O. BROTHERS, Jr.

Hold-Backs for Vehicles.

No. 206,221. Patented July 23, 1878.

Fig. 1.

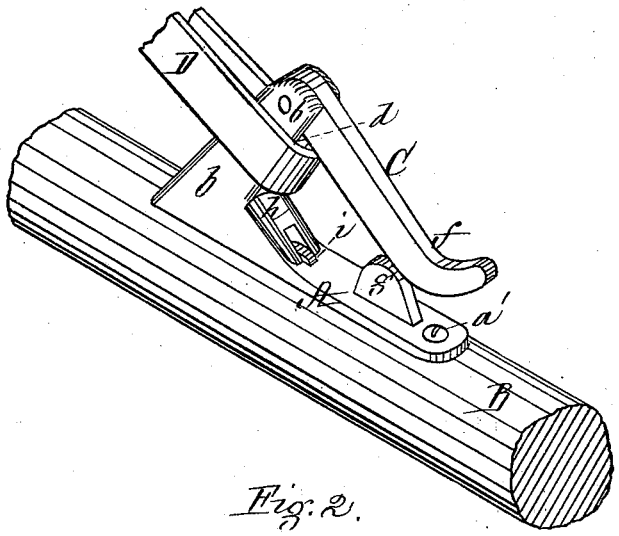


Fig. 2.

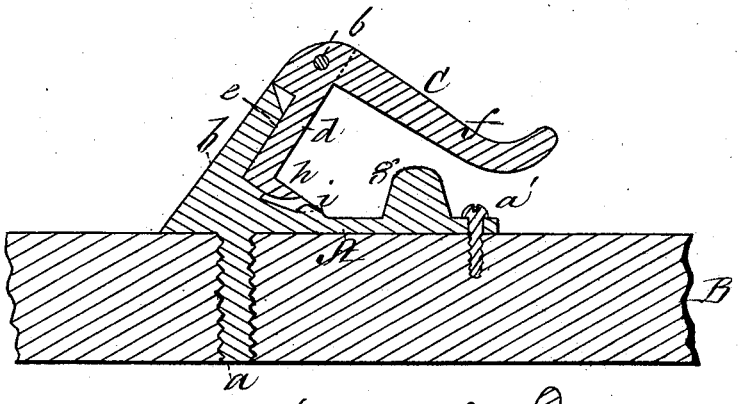
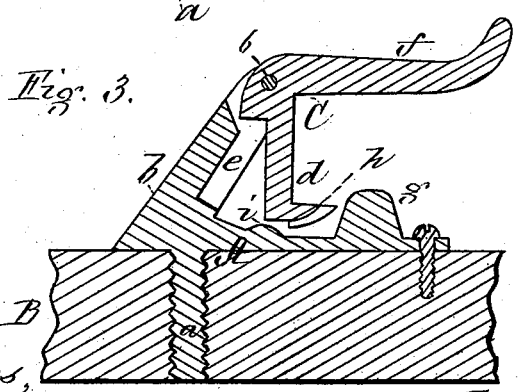


Fig. 3.



Witnesses,
W. J. Cambridge
J. E. Cambridge

Inventor,
Oliver Brothers Jr.
Per Teschemacher & Stearns,
Attorneys

UNITED STATES PATENT OFFICE.

OLIVER BROTHERS, JR., OF NORTH HARTLAND, VERMONT, ASSIGNOR TO HIMSELF AND HENRY D. DUNBAR, OF SAME PLACE.

IMPROVEMENT IN HOLDBACKS FOR VEHICLES.

Specification forming part of Letters Patent No. **206,221**, dated July 23, 1878; application filed June 17, 1878.

To all whom it may concern:

Be it known that I, OLIVER BROTHERS, Jr., of North Hartland, in the county of Windsor and State of Vermont, have invented certain Improvements in Holdbacks for Vehicles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view of a portion of a shaft with my improved holdback applied thereto. Fig. 2 is a longitudinal vertical section through the center of the same when closed. Fig. 3 is a similar section, the holdback being represented open to receive the holdback-strap.

My invention has for its object to provide a means whereby the holdback-straps of a harness may be readily detached from the holdbacks of the shafts by the forward movement of the horse after the traces have been liberated from the whiffletree; and my invention consists in a metal plate provided with a projection and an arm, at or near the top of which is pivoted an angular latch or lever, the front portion of which is brought down upon the projection, so as to close the space between it and the top of the arm when the holdback-strap is drawn against the rear portion of the angular latch or lever, while the pressure of the holdback-strap against the front portion of the latch will raise it, and thus allow the strap to disengage itself from the holdback; and, further, in constructing the foot of the angular latch with a bifurcation, as hereinafter more fully described and claimed.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawings, A represents a narrow metal plate, which is secured to the shaft B of the vehicle by screws *a a'*. From the rear of the plate A rises an inclined arm, *b*, between bifurcations at the top of which is pivoted, at 6, an angular lever or latch, C, the rear portion, *d*, of which fits into a groove or recess, *e*, on the inner side of the arm *b*, when the parts are in the position seen in Figs. 1 and 2, the front portion, *f*, which is turned up at its outer end, fitting down onto, or nearly onto, a rounded projection, *g*, rising from the plate A, and thus nearly closing the space between this projection and the portion *f*, so as to confine the holdback-strap D in place within the holdback, as seen in Fig. 1.

From the lower end of the rear portion, *d*, of the latch C projects a bifurcated foot-piece, *h*, which fits snugly over a rib, *i*, on the upper surface of the plate A, the friction between the two being sufficient to hold the latch C down in case the pivot 6 should wear loose.

When the holdback-strap D is in place within the holdback, as seen in Fig. 1, and any backward strain is brought upon it by the horse, it will bear firmly against the rear portion, *d*, of the latch, and thus securely hold the front portion, *f*, nearly down upon the projection *g*, so as to prevent any liability of the strap becoming detached; and this strap also lies upon and presses down on the foot-piece *h*, which thus affords additional security against the raising of the latch.

The inner side of the projection *g* serves as a stop, against which the holdback-strap strikes in its ordinary movements when the horse is traveling, and the liability of the latch being lifted thereby, as might occur if the projection *g* were dispensed with and the portion *f* of the latch extended down to the plate A, is thus entirely avoided.

When the traces have been detached from the whiffletree and the horse steps forward, the shafts are drawn out of their supporting-loops, and the holdback-strap D on each side is then brought against the front portion, *f*, of the latch C of the holdback, and exerts an upward pressure thereon sufficient to lift it, and thus allow of the escape of the strap, when the horse will be entirely free from the vehicle, the holdback being left with the latch C in the position seen in Fig. 3, so that in harnessing it is merely necessary to place the loop of the holdback-strap over the portion *f* and against the portion *d* and close the latch by pulling back the strap or pressing down the portion *f* toward the projection *g;* or, if the latch should be accidentally left open, the first backward strain on the holdback will instantly close the latch and prevent the escape of the strap.

The above-described self-operating holdback

is especially adapted for use in connection with a device for enabling the occupant of a vehicle to detach the traces from the whiffletree, whereby, in case of accident, the horse can be instantly set free; but my improved holdback can be used without such device, if desired.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The within-described self-operating holdback, consisting of the plate A, with its arm *b* and projection *g*, in combination with the angular latch C, pivoted to the arm *b*, and constructed to operate substantially in the manner and for the purpose set forth.

2. In combination with the plate A, rib *i*, and arm *b*, the angular latch C, provided with the bifurcated foot-piece *h*, substantially as and for the purpose set forth.

Witness my hand this 12th day of June, A. D. 1878.

OLIVER BROTHERS, JR.

In presence of—
H. R. MILLER,
C. C. GRIFFIN.