causing the animal to be checked in his forward movement, with the liability of his stepping upon and breaking the shafts, are wholly obviated. In the event of the horse becoming unmanageable and running away, he is immediately released from the vehicle when the traces give way.

I claim as my invention—

In a holdback-iron, the combination, with a base-plate A, having a transverse circular recess G, and with an upwardly-projecting and forwardly-opening hook B, of a tongue C for closing the hook-opening, a pivot-pin c' for securing the tongue to the base-plate, a

spiral spring D, wound upon the pivot pin *c'*  
and normally holding the swinging end of the  
tongue C against the hook B, said spring be-  
ing housed within the recess G, and a boss  
5 or shoulder *c* on the tongue and adapted to  
engage in said recess, substantially as de-  
scribed.

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

JAMES F. TAIT.

Witnesses:

EDWARD RUSSELL,  
CHARLES AIKIN.