J. L. HATTERY.

APPARATUS FOR DETACHING HORSES.

No. 195,123. Patented Sept. 11, 1877.

Fig. 1.

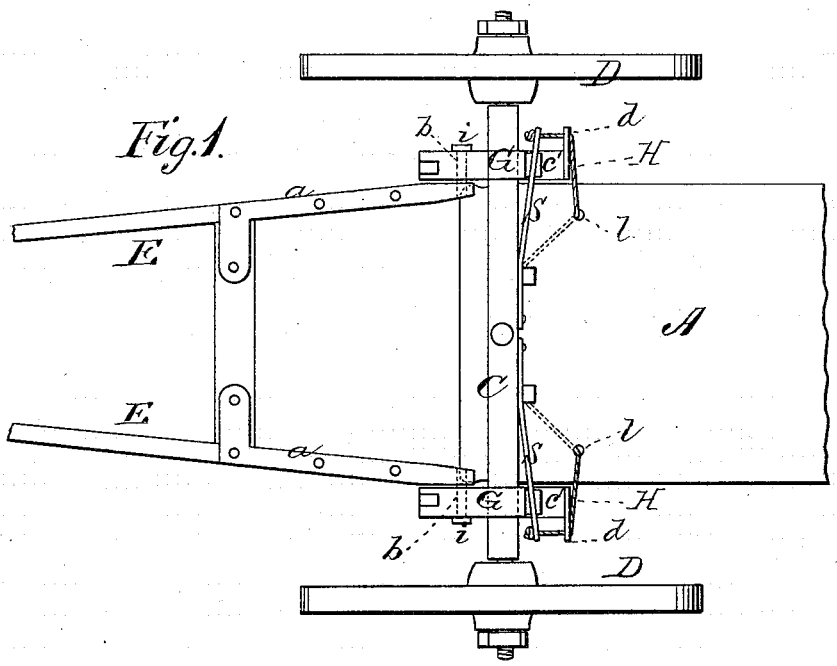


Fig 2.

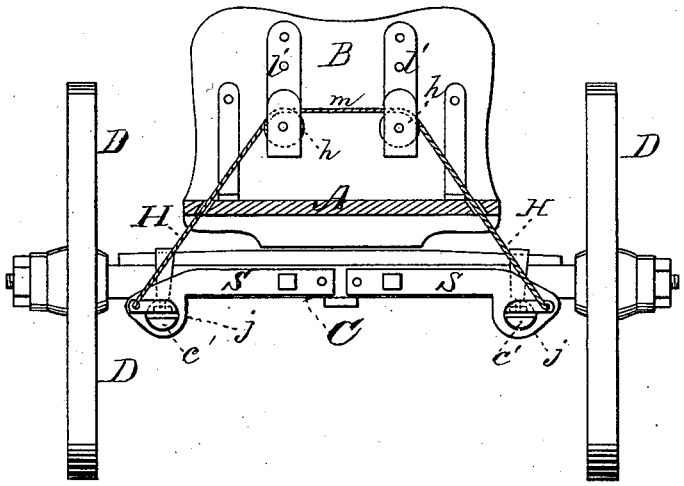


Fig 3

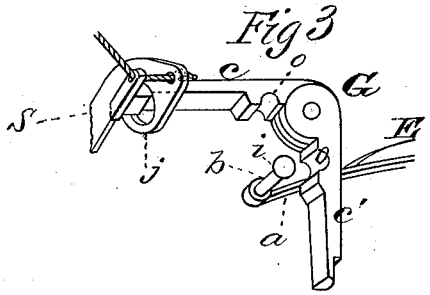
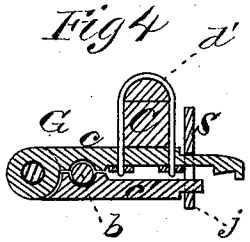


Fig 4



WITNESSES

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JEREMIAH L. HATTERY, OF CHARLOTTESVILLE, VIRGINIA.

IMPROVEMENT IN APPARATUS FOR DETACHING HORSES.

Specification forming part of Letters Patent No. **195,123**, dated September 11, 1877; application filed August 20, 1877.

To all whom it may concern:

Be it known that I, JEREMIAH L. HATTERY, of Charlottesville, in the county of Albemarle and State of Virginia, have invented a new and valuable Improvement in Safety Attachments for Carriage Shafts and Poles; 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 a plan view of my invention. Fig. 2 is a sectional view of the same, and Figs. 3 and 4 are detail views.

This invention has relation to improvements in thill-couplings for vehicles.

The object of the invention is to devise a coupling for vehicles which will allow the shaft or pole to be disconnected from the axle immediately in the event of the team running away.

The nature of the invention will be hereinafter more fully explained and claimed.

In the annexed drawings, the letter A designates a vehicle-body; B, the dash-board; C, the axle, and D the wheels.

In illustrating my invention I have selected the ordinary shafts E, as the most eligible device for showing its advantages; but the same principles and mechanism are equally applicable to a tongue or pole.

The shafts E are ironed off in the usual manner, and are provided at the end of said irons *a* with a spindle, *b*, at right angles to the length of the said shafts. These spindles are provided with terminal heads *i* at their free ends, for a purpose hereinafter fully explained.

G indicates my improved hinge-clamp, one wing, *c*, of which is secured to the axle by means of a clip, *d'*. The other wing, *c'*, is hinged to the wing *c*, and folds back thereon, as shown in Fig. 4. Each of these wings is provided with a half-bearing for the spindle *b* of the shaft. The rear end of the wing *c* extends to the rear of the axle through an eye, *j*, upon the outer end of a metallic spring, S, that is rigidly secured to the axle. This eye is sufficiently large to receive the free end of the other wing, *c'*. This is accomplished by throwing the spring S back until the two wings *c c'* are in contact with each other. The said spring being then released, it instantly reacts, and receives the ends of the said wings in the eye aforesaid. The strain of the draft being lengthwise of the hinge-clamp G, it follows, necessarily, that the function of the eye is simply to hold the two wings together; but if the spring is retracted beyond the end of the wing *c'*, the strain of the draft causes the said wing to swing to the front, and releases the spindle aforesaid from the coupling and detaches the runaway animal from the vehicle.

Each of the thill-irons is connected to the axle precisely as above described. The wings *c*, at their rear ends, are each provided with an eye, *d*, through which extends a rope, H, that is rigidly secured at each end to one of the springs S. This rope extends upward through perforations or guides *l* at each side of the wagon-body, near the dash-board, and is passed over pulleys *h*, arranged in suitable bearings *l'* on the said dash-board. By drawing directly upward on the bight *m* of said rope between the said pulleys, or forcibly depressing the said bight, the springs S will be drawn back, and the wings *c'* disengaged from the eyes *j* on said springs. The strain of the draft will then cause the said wing *c'* to swing to the front, thereby releasing the spindles *b* from the hinge-clamps G, and disconnecting the shafts from the vehicle. The heads upon the free ends of the thill-iron spindles *b* are designed to prevent them from working in their bearings in the hinge-clamps.

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

1. The combination, with the axle C and thills E, having spindles *b*, of the hinge-clamp G, having in its wings half-bearings, the springs S, having eyes *j*, the operating-cord H, and the pulleys *h* upon the dash-board, substantially as specified.

2. The hinge-clamp G, consisting of the

wings *c c'*, having each a half-bearing, *o*, adapted to receive the spindle, in combination with the springs S, having each an eye, *j*, substantially as specified.

3. The hinge-clamp G, consisting of the wings *c c'*, hinged together at one end, having each a half-bearing, *o*, and adapted to be removably clamped around the spindles of the thills, said spindles having terminal heads *i*, substantially as specified.

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

JEREMIAH L. HATTERY.

Witnesses:
HENRY BALZ,
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