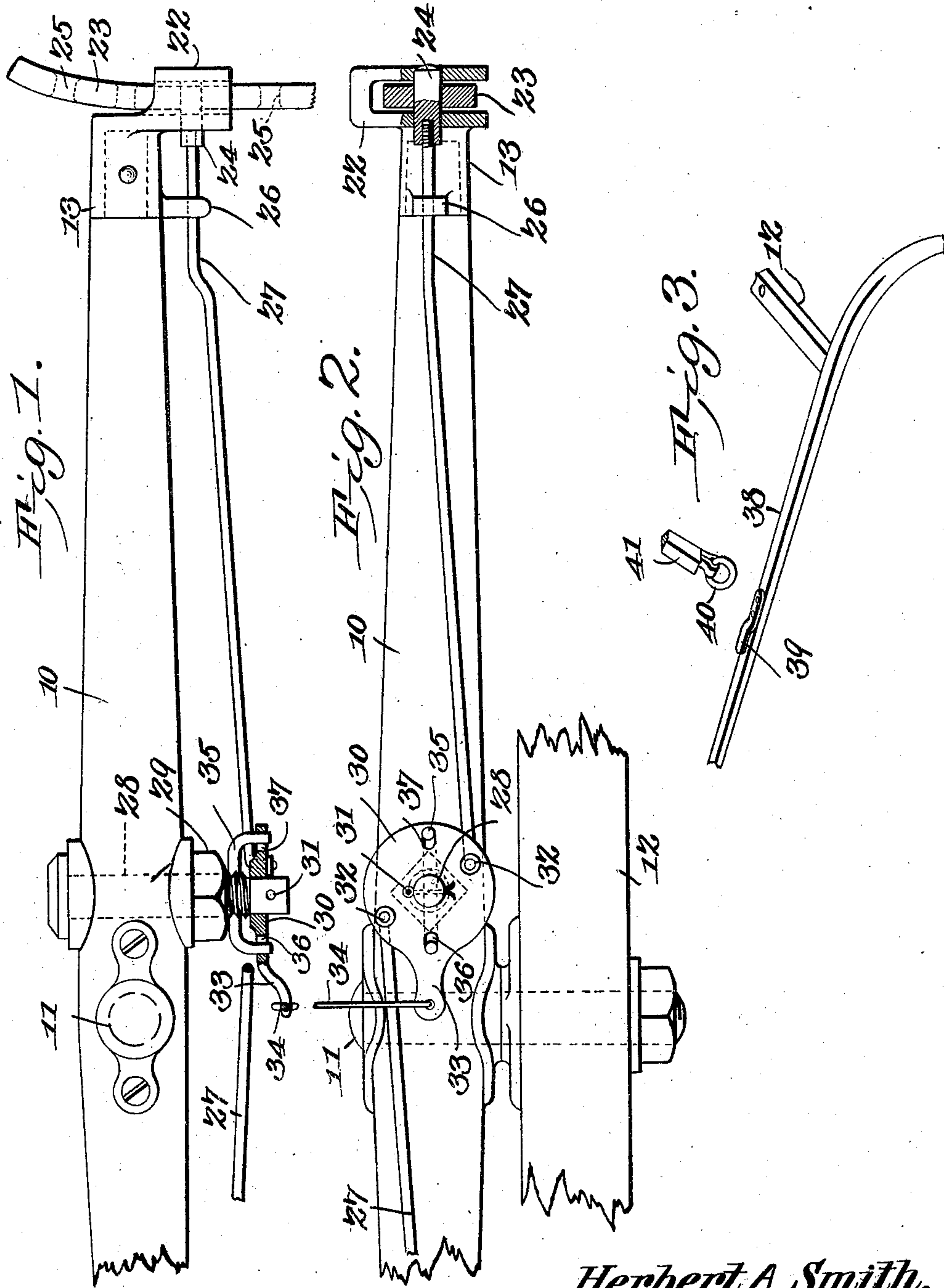


No. 844,548.

PATENTED FEB. 19, 1907.

H. A. SMITH.  
HORSE DETACHER.  
APPLICATION FILED MAR. 29, 1906.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

HERBERT ALFORD SMITH, OF ONAWAY, MICHIGAN.

## HORSE-DETACHER.

No. 844,548.

Specification of Letters Patent.

Patented Feb. 19, 1907.

Application filed March 29, 1906. Serial No. 308,751.

*To all whom it may concern:*

Be it known that I, HERBERT ALFORD SMITH, a citizen of the United States, residing at Onaway, in the county of Presque Isle and State of Michigan, have invented a new and useful Horse-Detacher, of which the following is a specification.

This invention relates to attachments to vehicles for releasing horses therefrom and under the control of the driver from his seat in event of an accident or runaway, and has for its object to improve and simplify the construction and increase the efficiency of devices of this character.

With these and other objects in view, which will appear as the nature of the invention is better understood, the invention consists in certain novel features of construction, as hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which corresponding parts are denoted by like designating characters, is illustrated the preferred form of the embodiment of the invention capable of carrying the same into practical operation.

In the drawings, Figure 1 is a plan view, partly in section, of a portion of a whiffletree with the improvement applied. Fig. 2 is a side elevation, partly in section, of the same and including the cross-bar of the thills. Fig. 3 is a perspective view of a portion of one of the thills and the connecting cross-bar, illustrating the construction of the holdback-releasing device.

The improved device is designed to be attached to the whiffletree of one-horse vehicles and to the swingletrees of two-horse vehicles, each end of each whiffletree or swingletree having one of the attachments applied; but as these attachments are precisely alike one only is shown for illustration.

For the purpose of illustration a portion of a whiffletree of conventional form is shown at 10 and pivoted at 11 to the cross-bar of the thills, the cross-bar represented at 12.

Attached to the outer ends of the whiffletree are ferrules, one of which is represented at 13, each ferrule provided with an inverted-U-shaped projection 22, forming sockets for the reception of the trace ends, one of which is represented at 23, the sockets provided with transverse apertures through which bolts 24 operate, the bolts also passing through spaced apertures 25 in the trace, the

latter having a plurality of the apertures, so that the trace may be adjustably connected in the socket.

The socket 13 is provided with a guide-lug 26, through which a rod 27 is slidably disposed, the terminal of the rod being attached to the bolt 24, preferably by threading therein, as shown in Fig. 2.

Extending through the whiffletree 10 near the pivoted bolt 11 is a stud 28, threaded at one end and provided with a nut 29, whereby the stud is secured in position. One end of the stud 28 is unthreaded, and oscillating upon this unthreaded portion is a disk 30, held in position in any suitable manner, preferably by cotter-pin 31.

The rod 27 is outturned at its inner end and pivoted at 32 in the disk 30, the disk having an extension 33, from which a pull-cord 34 leads to a point convenient to the driver. The rods 27 lead inwardly from each end of the whiffletree and are connected to the disk 30 at opposite sides, so that when the pull-cord 34 is actuated the rods 27 will be operated simultaneously to withdraw both of the bolts 24 and release both traces at the same time.

Extending through the stud 28 outside the nut 29 is a spring 35, having the ends outturned and extending through radial slots 36 37 in the disk 30. The spring thus exerts its force to maintain the disk 30 yieldably in central position or with the bolts 24 in their closed position and automatically return them to their closed position when the pull-cord is released after its operation.

In applying the improved device it will be necessary to provide means for releasing the horse from the thills in advance of the whiffletree at the same time that the traces or tugs are detached, and to this end the thills (one of which is represented at 38) are provided with clips (one of which is shown at 39) opening forwardly and to which a ring 40 on the holdback 41 is detachably connected. By this arrangement so long as the horse remains attached to the whiffletree the backward strain upon the pull-back straps will retain the rings in the clips 39.

If for any reason it is desired to detach the horse—for instance, in event of a runaway—this can be very quickly accomplished by simply pulling upon the pull-cord 34, and thus withdrawing the bolts 24 and releasing the traces 23, the horse in moving forward draw-



ing the holdback-straps from the clips, the thill-tugs at the same time readily withdrawing from the thills in the ordinary manner.

In hitching up the horse it is only necessary for the operator to turn the plate 30 manually to withdraw the bolts 24, insert the traces, and release the plate, the labor of "hitching up" being thus materially decreased.

10 The device may be applied to single or double rigs. When applied to double rigs, the pull-cords of the swingletrees connected to the doubletree are conducted toward the center and united to a single cord leading over  
15 the dashboard, so that the bolts at each end of each swingletree shall be operated simultaneously, and thus release both horses at the same time.

When employed upon double rigs, of course  
20 it will be understood that the clips 39 will not be required, as the traces in double harness are usually supported upon loops from the hip-straps.

25 The traces 23, passing through the sockets 22, which are open at both ends, may be ad-

justed to any desired extent by providing a plurality of the spaced apertures 25, as will be obvious.

Having thus described the invention, what is claimed as new is—

In a horse-releasing device, a swingletree 30 having means at the ends for detachably coupling the traces thereto, a stud extending from said swingletree and intermediately threaded, a clamp-nut engaging the threaded 35 portion of said stud and bearing upon the swingletree, a plate swinging upon the unthreaded portion of said stud, a spring operating to maintain said plate yieldably in position, connecting means between said coupling means and plate, and an operating element 40 connected to said plate.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

HERBERT ALFORD SMITH.

Witnesses:

J. FRANK MORFORD,  
GEO. W. PENINGTON.