L. GRAPE.

Rein-Holder for Vehicles.

No. 216,394. Patented June 10, 1879.

Fig. 1.

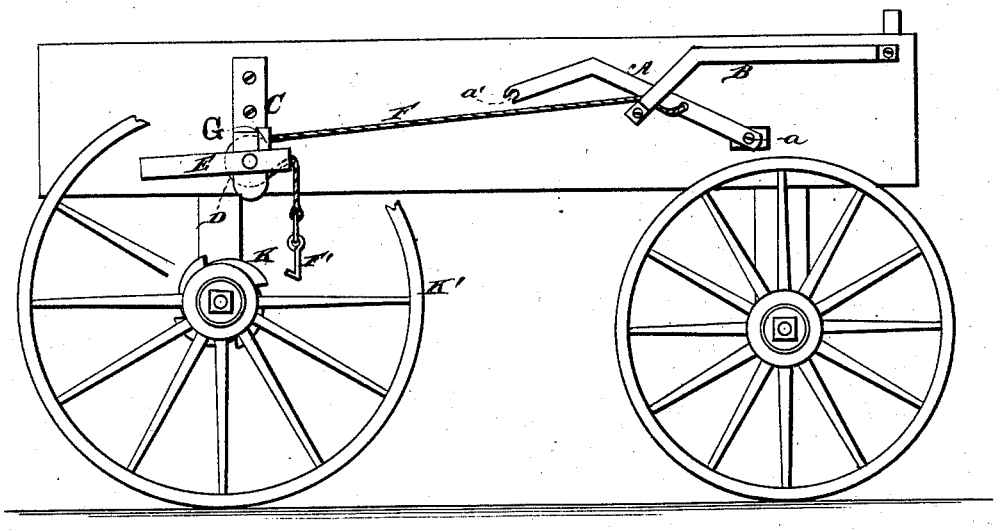
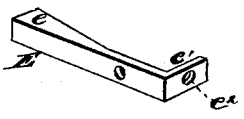


Fig. 2.



WITNESSES

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LEWIS GRAPE, OF CANAJOHARIE, NEW YORK.

IMPROVEMENT IN REIN-HOLDERS FOR VEHICLES.

Specification forming part of Letters Patent No. **216,394**, dated June 10, 1879; application filed May 10, 1879.

To all whom it may concern:

Be it known that I, LEWIS GRAPE, of Canajoharie, in the county of Montgomery and State of New York, have invented certain new and useful Improvements in Preventing Horses from Running Away; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of side elevation of a wagon showing my device applied. Fig. 2 is a detail view of the weighted lever E.

My invention relates to devices for holding horses and preventing them from running away when attached to a wagon; and it consists in a lever, to which the reins are attached, which is pivoted to the wagon-box, and a cord attached to this lever, which extends to a bracket and tripping device over the hub of the hind wheel, which hub is provided with a ratchet for engaging a hook attached to the cord, the devices being so constructed and arranged that in case the team starts when the reins are attached to the lever, thus moving it forward, that motion trips the device over the hub, and causes the hook of the cord to engage the ratchet of the hub and draw the lever rearward by the rotation of the wheel, thus checking and holding the team, as will herein more fully appear.

A is a lever, which is pivoted at *a* to the wagon-box, and provided with the notch *a'* for receiving and retaining the reins. B is a guard to support and protect the lever. This guard is also attached to the wagon-box at about the center of the lever A, which is located in a position convenient for the driver.

C is a bracket, which is attached to the wagon-box a little in front of the hub of the rear wheel. This bracket carries the pulley D, and the lever E is also pivoted on the bolt which retains the pulley. The lever E has a weight, *e*, upon its longer arm, and its shorter arm, e^1, is so angled as to play in front of the pulley. The arm e^1 is provided with an opening, e^2.

F is a cord, which is attached to the lever A, and, passing to the rear, passes over the pulley D and through the opening e^2, and is attached to the hook F'. A strap or flat chain is preferable, especially for that portion of the cord which may, in operation, be passed through the opening e^2, as such a chain or strap passing through a suitable opening would retain the hook in proper position to engage with the ratchet when brought in contact with it by the lowering of the short arm of the lever E. K is a ratchet on the hub of the wheel K'. G is a stop to retain the lever E in a horizontal position when the cord is slack.

The length of the cord is such that when the weighted arm of the lever E is held in horizontal position by the stop G the lever A is leaning slightly forward from the vertical.

The operation of my invention is as follows: In case the team starts up when the reins have been properly attached to the lever A the lever is drawn forward, this motion, by means of the cord, which, passing over the pulley, is so attached to the hook as to bring the hook or a projection on the cord in contact with the arm e^1 of the lever E, raising the lever E and permitting the hook to engage the ratchet. The revolution of the wheel draws the cord and lever A rearward, thus checking and stopping the team; and when the strain is removed from the lever A the weighted lever E returns the parts to their original position without involving any danger of forcing the team backward by continuing a draft on the reins.

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

1. In a device for stopping and holding teams when attached to a wagon, the weighted lever E, provided with the angled and slotted arm e^1, in combination with the stop G, bracket C, and pulley D, as and for the purposes substantially as set forth.

2. The cord F, attached to the lever A and hook F', in combination with the pulley D and ratchet K and lever E, as and for the purposes substantially as set forth.

3. The ratchet K, attached to the hub K', in combination with the hook F', lever E, pulley D, cord F, and lever A, as and for the purposes substantially as set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

LEWIS GRAPE.

Witnesses:
JACOB FULLER,
NICOLAS BARSHEID.