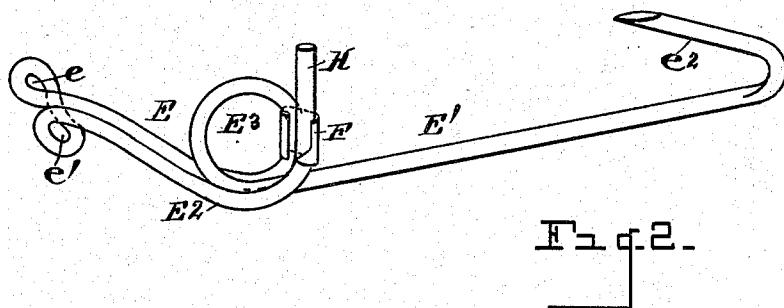
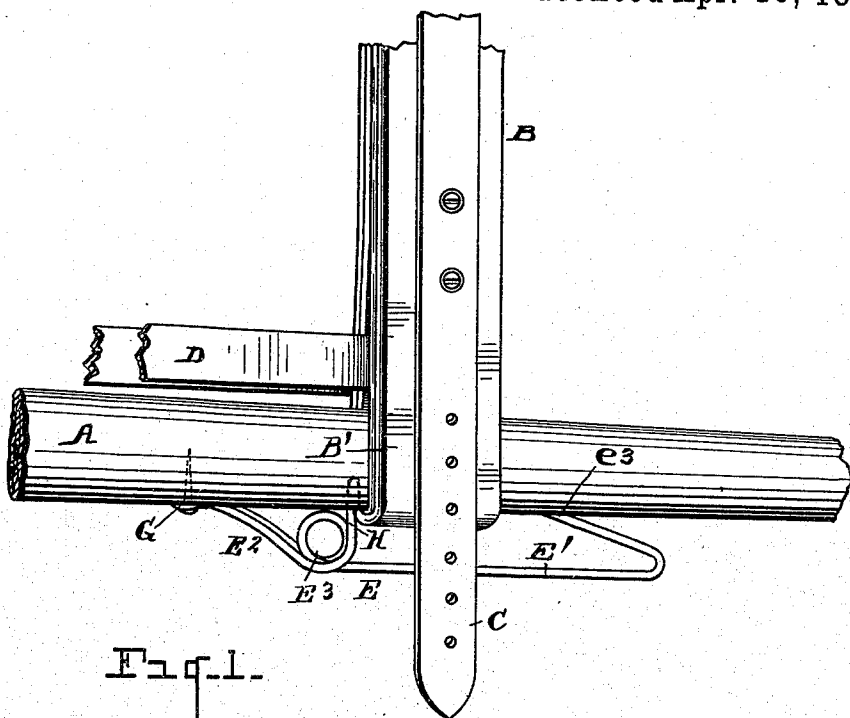


(No Model.)

E. HAUSE.
HOLDBACK AND THILL HOLDER.

No. 537,684.

Patented Apr. 16, 1895.



WITNESSES

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SPECIFICATION forming part of Letters Patent No. 537,684, dated April 16, 1895.

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To all whom it may concern:

Be it known that I, ELMER HAUSE, a citizen of the United States, residing at Tecumseh, in the county of Lenawee and State of Michigan, have invented a new and useful Attachment to Buggy-Thills, of which the following is a specification.

My invention relates to an improved hold-back and thill support and consists of the construction, combination and arrangement of devices hereinafter specified and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a view in perspective showing parts broken away. Fig. 2 is a detail view in perspective of the spring hook. Fig. 3 is a detail view of the shield plate in its normal outline.

The objects of my invention are, first, to provide a spring hook attachment to be applied to the under side of a thill or buggy shaft by means of which to secure the safety of the occupants of a carriage in case the whiffletree breaks or the tugs become unhooked or detached or the holdback straps should break, the spring hook being attached so firmly as to hold the thill or shaft in place in the loop of the back band or center of the harness in case of accident, thereby preventing the thills or shafts from dropping, the spring hook being of sufficient strength to draw the load or to hold back the carriage as the case might be should accident occur to the draft or hold-back parts of the harness or on the breakage of the whiffletree. The same device is adapted not only to draw the vehicle in case of the breakage of the whiffletree or tugs but also to hold the vehicle should the breeching give way.

My invention also has for its object to secure greater convenience in hitching and unhitching the horse dispensing with the necessity of winding or attaching the hold-back straps to the thill or shaft as is customary, as by my invention the hold-back straps may be engaged with the loop through which the thill passes.

I carry out my invention as follows:

A represents a thill or shaft of a vehicle.

B denotes a back band of a harness provided with a loop B'.

C is the strap to which the belly band, not

shown, is buckled when the horse is hitched to the vehicle.

D represents a hold-back strap leading from the breeching of the harness, not shown, and engaged with the loop B'. These parts may be of any ordinary construction.

E denotes my improved spring hook attachment made preferably of steel wire in a single integral piece, the wire being bent intermediate its extremities to form loops as at *ee'* through each of which loops a suitable screw, shown at G, Fig. 1, may engage the spring hook with the thill or shaft A. The spring hook is formed with two arms *E'* and *E²*, the arm *E'* being provided with a spring coil *E³*, said arm being led forward along the thill, as shown in the drawings, its extremities being formed of a hook *e²* turned upward against the thill when applied thereto. The arm *E²* is bent upward to form an arm H adjacent to the forward portion of the coil *E³*, said arm H being entered into the thill a suitable distance to hold the arm rigidly in place when the device is attached to the shaft.

In Figs. 2 and 3 I have shown a shield plate F, the normal form thereof being indicated in Fig. 3, said plate when applied being bent about the base of the arm H and adjacent portion of the coil *E³*. I do not however limit myself to the employment of this plate, as it may be omitted within the scope of my invention, its use being simply to provide a broader bearing or shield for the loop B' and to hold the coil *E³* and the arm H more firmly in juxtaposition. The plate affords a greater wearing surface for the leather of the loop, but its use is not indispensable. When the spring hook is attached to the thill and the horse is to be hitched to the vehicle, the loop B' of the back pad is sleeved into position between the hook and the loop *E³*, the arm *E'* of the spring hook yielding downward to permit the ready entrance of said loop into place and springing back thereafter into normal position the hooked end *e²* engaging against the under surface of the thill, as indicated at *e³* Fig. 1. By using screws G of suitable strength it will readily be perceived that the spring hook E will hold the strain in either direction should the whiffletree or tugs be disengaged and also if breeching straps or holdback straps break. Obviously if it becomes necessary on

account of accident to resist the strain owing to accident to the holdback straps or breeching, the loop B' will engage against the arm H and the vehicle will be held firmly in position.
 5 Should any accident befall the whiffletree or tugs, the loop B' would simply slip forward to engage the hook e^2 . As above observed, by this device the holdback strap D may be engaged in the loop B', dispensing with any necessity of winding the holdback strap about
 10 the shaft or thill.

The spring E being elastic is not liable to break.

In disengaging the horse from the vehicle,
 15 it is simply necessary to depress the hooked end e^2 of the arm E', as may readily be done, to allow the loop B' of the back pad to slip forward off from the shaft. In this manner the hitching and unhitching of the horse may
 20 be accomplished in a ready and convenient manner.

The hook E is made of wire of sufficient strength to hold the vehicle either in drawing or holding back the same as occasion might
 25 require. Inasmuch as the hooked end e^2 presses firmly against the thill or shaft, there is no liability whatever of the loop B' slipping forward and thereby being disengaged from the hook E, while it obviously cannot
 30 slip back past the arm H.

The device is simple and inexpensive as

well as efficient for the purpose to which it is applied.

What I claim as my invention is—

1. The combination with a vehicle shaft, of 35
 a spring hook formed with a coil E^3 , an arm H, and with attaching eyes or loops e e' , said hook forward of said coil, and arm provided with a yielding arm E' having contact at its forward end with the shaft, substantially as 40
 and for the purpose set forth.

2. The combination of a vehicle shaft, of a spring hook formed with attaching loops or eyes intermediate its ends, said hook formed with two arms E' E^2 , the arm E^2 constructed 45
 with an arm H entering the shaft, the arm E' constructed with a spring coil and terminating in a hook, the extremity of the hook normally resting against the shaft, substantially as set forth. 50

3. The combination with a vehicle shaft, of a spring hook rigidly attached to the shaft toward one extremity thereof, said hook provided with a spring coil E^3 , an arm H, and a forwardly projecting spring arm E' having a 55
 yielding contact with the shaft, substantially as and for the purpose set forth.

ELMER HAUSE.

Attest:

W. J. INGERSOLL,
 P. W. A. FITZSIMMONS.