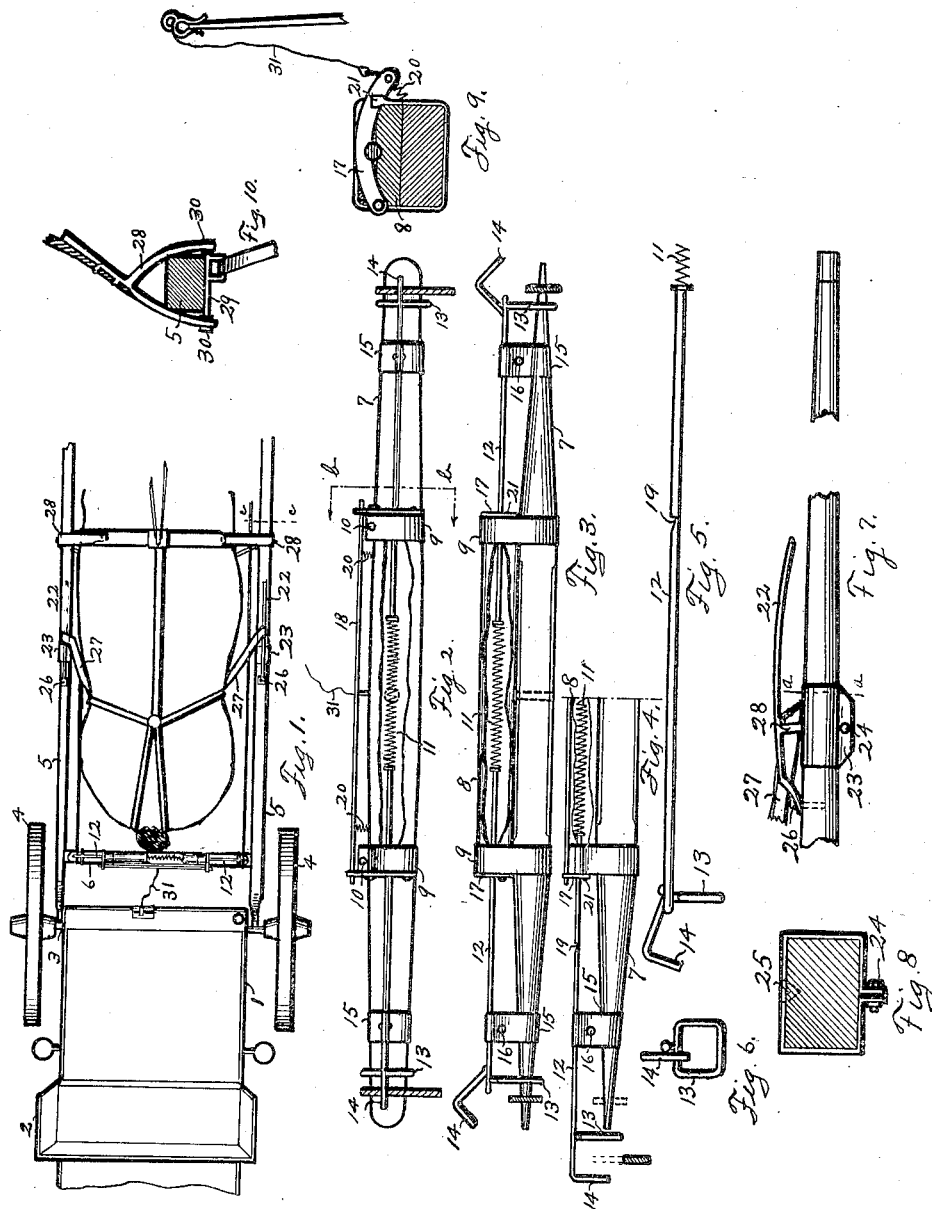


W. O. CARTER.
HORSE DETACHER.
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1,057,619.

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UNITED STATES PATENT OFFICE.

WILLIAM OTIS CARTER, OF MADISONVILLE, TEXAS.

HORSE-DETACHER.

1,057,619.

Specification of Letters Patent.

Patented Apr. 1, 1913.

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To all whom it may concern:

Be it known that I, WILLIAM O. CARTER, a citizen of the United States, residing at Madisonville, in the county of Madison and State of Texas, have invented certain new and useful Improvements in Horse-Detachers, of which the following is a specification.

My invention relates to new and useful improvements in horse detachers and has particular relation to such devices as are adapted to unhitch a horse from a wagon or other carriage.

The object of the invention is to provide a device of the character described, whereby a horse may be easily and completely released from the carriage to which it is hitched. This may be accomplished by the driver, without the necessity of getting out of the carriage and is consequently a great convenience when it is desired to unhitch the horse during a rain, or when the ground is wet or muddy, and the device is equally effective for unhitching a horse when it attempts to run away.

With the above and other objects in view, the invention has particular relation to certain novel features of construction and operation, an example of which is given in this specification and illustrated in the accompanying drawings, wherein—

Figure 1 is a partial plan view of the carriage and horse hitched thereto, said carriage being equipped with my improved detacher. Fig. 2 is a plan view of the detacher. Fig. 3 is a side elevation thereof, showing the same in position for the traces to be secured thereto. Fig. 4 is a side elevation of one end of the detacher, showing the same in position immediately after the traces have been released therefrom. Fig. 5 is a side elevation of the trace releaser. Fig. 6 is an end view thereof. Fig. 7 is a fragmentary view of the shaft of a carriage, showing the hold-back strap and its method of engagement to the shaft. Fig. 8 is a sectional view of said shaft, taken on the line *a—b* of Fig. 7. Fig. 9 is a sectional view of the detacher, taken on the line *b—b* of Fig. 2. Fig. 10 is a sectional view of the shaft, taken on the line *c—c* of Fig. 1 and showing the shaft support.

Referring now more particularly to the drawing wherein like numerals of reference designate similar parts in each of the figures, the numeral 1 refers to the carriage

body provided with the usual seat 2, the front axle 3 and the front wheels 4.

To the front axle the usual shafts 5 are attached in the ordinary manner, said shafts being connected by the cross-bar 6. Upon the cross-bar, the whiffletree 7 of the ordinary construction is mounted in the usual manner. Upon the whiffletree, I have mounted a casing 8 by means of metallic clamps 9, said clamps surrounding the whiffletree and casing and their free ends being secured together by means of bolts 10. The casing 8 is provided with a longitudinal passageway or opening, in which is secured a strong coil spring and resting against the respective ends of this spring and projecting out each way from said casing 8 are the rods 12, 12. The outer end of each rod carries a stirrup 13, 13, the stirrups being of such a size as to slide readily over the free ends of the whiffletree. The outer end of each rod is provided also with a hook 14, 14, which is hinged thereto and is provided to engage over the traces and hold the same securely on the end of the whiffletree, as will be more particularly described hereinafter.

Near each end of the whiffletree there is a clamp 15, 15 surrounding the same and the clamp projects upwardly a considerable distance, as shown in Fig. 3 and surrounds also the rods 12 and forms a bearing for said rods through which they may slide lengthwise and the clasps are secured firmly upon the whiffletree by means of bolts 16, 16.

Each end of the casing 8, has a trigger 17, 17, arcuate in shape, one end of which is pivoted to the front side of said casing and the other end of which is free. The free ends of these triggers are connected by means of a rod 18. Each of the rods 12 is provided with a notch 19 in which the triggers 17 may engage, as hereinafter set forth and this engagement is secured by means of springs 20, 20, which are secured to the rod 18 and also to the casing 8.

The rear side of each end of the casing 8 is provided with lugs 21—21, behind which the free ends of the triggers 17 engage and which prevent any lateral movement of said triggers.

The shafts 5 are of the ordinary construction, but are provided with fingers 22, 22, which extend forwardly, as shown. These fingers are secured to the shaft by means

of cuffs 23, 23 which are integral with the fingers and which clasp the shafts and are secured therearound by means of bolts 24, 24. Each cuff is provided with an inwardly
 5 extending tooth 25, which engages with the shaft and prevents any slippage of the cuff on the shaft. The rear ends of the fingers 22 are secured to the shafts by means of bolts 26. The hold-back strap 27, 27, of the
 10 harness engages over the finger 22 and against the bridge 28, connecting said finger to the cuff 23 and the vehicle is thus held back by means of said straps.

The harness is provided with shaft sup-
 15 ports 28, 28, consisting of a stirrup having a transverse supporting rod 29 secured in place by means of the nuts 30, 30. This rod should be surrounded by a section of rubber tubing, so as to prevent any wear upon the
 20 under side of the shaft.

When it is desired to hitch a horse to a carriage, the shafts are run through the stirrups 28 and the hold-back straps 27 are placed over the fingers 22 and the rods 12
 25 are then forced inwardly at the same time compressing the spring 11, until the triggers 17 engage in the notches 19 and the stirrups 13 slide over the outer ends of the whiffletree 7. The hooks 14 are then ele-
 30 vated and the traces are secured on the whiffletree in the ordinary manner and said hooks 14 then engaged over the ends of the traces so as to secure them in place.

When it is desired to unhitch the horse,
 35 the driver may grasp the cord 31 which is attached to the center of the rod 18 and by an upward pull thereon, the triggers 17 are released from the notches 19 and the rods 12 released to the pressure of the spring 11,
 40 which forces said rods outwardly and the stirrups 13 disengage the traces from the whiffletree. The horse may then move forward and the hold-back straps will slip off of the fingers 22 and the stirrups 28 are re-

leased from the shafts 5 and the horse will
 be completely detached from the carriage. 45

This device may be used for unhitching a horse whenever occasion may demand, but is especially used to release the horse in case it attempts to runaway. 50

What I claim is:—

1. A device of the character described comprising a whiffletree, a casing secured thereon, a pair of rods slidable lengthwise
 in said casing, one projecting from each end 55 thereof, a resilient member interposed between said rods, a stirrup carried by the free end of each rod and adapted to slide over the ends of the whiffletree, an engaging hook
 carried by the outer end of each rod, a mech- 60 anism for locking said rods against the resistance of said resilient member and means for releasing said locking mechanism.

2. A device of the character described, composed of a whiffletree and a pair of rolls 65 carried thereby and extending in opposite direction, a suitable bearing member in which said rods are slidably mounted, a stirrup carried by the free end of each rod and arranged to slide over the free ends of
 70 the whiffletree, an engaging hook carried by the free end of each rod and projecting beyond said stirrups, a mechanism for locking said rods against outward movement, a means for releasing said locking mechanism 75 and a resilient member interposed between the inner ends of the rods and resisting against said rods and tending to force the rods outwardly when said locking mechanism has been released. 80

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM OTIS CARTER.

Witnesses:

D. C. BROWN,

R. J. RANDOLPH.