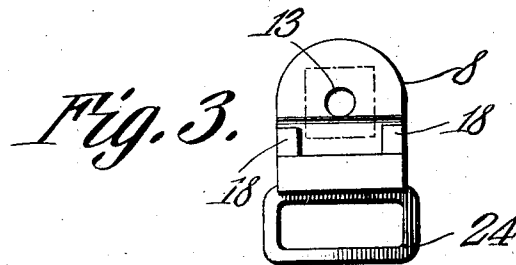
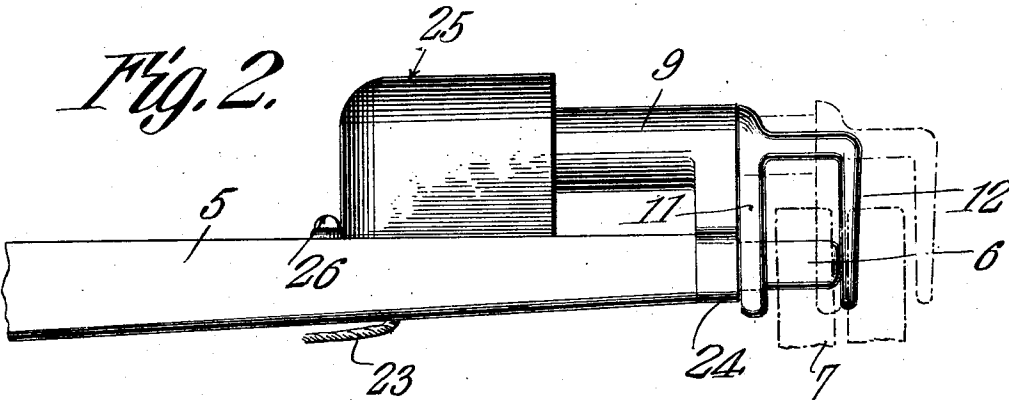
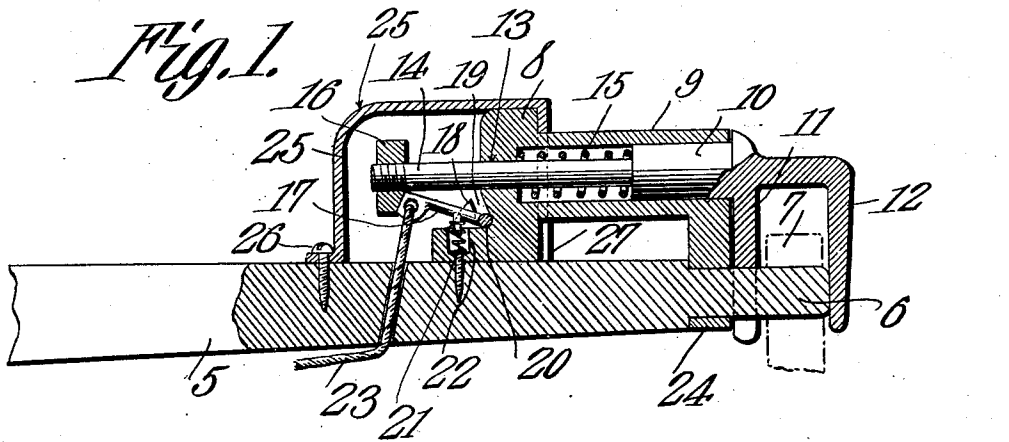


W. J. PARVIN.
TRACE RELEASER.
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938,072.

Patented Oct. 26, 1909



Inventor

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Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM J. PARVIN, OF MARYVILLE, MISSOURI.

TRACE-RELEASER.

938,072.

Specification of Letters Patent.

Patented Oct. 26, 1909.

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To all whom it may concern:

Be it known that I, WILLIAM J. PARVIN, a citizen of the United States, residing at Maryville, in the county of Nodaway and State of Missouri, have invented a new and useful Trace-Releaseer, of which the following is a specification.

This invention relates to a device for disconnecting the traces from the swingle-tree, whereby the horse is detached from the vehicle, and the object of the present invention is to provide an improved device of this kind which not only releases the traces, but also positively disengages the same from the swingle-tree.

Another object of the invention is to provide a trace releaser which is simple in structure, and highly efficient in operation, and also one which can be readily applied to any ordinary swingle-tree without altering or modifying the structure thereof.

With the foregoing objects in view, the invention consists in a novel construction and arrangement of parts, to be hereinafter described and claimed, reference being had to the drawing hereto annexed, in which:—

Figure 1 is a longitudinal sectional view of the device. Fig. 2 is an elevation of the same. Fig. 3 is an end view with the casing removed.

In the drawing is shown one end of a swingle-tree 5, with the invention applied thereto. It will be understood that the other end of the swingle-tree will be similarly equipped. From the ends of the swingle-tree project pins 6, over which the traces 7 are slipped, and thus secured to the swingle-tree.

The trace releaser is supported by a block 8, mounted on top of the swingle-tree, and having on one side a tubular extension 9, in the bore of which is slidably mounted a spring-pressed plunger 10, carrying the trace-releasing means, such means comprising a fork 11, straddling the pin 6, and a finger 12, bearing against the outer end of said pin. The trace ends are received between the fork and finger. In line with the bore of the tubular extension 9, the block 8 has a transverse opening 13, through which extends a stem 14, projecting from the rear end of the plunger 10. Around this stem, between the rear end of the plunger and the block 8, is coiled a spring 15, which actuates the plunger in a manner to be presently described. That end of the stem

14 which projects from the block 8 is fitted with a head 16, which is engageable by a latch 17, for holding the plunger retracted. The head may conveniently be a nut, the end of the plunger stem being screw-threaded to receive the same. On opposite sides of the block 8 are ears 18, provided with slots 19, in which are received the trunnions 20 formed on the latch 17, whereby the same is pivotally supported. The latch is spring-pressed in the direction of the head 16, being engaged by a spring 21, seating in a recess 22, made in the block 8. The latch is also provided with an eye, to which it attached a flexible operating device, such as a rope or cable 23, which leads to a convenient position adjacent to the driver's seat, so that the latch may be operated without the driver leaving the seat.

The outer end of the tubular extension 9 is formed with a sleeve 24, which encircles the pin 6 and abuts against the shoulder formed on the swingle-tree at the inner end of said pin. In addition to this fastening means for the block 8, there is also provided a housing or cover 25, which is fastened to the swingle-tree by screws or other means 26, and has in its front end wall a slot 27, through which the tubular extension 9 projects. Said wall of the casing is in contact with the block 8, and, as the casing is secured to the swingle-tree, the block requires no other fastening means, the sleeve, by its engagement with the shoulder of the swingle-tree, preventing inward movement of the block along the swingle-tree. The outward movement of the block is prevented by the engagement of the front wall of the casing therewith, as already described.

The operation of the device will be apparent from the foregoing description, but may be summarized as follows:—The trace ends are received on the pins 6, between the parts 11 and 12, as shown in Figs. 1 and 2. When it is desired to release the traces, the operator pulls on the rope 23, which swings the latch 17 away from the head 16, whereby the plunger is released, and shot forward by the spring 15, the parts 11 and 12 moving outwardly to the positions shown by dotted lines in Fig. 2. This movement of said parts 11 and 12 disengages the traces from the pin 6, the part 11 pushing the same off said pin.

It will be seen from the foregoing that the device is simple in construction and has no

complicated parts to get out of order. It is therefore reliable in operation, and it may also be applied to any ordinary swingle-tree without materially altering or modifying the structure thereof.

What is claimed is:—

The combination with a swingle-tree carrying a trace-pin, and having a shoulder at the inner end of said pin, of a trace-releaser comprising a block on the swingle-tree and having a transverse opening, a tubular extension on one side of the block, a sleeve on said extension encircling the trace pin, and abutting against the aforesaid shoulder, a housing inclosing the block, and engageable with the side thereof from which the tubular extension projects, said housing having a

slot through which the tubular extension projects, a spring-pressed plunger working in the bore of the extension, trace-releasing means on one end of the plunger, a stem projecting from the other end of the plunger, and passing through the aforesaid opening in the block, a head on the plunger stem, a latch engageable with said head, and means for operating the latch.

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

WILLIAM J. PARVIN.

Witnesses:

J. J. PORTER,
VIRGIE ROSE.