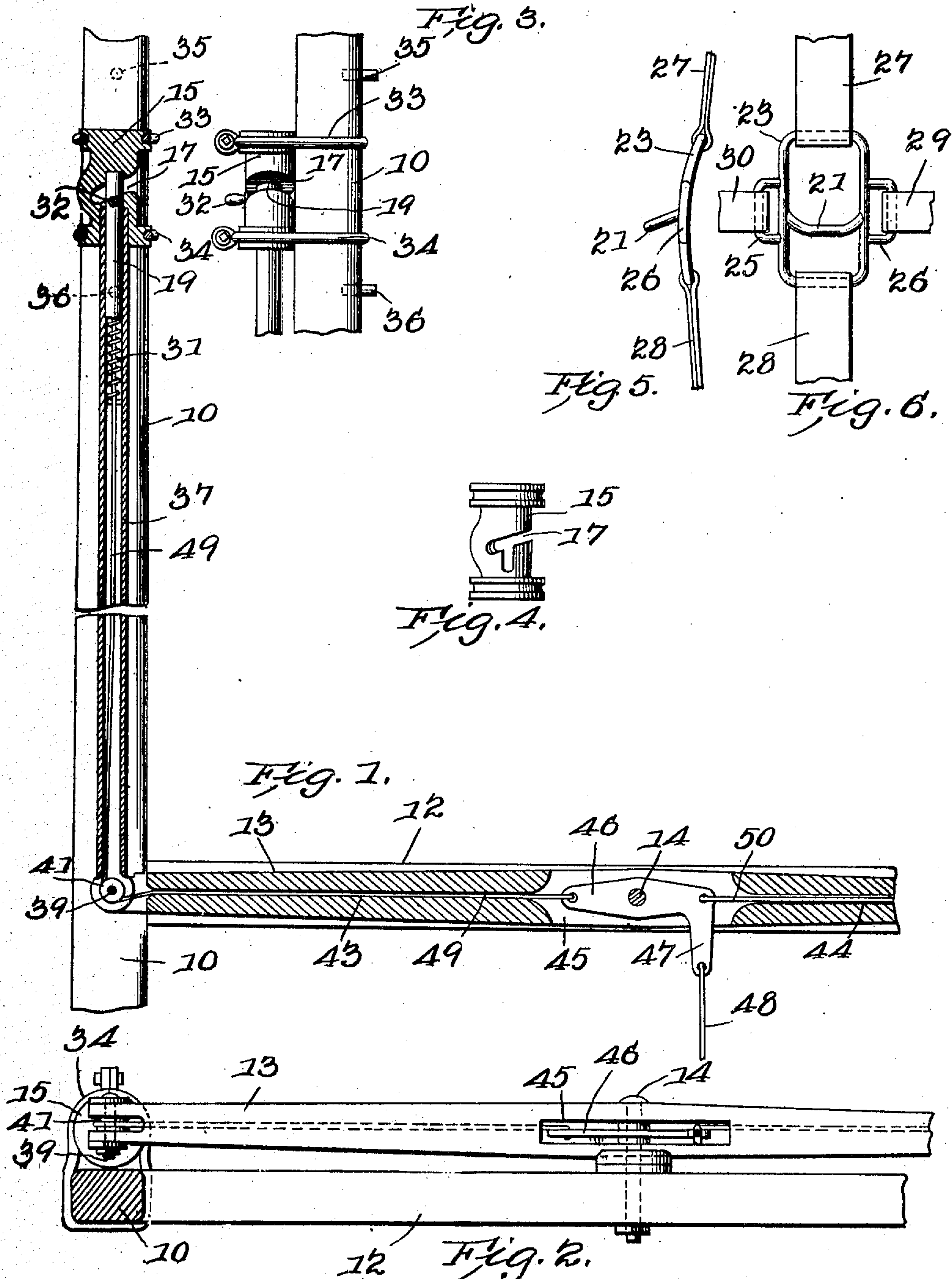


No. 860,454.

PATENTED JULY 16, 1907.

J. A. FENNELL.
HORSE DETACHER.

APPLICATION FILED JUNE 21, 1906.



WITNESSES:

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JOHN ALVIN FENNELL, OF GREENSBURG, PENNSYLVANIA.

HORSE-DETACHER.

No. 860,454.

Specification of Letters Patent.

Patented July 16, 1907.

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To all whom it may concern:

Be it known that I, JOHN ALVIN FENNELL, a citizen of the United States, residing at Greensburg, in the county of Westmoreland and State of Pennsylvania, have invented a new and useful Horse-Detacher, of which the following is a specification.

This invention relates to attachments for vehicles for releasing the horse by devices operative from the driver's seat, and has for its object to improve and simplify the construction of devices of this character.

With this 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 hereafter 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 portions of one of the thills and the connecting bar of the same together with a portion of the whiffletree, with the improved devices attached thereto. Fig. 2 is a rear elevation of the same. Fig. 3 is a side elevation of a portion of one of the thills with one of the sliding coupling members attached. Fig. 4 is a plan view of one of the sliding coupling members, detached. Figs. 5 and 6 are views of the harness coupling member, detached.

The improved device may be applied to any size or form of thills or shafts of vehicle, and for the purpose of illustration is shown applied to a conventional construction of this character, one of the thills being represented at 10, the cross-bar connecting the thills at 12, and the whiffletree at 13, the latter pivoted at 14 to the cross-bar.

Slidably disposed upon the thills, preferably opposite the point where the back band of the harness usually comes, are sleeves one of which is represented at 15, each having a rearwardly inclined recess 17 opening inwardly therefrom, and through each of which a bolt 19 is movably disposed. The inclined recesses are each adapted to receive a loop 21 upon a frame, one of which is represented at 23, the frames being thus detachably coupled to the sleeves by the bolts. The frame 23 is in the form of a rectangular loop, and provided with smaller loops 25—26 extending from their upper and lower sides, the upper loop 25 adapted to support the billet or suspending straps 29 of the back band of the harness, and the lower loop 26 adapted to support the girth members, indicated at 30, of the harness. The forward end of the frame 23 is designed to receive the hame tugs or traces indicated at 27, and the rear ends of the frames adapted to receive the forward

ends of the hold back straps indicated at 28, the ordinary traces which lead to the whiffletree being eliminated in the improved structure herein described.

The hold back straps, the back straps, the girth straps, and the hame tugs are shown only in part, as they form no part of the present invention, and it is not necessary to further illustrate them.

The bolt 19 is spring supported, one of the springs being represented at 31, and is provided with a lug 32 projecting therefrom, to enable them to be opened manually, when required, to release the frame 23, and the parts connected with them.

The sleeve 15 is connected to the thills by clips 33—34, so that they are free to move longitudinally upon the thills to a limited extent, the extent of the movement equaling the ordinary "horse motion", and the thills are provided with spaced stops 35—36 to prevent undue movement of the sleeves. Extending rearwardly of the sleeves are tubular members 37, pivoted at their rear ends at 39 to the ends of the whiffletree 13. The pivot 39 is provided within the tubular member 37 with a guide sheave 41, and the whiffletree is formed with longitudinal apertures 43—44 and with transverse apertures 45 centrally of the same and with which the longitudinal apertures communicate. Swinging upon the pivot bolt 14 of the whiffletree is a lever arm having an extension 47 at one end, from which a pull cable 48 leads to a point convenient to the hand of the driver from the seat of the vehicle. Attached to the bolts 19 are pull cables 49—50, leading thence through the tubular members 37 around the guide sheaves 41, and thence to the lever arm 46, and attached thereto at opposite sides of the pivot 14. The sleeve 15 is thus coupled movably to the whiffletree, and when the horse is hitched to the device by means of the coupling frame 23 and loop 21, and is moving forward, the action is precisely the same as when hitched in the ordinary manner by the ordinary traces or tugs to a whiffletree, the sliding movement of the sleeve being controlled by the swinging whiffletree in precisely the same manner as with the ordinary harness connections.

By this arrangement it will be obvious that so long as the horse is traveling in the usual manner he will remain coupled to the vehicle, but in event of a runaway or like occurrence, the driver by a pull upon the cable 48 can quickly withdraw the bolt 19 and release the animal, the forwardly inclined recess 17 causing the loop 21 to be quickly withdrawn from the sleeves.

When the horse is to be unhitched, the loops 21 may be simultaneously released by simply drawing the member 48 rearwardly in the same manner as when releasing in event of a runaway, except that the driver is on the ground, instead of in the vehicle, during the latter operation.

The device is simple in construction, can be readily applied to the vehicle, and operates effectually for the purposes described.

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

1. In a device of the class described, the combination with a pair of thills having a whiffletree thereon, sleeves slidable upon the thills and provided with lateral sockets opening inwardly, spring-supported bolts operating in said sleeves and transversely of said sockets, tubular members connected at one end to said sleeves and pivoted at the other end to the ends of said whiffletree, draw cords connected to said bolts and leading through said tubular members, and members having means for attachment to the harness and provided with loops bearing in said sockets and detachably engaged by said bolts.

2. In a device of the class described, the combination with a pair of thills having a whiffletree swinging thereon, sleeves bearing on said thills and provided with lateral sockets opening inwardly, clips coupling said sleeves slidably to said thills, spaced stops upon the said thills and limiting the movement of said sleeves, bolts spring-supported and operating in said sleeves and transversely of said sockets, tubular members connected between said sleeves and the ends of said whiffletree, draw cables connected to said bolts and leading through said tubular members, and members having means for attachment to the harness and provided with loops bearing in said sockets and engaged by said bolts.

3. In a device of the class described, the combination with a pair of thills having a whiffletree swinging thereon, of sleeves slidable upon the thills and provided with lateral sockets opening inwardly and inclining forwardly, coupling means between said sleeves and thills, members having means for attachment to the harness and provided with loops bearing in said sockets and engaged by

said bolts, and means operative by the driver for withdrawing said bolts.

4. In a device of the class described, the combination with a pair of thills having a whiffletree swinging thereon, sleeves slidable upon said thills and provided with lateral sockets opening inwardly, bolts spring-supported and operating in said sleeves and transversely of said sockets, tubular members connected at one end to said sleeve and pivoted at the other end to said whiffletree, guide sheaves upon the pivots between said tubular member and whiffletree, draw cables connected to said bolts and leading through said tubular members and around said guide sheave, and members having means for attachment to the harness and provided with loops bearing in said sockets and engaged by said bolts.

5. In a device of the class described, the combination with a pair of thills having a whiffletree swinging thereon, a lever arm swinging upon the pivot of said whiffletree, sleeves slidable upon the thills and provided with lateral sockets opening inwardly, bolts spring-supported and operating in said sleeves and transversely of said sockets, members having means for attachment to the harness and provided with loops bearing in said sockets and engaged by said bolts, tubular members connected at one end to said sleeves and pivoted at the other end to said whiffletree, guide sheaves upon the pivots between said tubular member and whiffletree, draw cables connected at one end to said bolts and leading around said guide sheaves and connected at the other ends to said lever arm, and a pull cord connected to said lever arm.

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

JOHN ALVIN FENNELL.

Witnesses:

EDWARD E. ROBBINS,
JNO. E. KUNKLE.