

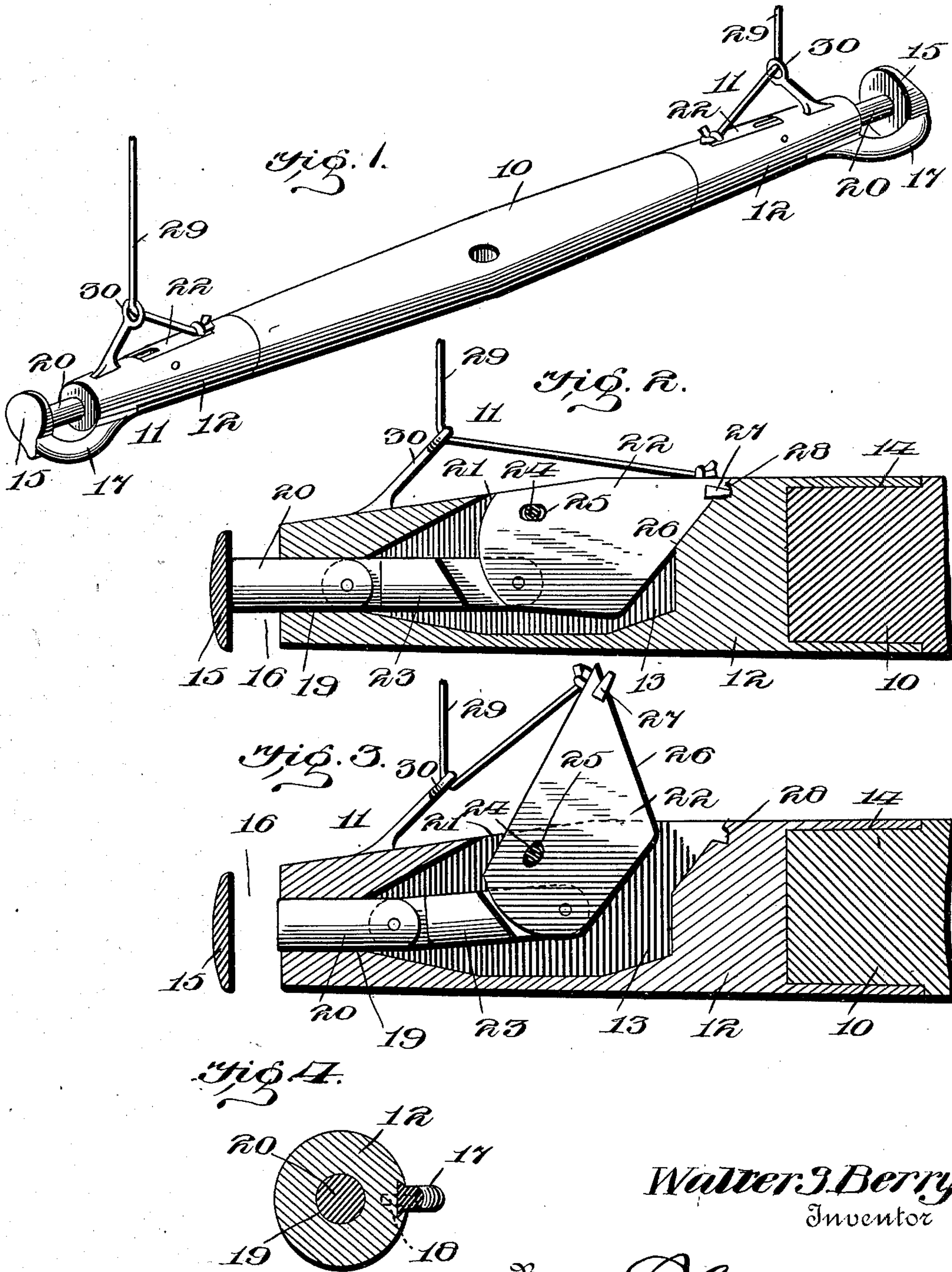
No. 672,818.

Patented Apr. 23, 1901.

W. S. BERRY.
HORSE DETACHER.

(Application filed Dec. 10, 1900.)

(No Model.)



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Witnesses

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WALTER S. BERRY, OF EASTVIEW, KENTUCKY, ASSIGNOR OF ONE-HALF TO
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HORSE-DETACHER.

SPECIFICATION forming part of Letters Patent No. 672,818, dated April 23, 1901.

Application filed December 10, 1900. Serial No. 39,370. (No model.)

To all whom it may concern:

Be it known that I, WALTER S. BERRY, a citizen of the United States, residing at Eastview, in the county of Hardin and State of Kentucky, have invented a new and useful Horse-Detacher, of which the following is a specification.

The present invention relates to improvements in horse-detachers, and more particularly to the means for securing the traces to the whiffletree.

One of the principal objects of the invention is to provide a device of this character which will positively fasten a trace to the whiffletree and which will itself be securely locked in operative position against displacement, but may be readily thrown to an inoperative position to release the animal should it become desirable.

A further object is to construct the fasteners in the form of attachments that may be applied by an unskilled person to an ordinary whiffletree-body without the necessity of reconstructing or changing such body.

In the following specification is described a preferable form of construction that carries out the above objects; but it will be understood that this construction is open to changes which are within the scope of the appended claims. The construction is also illustrated in the accompanying drawings, wherein—

Figure 1 is a perspective view of a whiffletree, showing the improved trace-fasteners applied thereto. Fig. 2 is a longitudinal sectional view, on an enlarged scale, of one end of the whiffletree, showing the trace-fastener in locked position. Fig. 3 is a view similar to Fig. 2, but showing the trace-fastener in unlocked position. Fig. 4 is a cross-sectional view.

Similar numerals of reference designate corresponding parts in the several figures of the drawings.

In the drawings, 10 designates a whiffletree, which may be of any construction desired and carries at its opposite ends a pair of the improved trace-fasteners 11, constituting the detacher. Each of these fasteners 11 is a complete article in itself and is in the form of a tip that can be applied to the end of an ordinary whiffletree-body.

In the construction of fastener shown the

tip is in the form of a casing 12, in the interior chamber 13 of which the trace-locking mechanism operates. The tip is provided at its inner end with a socket 14 for the end of the whiffletree-body and at its outer end with a retaining-cap 15, that is spaced from the end of the casing to provide a trace-receiving opening 16. This cap is preferably in the form of a bracket, the arm 17 of which is detachably secured to the casing by being dovetailed and fitting in a correspondingly-shaped groove in said casing, as clearly shown in Fig. 4. A suitable screw or other fastening 18 holds the arm in place.

The chamber 13 is provided with an end opening 19, in which is slidably mounted a locking-pin 20, that is arranged to be projected across the trace-receiving opening 16. The chamber 13 is furthermore provided with a side opening 21, through which moves an operating-lever 22, that is connected with the locking-pin by means of a link 23. The operating-lever 22 is preferably in the form of a plate that is pivoted contiguous to its outer edge by means of a pivot-pin 24, that passes transversely through the casing. This lever is furthermore allowed a slight longitudinal movement, that may be provided for by making the pivot-opening 25 elongated or by any other means desired. The swinging end of the lever is beveled, as at 26, and coacts with the correspondingly-shaped end of the chamber to form a stop, and this end 26 is provided with a projecting locking-stud 27, that is arranged to engage in a notch 28 of the end of the chamber to lock the lever in closed position, and consequently the pin 20 in operative position.

In order to operate the lever from a vehicle, a cord 29 is attached to the swinging end thereof and passes through a guide-eye 30, arranged upon the exterior of the casing at a point contiguous to the side opening 21 and opposite to the notch 28.

The operation of the device will be apparent. After the end of the trace has been inserted in the opening 16 the lever is forced into the chamber, thus sliding the pin 20 through the usual trace-opening and across the space between the end of the casing and the retaining-cap. At the same time the locking-stud 27 will engage in the notch 28, whereby the le-

ver 22 and pin 20 will be securely held in operative position, and any inward pressure upon said pin will only force the stud into tighter engagement. When it becomes desirable to release the trace, it is only necessary to pull upon the cord 29, which will first move the lever 22 longitudinally until the stud 27 is disengaged from the notch 28 and then raise it, retracting the pin 20 and disengaging it from the trace.

By this exceedingly simple construction it will be seen that reliable fastening means are provided which will securely hold the traces against accidental displacement, but will permit of their quick release when so desired. Furthermore, each fastener is in the form of a complete attachment that can be applied to any ordinary whiffletree-body. A still further advantage resides in the construction of the retaining-plate, which, on account of its exposed position, is sometimes broken. It will be seen that should an accident of this kind occur it may be readily replaced without the necessity of renewing the entire casing.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described invention will be apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

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

1. In a device of the class described, the combination with a casing having an end and a side opening, of a locking-pin slidably mounted in the casing and adapted to be projected through the end opening thereof, an actuating-lever pivoted intermediate its ends in the casing and having an operative connection at one end of the locking-pin, said pin being contiguous to one end of the side opening, the casing being furthermore provided with an eye contiguous to the pivot of the lever, and an operating-cord connected to the free arm of the lever and passing through the eye.

2. In a device of the class described, a tip chambered to form a casing and having a socket at one end for the reception of the whiffletree-body, said casing being provided with an end and a side opening, a locking-pin slidably mounted in the casing and adapted to be projected through the end opening thereof, an actuating-lever pivoted intermediate its ends in the casing and having a link connection at one end with the locking-pin, said pivot being contiguous to one end of the side opening, the casing being furthermore provided with an exterior eye contiguous to the pivot of the lever and an operating-cord connected to the free arm of the lever and passing through said eye.

3. In a device of the class described, the combination with a casing, of a trace-holding pin slidably mounted within the casing and arranged to have a portion projecting from the same to engage a trace, an actuating-lever pivotally and slidably secured to the casing and having an operative connection with the holding-pin to move it to an inoperative position when said lever is actuated, said lever carrying means adapted to engage the casing to hold the pin in its projected or operative position against accidental displacement and be disengaged by the sliding of the lever when said lever is operated.

4. In a device of the class described, the combination with a casing, of a trace-holding pin slidably mounted within the casing and arranged to have a portion project from the same to engage a trace, a bell-crank-actuating lever pivotally and slidably mounted at its elbow within the casing and having an operative connection with the holding-pin to move it to an inoperative position when the lever is actuated, said lever being adapted to engage the casing to hold the pin in its projected or operative position against accidental displacement and be disengaged by the sliding of the lever when said lever is operated.

5. In a device of the class described, the combination with a casing, of a trace-holding pin slidably mounted within the casing and arranged to have a portion project from the same to engage a trace, an actuating-lever pivotally mounted within the casing and having an operative connection with the holding-pin to move it to an inoperative position when said lever is actuated, said lever carrying means which are adapted to engage the casing to hold the pin in its projected or operative position against accidental displacement, said means automatically disengaging the casing when the lever is operated.

6. In a device of the class described, the combination with a casing, of a trace-holding pin slidably mounted within the casing and having a portion arranged to project from the same and engage a trace, a lever pivotally mounted within the casing and having an operative connection with the holding-pin to move it to an inoperative position when the lever is actuated, said lever carrying a projection arranged to engage in a notch in the casing when the pin is in its projected position, and an operating-cord connected to the lever and arranged to move the same longitudinally to release said projection from the notch and swing the lever to move the locking-pin to a retracted position.

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

WALTER S. BERRY.

Witnesses:

J. A. BISHOP,
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