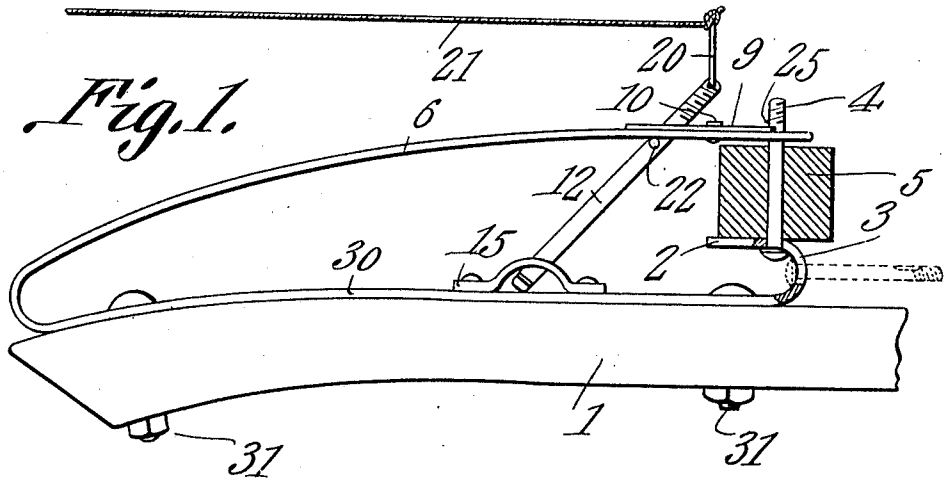
T. NOBLE.

HORSE RELEASER.

APPLICATION FILED JAN. 28, 1910.

970,346. Patented Sept. 13, 1910.

Fig. 1.



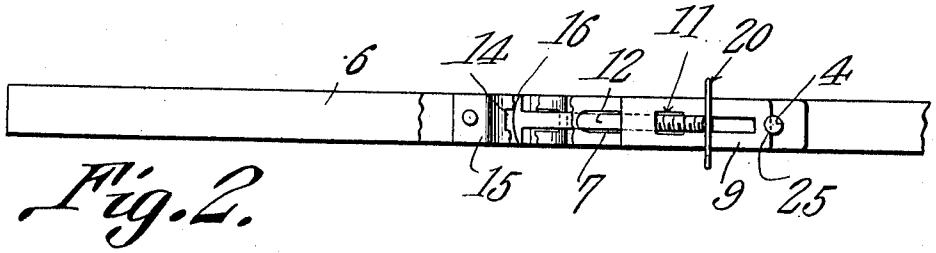
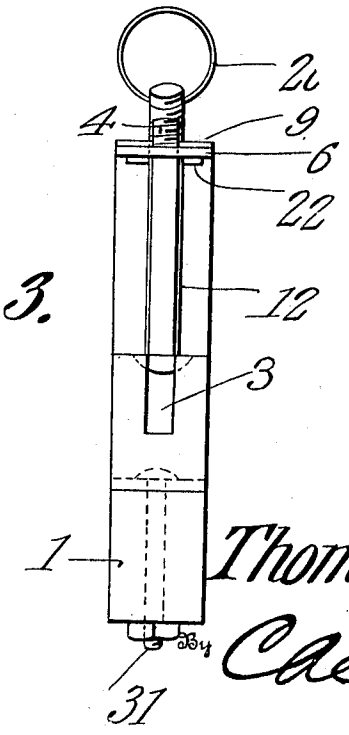


Fig. 2.

Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

THOMAS NOBLE, OF LAKESIDE, NEBRASKA.

HORSE-RELEASER.

970,346. Specification of Letters Patent. **Patented Sept. 13, 1910.**

Application filed January 28, 1910. Serial No. 540,656.

To all whom it may concern:

Be it known that I, THOMAS NOBLE, a citizen of the United States, residing at Lakeside, in the county of Sheridan and State of Nebraska, have invented a new and useful Horse-Releaser, of which the following is a specification.

This invention relates generally to the tongues or draft appliances of wagons or carriages and the like, and particularly to a device for disconnecting the draft animals from the conveyance in the case of a runaway or other accident.

The object of the invention is to provide strong, simple, durable and inexpensive means for releasing the draft animal, said means being controlled from the driver's seat and being so constructed as to act positively and without danger of failure in the case of emergency.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the embodiment of the invention herein set forth can be made within the scope of the claims without departing from the spirit of the invention.

In the accompanying drawing forming part of this specification,—Figure 1 is a side elevation of a tongue or shaft of the wagon or carriage provided with the improved detaching device of the present invention. Fig. 2 is a plan view thereof. Fig. 3 is a front elevation.

Like reference numerals indicate corresponding parts in the different figures of the drawing.

The reference numeral 1 indicates the tongue or other portion of a carriage or wagon. Suitably connected with the tongue 1 is an upwardly and rearwardly extending bracket 2 which is longitudinally slotted, as indicated at 3. Extending through the slot 3 is a draft bolt 4 which passes through the whiffle tree 5 which may be either a single tree, double tree or other draft element. The upper end of the draft bolt 4 extends through an opening in an arm 6 which preferably, although not essentially is formed of resilient metal and has a tendency to spring upward when released. The arm 6 is connected with the tongue 1 in any suitable manner and is longitudinally slotted, as indicated at 7. Mounted for sliding movement upon the arm 6 is a catch 9 which has a headed bolt or pin 10 extending through the slot 7 in the arm 6 so as to hold the catch 9 in proper position during its longitudinal sliding movement on the arm 6. Extending through the slot 7 of the arm 6 and through an opening 11 in the catch 9 is a rod 12. The rod 12 preferably is fulcrumed at its lower end in any suitable manner. For this purpose it extends through a slot 14 in an arched retaining member 15. The rod 12 at its lower end is provided with lateral extensions 16 which serve to prevent it from becoming disengaged from the retaining member 15. At its upper end the rod 12 is provided with a ring or other fastening device 20 with which is engaged a cord, wire or the like 21 extending rearwardly to the driver's seat. Below the arm 6 the rod 12 is provided with a pin or cross piece 22 which rests against the lower surface of said arm. The sliding catch 9 is adapted to be moved forward to engage a notch 25 in the draft bolt 4.

The arm 6 and bracket 3 may, if desired, be formed integral with each other, as shown in the drawing, the body portion 30 thereof being connected with the tongue 1 by means such as the bolts 31.

Constructed as described the operation of the device is as follows: So long as the parts remain in the position shown in Fig. 1 the draft animals are securely connected with the wagon. In case of a runaway or other accident necessitating the freeing of the draft animals, the driver pulls upon the cord or wire 21. By reason of the fact that said cord or wire is connected with the pivot rod 12, the upper end of said rod is drawn backward, thus withdrawing the catch 9 from the notch 25 in the draft bolt 4. The cross piece or pin 22 of the bolt 12 serves to force the arm 6 positively upward, this movement being facilitated by the resiliency of said arm. The upward movement of the arm 6 due to either its resiliency or the cross piece 22, of rod 12 releases the said arm from engagement with the draft bolt 4, which thereupon swings forward in the slot 5 to approximately the dotted line position of Fig. 1, upon reaching which the whiffle tree 5 slides off of said bolt and permits the escape of the draft animals.

By providing means for positively throwing the arm 6 upward out of engagement

with the draft bolt 4, in addition to the natural resiliency of said arm, liability of the parts catching and refusing to operate is effectually avoided.

The device of the present invention is strong, simple, durable and inexpensive in construction, as well as thoroughly efficient in operation.

What is claimed as new is:

1. A horse detacher comprising a whiffle tree, a pivotal bolt for said whiffle tree, a spring engaging said bolt and tending to spring out of engagement therewith means engaging said bolt for locking said spring thereto, and means operable from the driver's seat for releasing said spring.

2. A horse detacher comprising a whiffle tree, pivotal holding means for said whiffle tree, spring means for positively releasing said holding means, means engaging said holding means for locking said spring means in engagement with said holding means, and means operable from the driver's seat for releasing the locking means for said spring means.

3. A horse detacher comprising a whiffle tree, a swinging bolt connected with said whiffle tree, spring means for holding said bolt against swinging movement, said spring means tending to move out of engagement with said bolt, means engaging said swinging bolt for locking said spring in engagement with said bolt, and means for releasing said locking means.

4. A horse detacher comprising a slotted bracket, a bolt extending through said slotted bracket and slidable therein, a whiffle tree connected with said bolt, and means detachably engaging the upper end of said bolt for holding it against movement.

5. A detaching device comprising a bolt mounted for swinging movement, a whiffle tree connected with said bolt, an arm fitting over the upper end of said bolt, a catch on said arm engaging said bolt, and means for releasing the said catch from said bolt and moving said arm out of engagement with said bolt.

6. A horse detacher comprising a swinging bolt, a whiffle tree connected with said bolt, an arm engaging the end of said bolt, a catch on said arm engaging said bolt, and a pivoted rod for releasing said catch and positively moving said arm out of engagement with said bolt.

7. A horse detacher comprising a swinging bolt, a whiffle tree connected with said bolt, a resilient arm engaging the end of said bolt, a catch in engagement with the arm and bolt for holding said arm in engagement with said bolt, and means for operating said catch.

8. A horse detacher comprising a curved bracket having a slot therein, a bolt extending through said slot and having a notch adjacent its upper end, a whiffle tree connected with said bolt, a resilient arm formed integral with said bracket and fitted over the upper end of said bolt, a slide catch on said arm engaging the notch in said bolt, and a pivotally mounted rod extending through said arm and said catch and having a cross piece thereon below said arm, said pivotally mounted rod being adapted to release said catch and raise said arm out of engagement with said bolt.

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

THOMAS NOBLE.

Witnesses:

WILLIAM SEEBOHM,

IKE M. SHRINER.