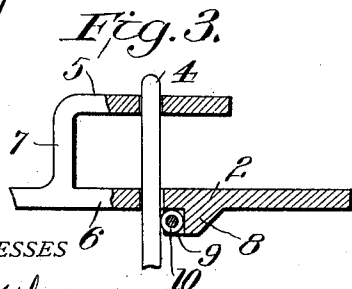
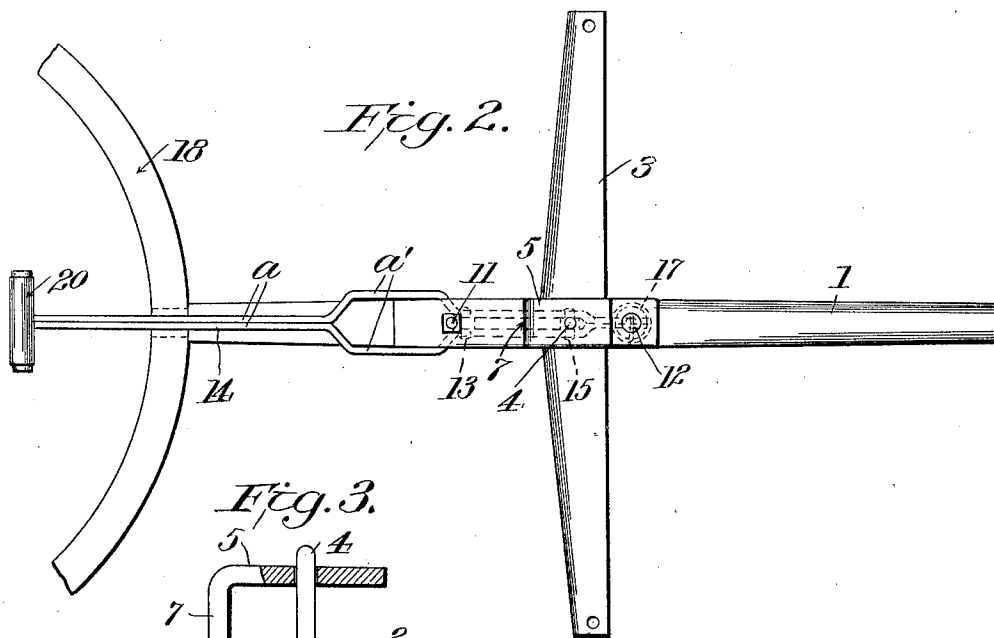
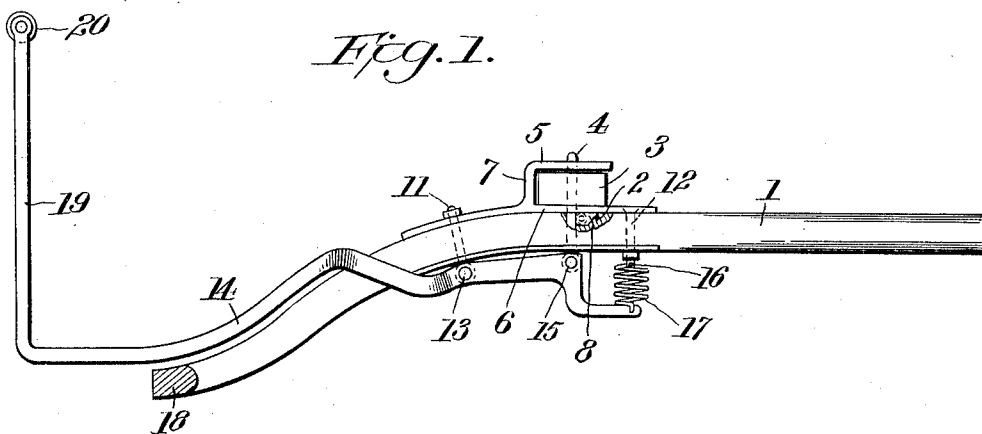


A. W. TOOL.
 HORSE DETACHER.
 APPLICATION FILED JULY 30, 1910.

1,003,073.

Patented Sept. 12, 1911.



WITNESSES

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HORSE-DETACHER.

1,003,073.

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To all whom it may concern:

Be it known that I, ARCHIE W. TOOL, a citizen of the United States, residing at Bellaire, in the county of Smith and State of Kansas, have invented certain new and useful Improvements in Horse-Detachers, of which the following is a specification.

This invention relates to horse detachers.

One object is to provide a device embodying such characteristics that it may be easily and readily applied to draft appliances for the purpose of providing means whereby unmanageable or unruly horses may be easily and quickly released from a vehicle so that danger attending unruly runaway horses is reduced to a minimum.

Another object resides in the provision of a horse detacher of simple construction which may be easily applied to any type of vehicle and provide for an effective connection of the animals to the vehicle and permit of a ready release of the animals in the event that the animals become unmanageable or run away or in the event that it is desired to release the animals quickly for any purpose.

With the above and other objects in view the present invention consists in the combination and arrangement of parts illustrated in the accompanying drawings, described in the specification and particularly pointed out in the appended claim, it being understood that changes may be made in the form, proportion, size and minor details without departing from the spirit of the invention or sacrificing any of the advantages thereof.

In the drawings: Figure 1 is a side elevation of my invention applied to a vehicle tongue. Fig. 2 is a top plan view. Fig. 3 is a detailed sectional view.

Referring now more particularly to the accompanying drawings the reference character 1 indicates a tongue provided with a recess 2 for a purpose presently explained.

The character 3 indicates a doubletree which has swiveled connection and which is held in place by the slidable bolt 4 slidably mounted through the tongue 1 and also through the upper and lower ears 5 and 6 of the casting 7, which latter has a lug 8 provided with spaced ears 9 adapted to receive a roller 10 and which is mounted in the aforesaid recess of the tongue 2, the casting 7 being secured rigidly to the tongue 1 by means of bolts 11 and 12, as clearly

shown in Fig. 1. The bolt 11 extends beneath the tongue 1 and has an eye to receive a bolt 13 upon which latter the operating lever 14 is pivotally mounted, the slidable bolt 4 having an eye to receive a bolt 15 so that the bolt 4 may slide through the tongue, the doubletree and the casting when the operating lever 14 is moved upon its pivot or fulcrum 13. To hold the bolt 4 in its operative position I provide the bolt 12 with an eye 16 adapted to receive one end of the spring 17 whose opposite end is secured at the extreme outer end of the operating lever 14, as shown.

The lever 14 is preferably formed of two members *a* and in order that its outer end may be disposed beneath the tongue 1 and its inner end above the tongue, the parts *a* are spread as indicated at *a'* in Fig. 2 so that the operating lever 14 may be provided with an eye to embrace the rear end of the tongue and rest upon the circle 18 ready for operation, the lever 14 having a part 19 which extends in front of the dashboard of the vehicle and whose upper end is provided with a hand piece or handle 20.

To release the doubletree 3 and consequently the animals from the vehicle, it is simply necessary for the occupant of the vehicle to pull upwardly on the handle 20 which causes the operating lever 14 to move on its pivot 13 and the outer end of the operating lever to move downwardly against the action of the spring 17 which causes the bolt 4 to be withdrawn from the casting and doubletree 3 so that further pull by the animals on the doubletree 3 will release the animals from the vehicle, the bolt 4 having free and quick sliding movement because of friction being reduced to a minimum through the instrumentality of the roller 10 mounted in the ears 9 and contacting with the bolt 4.

By virtue of the substantially elongated eye intermediate the ends of the lever 14, off from the center of the latter, the lever may be pivoted to the underside of the tongue with a portion of the lever disposed above the tongue and another portion disposed beneath the tongue. The eye embraces the tongue with one end of the eye arranged to engage the upper face of the tongue to limit downward movement of the lever, the other end of the eye being arranged to engage the lower face of the tongue to limit the upward movement of the lever. The spring 17 acts

upon the outer end of the lever to maintain the bolt 4 in operative relation with the tree 3, and the action of this spring is reinforced by the weight of the handle by which the lever is shifted.

What is claimed is:

The combination with a vehicle tongue having a perforation and a double tree and its support, of a lever pivoted to the underside of the tongue and provided with an eye intermediate its ends off from the center thereof, the eye embracing the tongue with one end of the eye arranged to engage the upper face of the tongue to limit downward movement of the lever, the other end of the eye being arranged to engage the lower face of the tongue to limit upward movement of the lever, a bolt secured to the lever and pro-

jecting through said opening for detachable connection with said double tree, a spring connecting the lever and tongue to maintain the bolt in operative relation to the double tree, and an operating handle for the lever for operating the latter to pull the bolt away from operative connection with the double tree and whose weight reinforces the action of the spring in maintaining the operative connection between the bolt and double tree.

In testimony whereof I affix my signature in presence of two witnesses.

ARCHIE W. TOOL.

Witnesses:

W. H. FLESHER.

W. E. TOOL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."