

(No Model.)

D. M. FORSYTH.
HARNESS.

No. 523,981.

Patented Aug. 7, 1894.

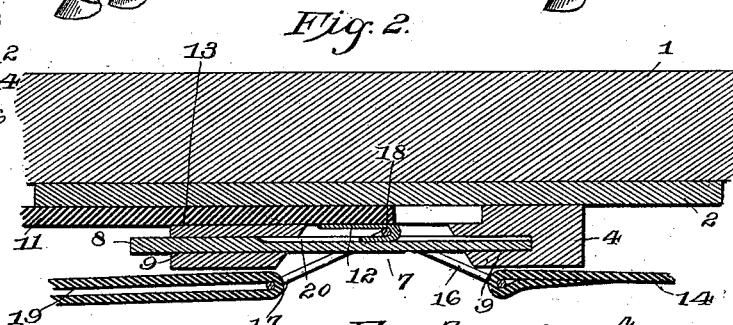
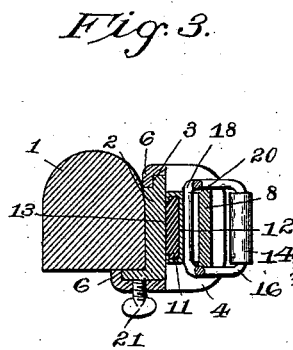
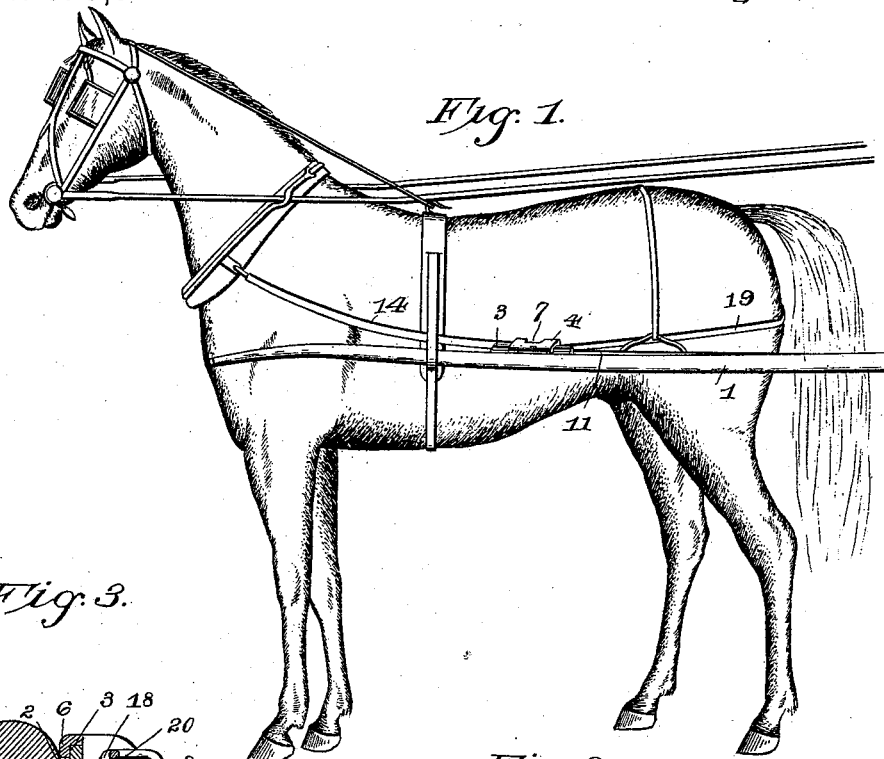


Fig. 4.

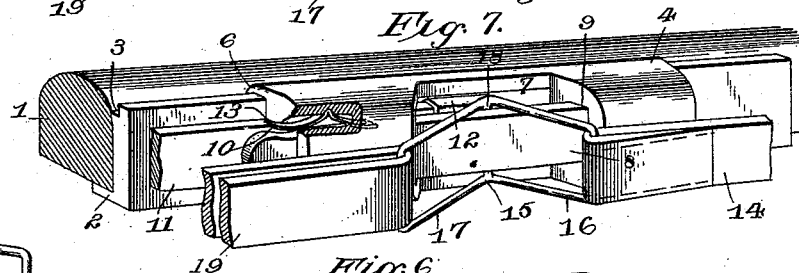
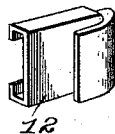


Fig. 5.

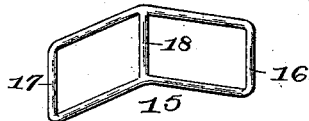


Fig. 6.



Witnesses

Chas. Ford
D. M. Forsyth

Inventor
Daniel M. Forsyth,
By his Attorneys.

Chas. Ford

UNITED STATES PATENT OFFICE.

DANIEL M. FORSYTH, OF FRANKLIN, INDIANA.

HARNESS.

SPECIFICATION forming part of Letters Patent No. 523,981, dated August 7, 1894.

Application filed February 10, 1894. Serial No. 499,770. (No model.)

To all whom it may concern:

Be it known that I, DANIEL M. FORSYTH, a citizen of the United States, residing at Franklin, in the county of Johnson and State of Indiana, have invented a new and useful Hold-back, of which the following is a specification.

My invention relates to a hold-back for harness; and has for its object to provide a simple, inexpensive, and efficient device, which may be applied to the ordinary harness without change of the latter; and to provide means for adjusting the position of the hold-back with relation to the shaft of the vehicle, whereby the length of the horse may be accommodated.

Further objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claims.

In the drawings:—Figure 1 is a perspective view of a hold-back embodying my invention applied in the operative position to a shaft. Fig. 2 is a horizontal longitudinal section of the same. Fig. 3 is a transverse section. Fig. 4 is a detail view of the hook which is attached to the front end of the tug or rear portion of the trace. Fig. 5 is a similar view of the double loop by which the breast-strap or front portion of the trace is connected to the breeching or hold-back strap and by which the connection is formed with the tug. Fig. 6 is a detail view in perspective of the key reversed to show the groove in the side adjacent to the shaft. Fig. 7 is a perspective view.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

1 represents a shaft, to the inner and under sides of which is secured the angular plate 2, said plate being provided at its upper edge with a rabbet 3, and 4 represents a slide mounted upon said plate and provided with inturned flanges 6, the upper of which engages said rabbet in the upper edge of the plate, and the lower of which engages the outer edge of the horizontal leaf of said plate. This slide is cut away at the center of its inner side to form an opening 7, which is spanned by the removable key 8 fitting in registering sockets 9, which are aligned longitudinal of the slide and are arranged upon opposite sides

of said opening therein. This key is held in place by a thumb-spring 10.

11 represents the tug or rear portion of the trace, which is provided at its front end with a flat hook 12 arranged in the opening of the slide between said key and the adjacent surface of the guide-plate, said tug or portion of the trace passing through an opening 13, which is between the planes of the socket 9 and the guide-plate.

14 represents the breast-strap or front portion of the trace, which is connected at its rear end to one loop of the double loop 15, said double loop consisting of the angularly disposed loops 16 and 17 and a central cross-bar 18, which is adapted when the parts are connected for operation to engage the hook at the front end of the tug. When the parts are in operative position the key passes through the loops, forming the double loop, and thus prevents detachment and displacement without interfering with a limited forward and rearward movement of the double loop to accommodate the movements of the horse. Attached to the rear loop of the double loop is the breeching or hold-back strap 19. The key is provided in its rear or outer side with a longitudinal groove 20, which receives the free end of the hook on the front end of the tug, whereby when the double loop is drawn to the rear end of the opening in the slide, as in descending grades, the parts will be held in aligned positions, whereby when the forward draft of the horse is resumed the cross-bar of the double loop will pass without obstruction into the hook. The slide is held in the desired position upon the guide-plate by means of a set-screw 21.

In applying the improved hold-back to harness the trace, which ordinarily extends from the breast-collar to the whiffletree, is simply divided at the point where the hold-back is to be inserted, the described hook is attached to the front end of the rear portion of the trace, and the double loop is attached to the rear end of the front portion of the trace and to the breeching of the hold-back strap. The hook on the front end of the tug is held permanently in the slide, and therefore to hitch the horse it is necessary simply to place the cross-bar of the V-shaped or angular double-

loop in the opening in the slide and insert the key to engage or pass through the loops thereof.

5 It will be understood that various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit of the invention or sacrificing any of the advantages thereof.

10 Having described my invention, what I claim is—

1. In a hold-back, the combination of a hook attached to the front end of the tug, a double loop connecting the breast-strap and the breeching and having a cross-bar to engage
15 said hook, and means for holding said parts in engagement and guiding the same to allow longitudinal movement, substantially as specified.

2. In a hold-back, the combination of a
20 guide-plate fixed to a shaft, a slide mounted upon said guide-plate and provided with a set-screw to lock the same at the desired adjustment, and connections between the tug, breeching and breast-strap and said slide,
25 substantially as specified.

3. In a hold-back, the combination with a slide, and means for securing the same to a shaft, of a hook attached to the front end of

the tug, an angular double loop forming the connection between the breast-strap and the
30 breeching and having a cross-bar to engage said hook, and a key fitting removably in the slide to hold said double loop in operative relation with the hook, substantially as specified.

4. In a hold-back, the combination with a
35 slide, and means for attaching the same to a shaft, of a hook attached to the front end of the tug and arranged in an opening of the slide, a double loop forming the connection between the breast-strap and the breeching
40 and having a cross-bar to engage said hook, the opening in the slide being adapted to allow forward and rearward movement of said double loop, a key fitting removably in registering sockets in the slide, spanning the said
45 opening, and provided with a groove to receive the extremity of the hook on the tug, and means to secure said key in place, substantially as specified.

In testimony that I claim the foregoing as
my own I have hereto affixed my signature in
the presence of two witnesses.

DANIEL M. FORSYTH.

Witnesses:

W. T. PRITCHARD,
STRATHER HEROD.