(No Model.)

L. TOWNSEND.

HARNESS SUSPENDING DEVICE.

No. 503,814. Patented Aug. 22, 1893.

Fig. 1.

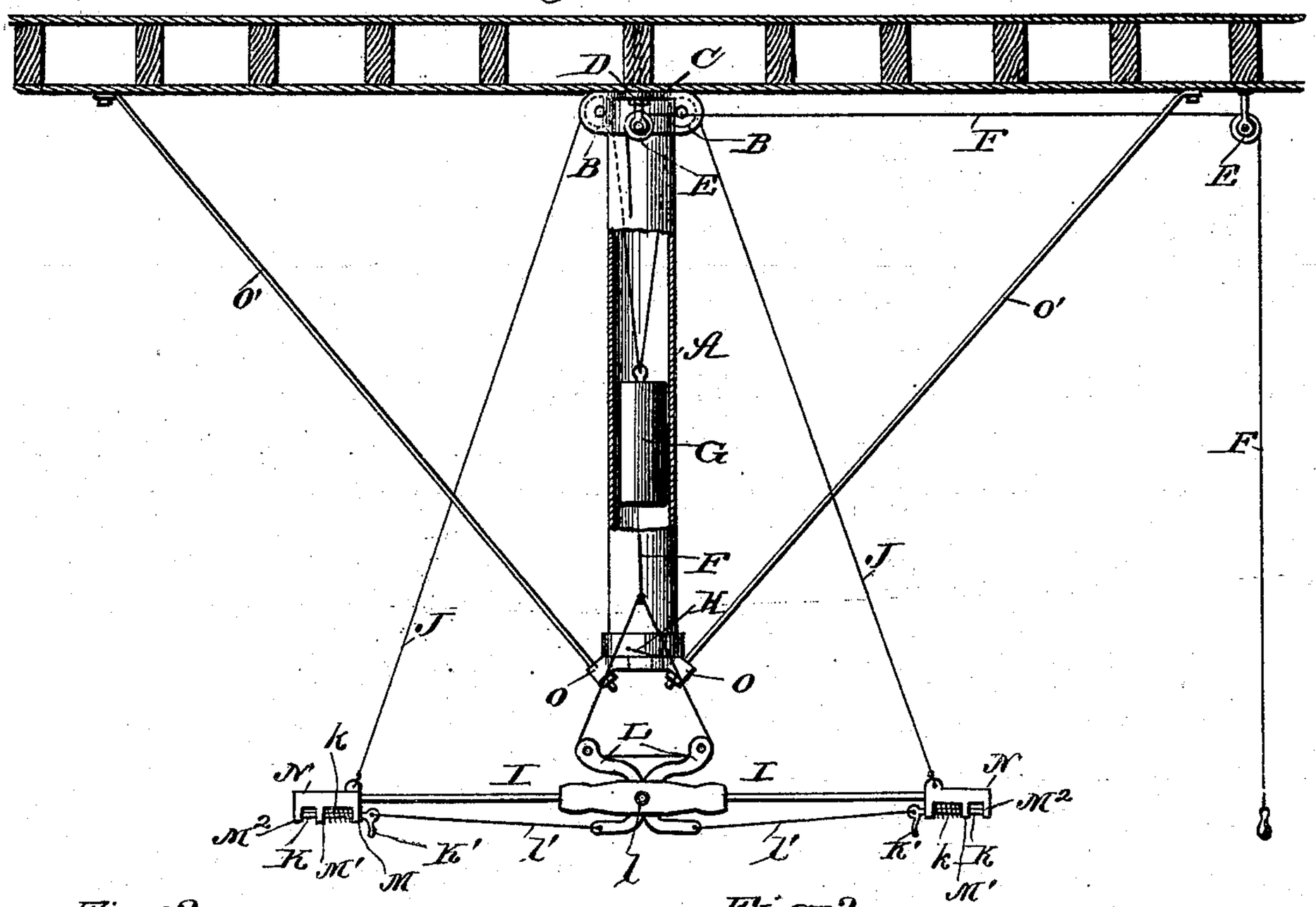


Fig. 2.

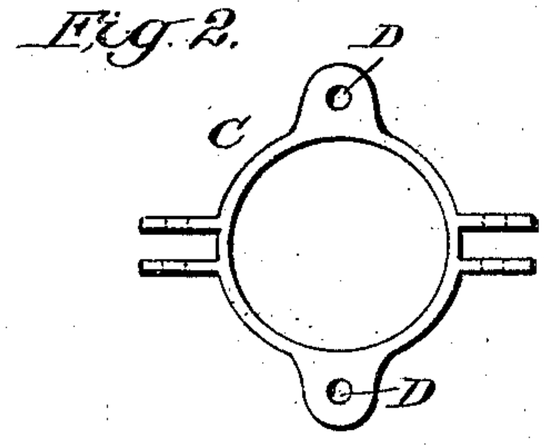


Fig. 3.

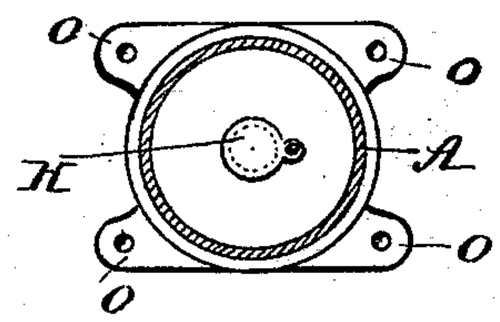
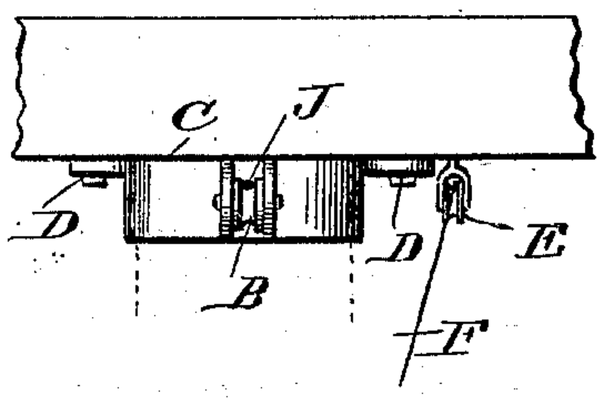


Fig. 4.



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UNITED STATES PATENT OFFICE.

LOUIS TOWNSEND, OF EVANSVILLE, INDIANA.

HARNESS-SUSPENDING DEVICE.

SPECIFICATION forming part of Letters Patent No. 503,814, dated August 22, 1893.

Application filed March 14, 1893. Serial No. 465,942. (No model.)

To all whom it may concern:

Be it known that I, LOUIS TOWNSEND, of Evansville, in the county of Vanderburg and State of Indiana, have invented a new and useful Improvement in Harness-Suspending Devices, of which the following is a specification.

My invention is an improvement in harness suspending devices such as are used in fire department houses to enable the harness to be quickly applied to the horses and the invention consists in the novel construction, combination and arrangement of parts hereinafter described and pointed out in the claims.

In the drawings—Figure 1 is a sectional elevation of my improvement and Figs. 2, 3, and 4 are detail views.

A cylinder A is secured to and depends from the ceiling or other support and at or near the upper end of said cylinder I provide the pulleys or sheaves B. In securing the cylinder proper and supporting the sheaves it is preferred to provide a bracket or head plate C and journal the rollers thereto. The cylinder may be formed integral with or be suitably bolted to the plate C the latter being bolted to the ceiling as shown at D. To the ceiling or other elevated support I also secure sheaves or guides E for the trigger operating cord F. In the cylinder I arrange a weight G so fitted to the cylinder that it may slide up and down therein, sufficient space being left between its sides and the cylinder to permit the air to pass up slowly and cushion the descent of the weight—the lower end of the cylinder being closed and provided with a check valve H so that the weight may freely ascend but will be cushioned and checked in its descent by the air in the cylinder.

The harness bar I is supported and counterbalanced by the weight G, being connected therewith by the cords J fixed to the bar I near its ends, carried up over the pulleys B, and made fast to the weight. As the weight descends it will elevate the bar I and hold the same up as desired, and yet permit it to be readily drawn down by the attendant. At its ends the bar is provided with the bolts K actuated by springs *k* normally into locked position or position to secure the harness. These bolts are released by means of the triggers L and the cord F looped at its end through the guides at the upper ends of the triggers, the latter being pivoted between their ends at *l* and having their lower ends connected by cords *l'* with the bolts. By pulling on the cord F it is evident that the bolts will be operated to release the harness.

In specifically describing the bolts K they may be said to slide longitudinally through the lugs M M' on the socket or thimble N which fits on the end of the harness bar and the bolt is pressed by its actuating spring normally against the lug M^2, the harness ring or loop being fitted between lugs M' and M^2. At its end where the cord *l'* connects with it the bolt also has a thumb rest K' so that the bolt may be operated directly by hand.

The cylinder has its lower end or bottom plate provided with lateral lugs O and to these are connected the brace rods O' which extend upward and steady the cylinder firmly in position. In practice the cylinder is arranged sufficiently high to permit the engine or other vehicle to pass under it.

The harness is attached by means of one bolt passed through the line ring on the harness at the forward end and the rear bolt passes through a ring placed upon the hip strap of the breeching.

In operation when the horse is below the suspended harness it is only necessary for the attendant to draw the bar down and release the bolts when the harness will be in place and the bar will be raised by the weight falling in the cylinder the descent of such weight being retarded as described avoiding any jar or noise as the weight falls.

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

1. An improved harness suspending device comprising the harness supporting devices, the weight piston connected therewith whereby to counterbalance the same, and the cylinder receiving said weight piston whereby the descent thereof will be air cushioned all substantially as and for the purposes set forth.

2. In a harness suspending device the combination with the harness supporting devices and the connecting cords of the counterbalance weight piston and the cylinder receiving

the same and provided at its lower end with a check valve whereby to retard the descent of the weight piston all substantially as and for the purposes set forth.

3. The improved harness suspending device comprising the cylinder proper, having the top plate provided with the sheaves or guide pulleys the harness bar the weight piston and the connecting cords substantially as set forth.

4. A harness suspending device comprising the counterbalance devices, the harness bar provided at its ends with the spring actuated bolts, and between its ends with pivoted triggers connections between the triggers and the bolts the trigger operating cord and the guide therefor all substantially as set forth.

5. The improved harness suspending device herein described consisting of the cylinder provided with the cap plate having the guide pulleys, and with the bottom plate having the check valve the weight piston operating in said cylinder, the harness bar having at its ends the spring actuated bolts and provided between its ends with the triggers, connections between the triggers and the end bolts, the cords connecting the bar with the weight piston and the trigger cord and its guide all substantially as set forth.

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Witnesses:
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