

(No Model.)

A. BARHITE.
HORSE DETACHING DEVICE.

No. 532,436.

Patented Jan. 15, 1895.

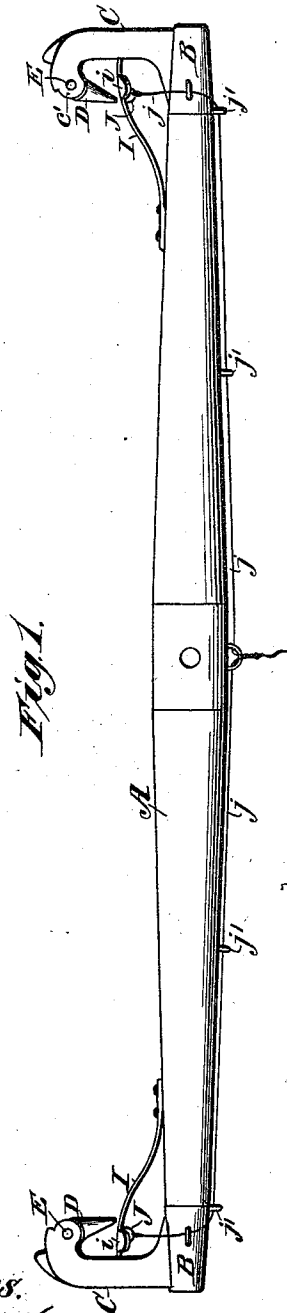


Fig. 1.

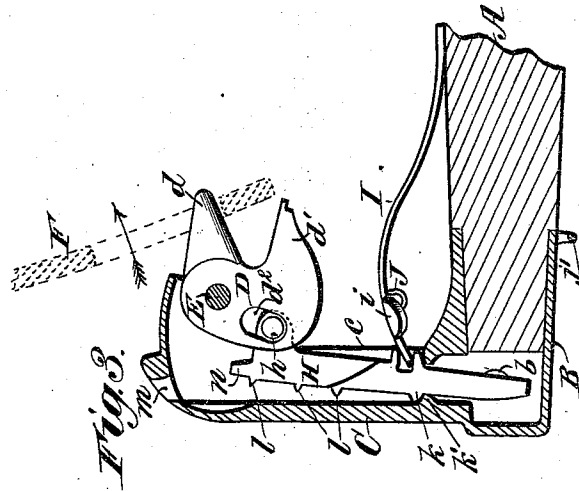


Fig. 3.

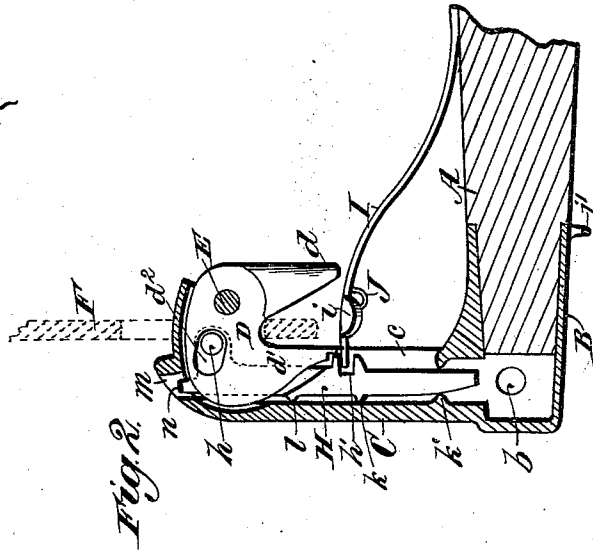


Fig. 2.

Witnesses.
Robert Everett.
G. W. Rea

Inventor.
Alexander Barhite.
By *James L. Norris.*
Atty.

UNITED STATES PATENT OFFICE.

ALEXANDER BARHITE, OF TORONTO, CANADA, ASSIGNOR TO JOHN N. BARHITE, OF BUCKEYE, IOWA.

HORSE-DETACHING DEVICE.

SPECIFICATION forming part of Letters Patent No. 532,436, dated January 15, 1895.

Application filed May 10, 1894. Serial No. 510,760. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER BARHITE, a citizen of the United States, residing at Toronto, in the Province of Ontario, Canada, have invented new and useful Improvements in Horse-Detaching Devices, of which the following is specification.

My invention relates to certain new and useful improvements in horse detaching devices, and has for its object to produce a device of the nature described wherein is combined strength, durability and simplicity with ease and rapidity of operation.

To these ends my invention consists in the novel construction, arrangement, and combination of parts hereinafter fully described and finally defined specifically in the claims following the description, due reference being had to the accompanying drawings, forming a part of this specification, wherein—

Figure 1 is a top plan view of my improved device; Fig. 2, a horizontal section of one of the whiffletree-hooks illustrating its normal position under draft, and Fig. 3 a similar view illustrating the manner of releasing or detaching the tug.

Referring to said drawings A indicates the whiffletree to each end of which is fitted my improved attaching and releasing devices, which I will now proceed to describe.

B indicates a socket formed hollow and cylindrically tapering to fit over the tapered end of the whiffletree. Cast integral with said socket is a hollow casing C, open at one side, as at *c*, and provided with ears or lugs *c'* projecting inwardly or at right angles to the body portion proper of the casing C.

D indicates the tug-hook provided with a pointed, hooked end *d* over which the slotted end of the trace or tug is passed, and having a prolonged lug or arm *d'*, for the purpose hereinafter described. The hook D is eccentrically pivoted at one side between the ears *c'* by means of a pivot pin E in such manner that when the tug F is passed over the hooked portion *d*, the draft of the tug or trace brings all the strain upon the hook D between its pivotal point and the outer side of the casing C, as shown in Fig. 2 of the drawings. The upper portion of the arm *d'* of the tug hook D is provided with an elongated slot *d²* within

which fits a pivot pin or pintle *h* carried by a rod H. Said rod H rests loosely within the casing C and is provided with a recess *h'* in which rests one end of a leaf spring I, the other end of said spring being fastened to the whiffletree.

The spring I operates to throw the hook D into the position shown in Fig. 2, in which position it serves to hold the trace or tug. The spring I is provided with a projection or thumb piece *i* by means of which the spring may be retracted to throw the hook D into the position shown in Fig. 3 to release the trace or tug. The spring I is also provided with an eye J to which is secured one end of a cord or strap *j*, said cord or strap being passed through suitable guides *j'* secured to the whiffletree and from thence passes up within reach of the driver.

The rod H is provided with an annular flange *k* which seats itself upon a similar flange *k'* cast integral with the casing C, and permits a rocking motion thereon of the rod H as the hook D is swung outwardly to release the tug. Said rod H is also provided with projecting lugs or protuberances *l* which, as the rod is thrown back and forth within the casing C serve to scrape the interior of said casing and remove the accumulation of any dirt or foreign substances, an outlet *b* for such substances being provided in the socket B, and another outlet *m* in the end of the casing C, the end of the rod H being extended as at *n* to form an ejector that operates to push the accumulated dust or dirt out through the outlet *m*.

The operation of my device will be readily understood. In order to attach the tugs or traces to the whiffletree the springs I are pressed back by means of the thumb pieces *i*, thus throwing the hooks D outward, as shown in Fig. 3, when the tugs may be slipped over said hooks and, upon releasing said springs, the hooks are thrown back into the position shown in Fig. 2, in which position the draft serves to maintain the parts in the position shown. In the event of the horse running away, or becoming unruly or fractious he may be instantly disconnected from the vehicle by pulling upon the cords or straps *j* which will retract the springs I and throw the hooks into

the position shown in Fig. 3 and permit the tugs or traces to slip therefrom, thus entirely detaching the animal from the vehicle.

Having described my invention, what I claim is—

1. In a horse detaching device, the combination with a whiffletree, of a socket fitted over each end thereof and provided with a forward projecting casing and a tug-hook pivoted in said casing at a point to one side of the line of draft, and means for locking and releasing the tug-hook, said casing serving to arrest the movement of the hook, substantially as described.

2. In a horse detaching device the combination with a whiffletree, of a socket fitted over each end thereof and provided with a tug hook pivotally secured thereto at a point to one side of the line of draft, a casing for arresting the movement of said hook, and a spring for throwing said hook into position for engaging the tug, substantially as described.

3. In a horse detaching device, the combination with a whiffletree, of the socket B and casing C, the hook D pivoted in said casing, the rod H pivotally secured to said hook, and the spring I engaging said rod, substantially as described and for the purpose specified.

4. In a horse detaching device, the combination with a whiffletree, of the socket B and casing C, the hook D pivoted in said casing, the rod H pivotally secured to said hook, a spring I engaging said rod and acting to throw the hook into position for holding the tug, and a cord or strap secured to said spring and serving as a means for oscillating the tug hook to release the tug, substantially as described.

5. In a horse detaching device, the combination with a whiffletree, of the socket B and casing C, the hook D eccentrically pivoted within said casing and provided with an elongated slot d^2 , the rod H loosely seated within said casing and provided with a pin h engaging the slot d^2 , a spring I operating to retract the rod H, and a thumb piece i carried by said spring, substantially as described.

6. The combination with a whiffletree, of the socket B and the casing C provided with the apertures b and m , of the hook D pivoted within said casing, the rod H pivotally secured to said hook and provided with projections l for scraping the interior of the casing, substantially as described.

7. The combination of the casing C having the aperture m , of the hook D pivoted within said casing, the rod H pivotally secured to said hook and provided with an extension n adapted to engage the aperture m , and a spring for projecting said rod to throw the tug hook into operative position, substantially as described.

8. The combination of the hollow casing C provided with the socket B and having an interior flange or shoulder k' , the tug hook D pivoted within said casing, the rod H pivotally secured to said hook and provided with an annular flange k adapted to seat itself upon the flange k' and the spring I operating to force said rod away from its seat to throw the tug hook into position for holding the tug, substantially as described.

In testimony whereof I have hereunto set my hand and affixed my seal in presence of two subscribing witnesses.

ALEXANDER BARHITE. [L. S.]

Witnesses:

JAMES L. NORRIS,
G. W. REA.