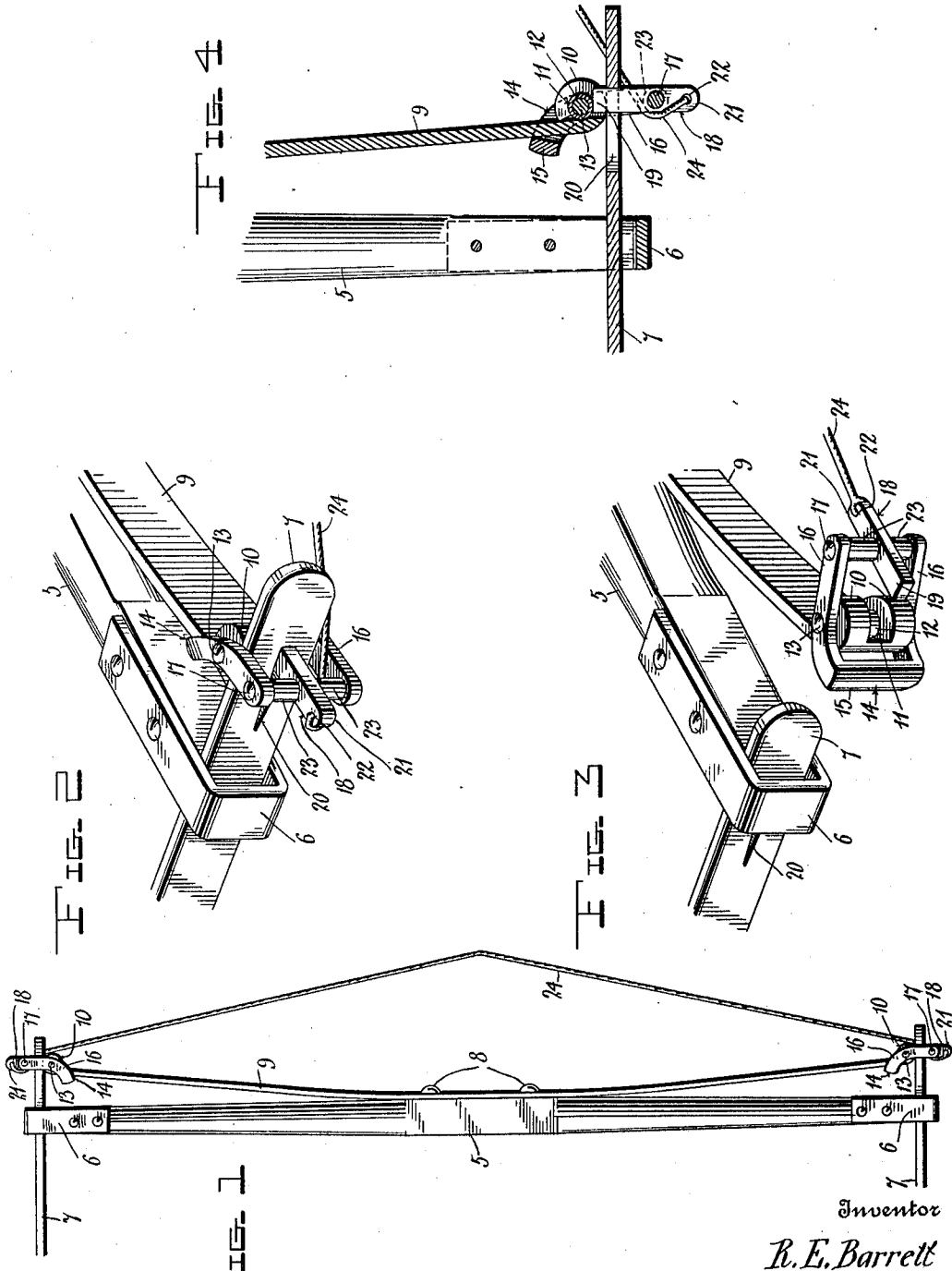


R. E. BARRETT.
HORSE RELEASING DEVICE.
APPLICATION FILED SEPT. 23, 1911.

1,021,297.

Patented Mar. 26, 1912.



Witnesses

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UNITED STATES PATENT OFFICE.

RICHARD E. BARRETT, OF BOYKINS, VIRGINIA.

HORSE-RELEASING DEVICE.

1,021,297.

Specification of Letters Patent. Patented Mar. 26, 1912.

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To all whom it may concern:

Be it known that I, RICHARD E. BARRETT, a citizen of the United States, residing at Boykins, in the county of Southampton, State of Virginia, have invented certain new and useful Improvements in Horse-Releasing Devices; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an improvement in horse releasing devices adapted for attachment to swingletrees.

The principal object of the invention is to provide a horse detacher which is yieldable to the strain to which it may be subjected and which is provided with means for quickly releasing the traces from the swingletree in cases of emergency.

Another object of the invention is to provide a swingletree with trace releasing means of simple construction associated therewith, and which are positive in operation and easy of operation.

With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended; it being understood that various changes in the form, proportion, size and minor details of construction within the scope of the claims, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawing: Figure 1 is a top plan view of a swingletree constructed in accordance with my invention, Fig. 2 is a perspective view of one end of the tree showing the parts in their operative positions, Fig. 3 is a similar perspective view but showing the parts in their inoperative positions, Fig. 4 is a central longitudinal sectional view through one end of the releasing means.

Like reference numerals designate corresponding parts in all the figures of the drawing.

Referring to the drawing, 5 designates a swingletree which is provided at its ends with loops 6—6 through each of which a trace 7 is arranged. Centrally secured to the rear face of the swingletree 5 by means of bolts 8 or other suitable fastening means

is a rearwardly bowed flat spring 9. Each end of the spring 9 is forked to form a pair of spaced arms 10—10 which are bent rearwardly to form loops having alined openings 11—11. Disposed within the said openings 11 is a bearing sleeve 12, and disposed within the sleeve is a pivot bolt 13, the ends thereof extending beyond the top and bottom of the spring 9.

My invention further comprises a releasing lever which is designated as a whole by the reference numeral 14. This lever is formed of metal, and is of U-shaped construction and consists of a bight portion 15 and spaced legs 16—16, said legs being fulcrumed upon the pivot bolt 13. The bight portion 15 of said lever is disposed in an offset relation to the longitudinal axis of the legs, so that when the lever is in its operative position, the bight 15 will be disposed against the forward face of the spring 9 and the major portion of the legs 16 will be disposed in substantially parallel plane with the said spring, as clearly shown in Fig. 1 of the drawing. It is to be noted in this connection that when the lever is in this position, it is held against forward swinging movement by means of the bight 15. Formed in the outer ends of the legs 16 and in spaced relation to the loops 10 of the spring are alined openings through which a pivot pin 17 is disposed. Centrally formed on and disposed at right angles to this pin, is a latch pin 18, one end 19 thereof projecting through the eye 20 of the trace 7 and engaging against the rear face of the spring 9 between the loops 10—10 thereof. The other end 21 of said latch pin projects outwardly beyond the pin 17, and is formed with a perforation 22. Mounted on the pivot pin 17 between the legs 16 and the latch pin 18 are spacing sleeves 23—23, which are loosely mounted to revolve. A cord 24 has each end secured to the end 21 of each latch pin 18 by tying the same through the opening 22 thereof. This cord is passed around between a respective spacing sleeve 23 and the trace 7.

In operation, it will be observed that when it is desired to release the traces from the swingletree, the operator will by pulling upon the cord 24 rotate the latch pins 18 against the tension of the spring 9, said rotation causing each pin to pull the trace rearwardly and shift the end of the spring 9 forwardly. This movement of the latch

pin is continued until the end 19 thereof has become disengaged from the adjacent end of the spring 9, when each trace 7 will become disengaged.

5 In attaching a trace to one of the releasers, each end of the spring 9 is forced against the swingletree 5, a trace 7 is passed through the loop 6 of said tree, and the end 19 of the latch pin 18 is projected through
10 the eye 20 of the trace 7 and against the outer face of the end of the spring 9 between the loops 10—10 thereof.

What is claimed is:

1. In a horse releaser, the combination
15 with a swingletree, of a rearwardly bowed spring secured centrally to the rear face thereof, a lever fulcrumed intermediate its ends to each end of the spring, a latch pin adapted to project through the eye of a
20 trace pivotally mounted upon each lever for engagement with the rear face of the adjacent end of the spring, and means for releasing said pins.

2. In a horse releaser, the combination with a swingletree, of a rearwardly bowed
25 spring secured to the rear face thereof, each end of the spring being forked to form spaced arms, said arms being rearwardly bent to form loops having alined openings, a pivot pin disposed within said openings
30 and projecting beyond the loops, a U-shaped lever having its legs fulcrumed intermediate their ends upon the projecting ends of the pivot pin, a latch pin adapted to project
35 through the eyes of a trace pivotally mounted between the free ends of the legs of each lever for engagement with the rear face of the adjacent end of the spring, and means for releasing said pins.

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

RICHARD E. BARRETT.

Witnesses:

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