O. P. VROOM.

AUTOMATIC HARNESS HOOK.

APPLICATION FILED NOV. 20, 1912. RENEWED NOV. 22, 1913.

1,100,637. Patented June 16, 1914.

Fig. 1.

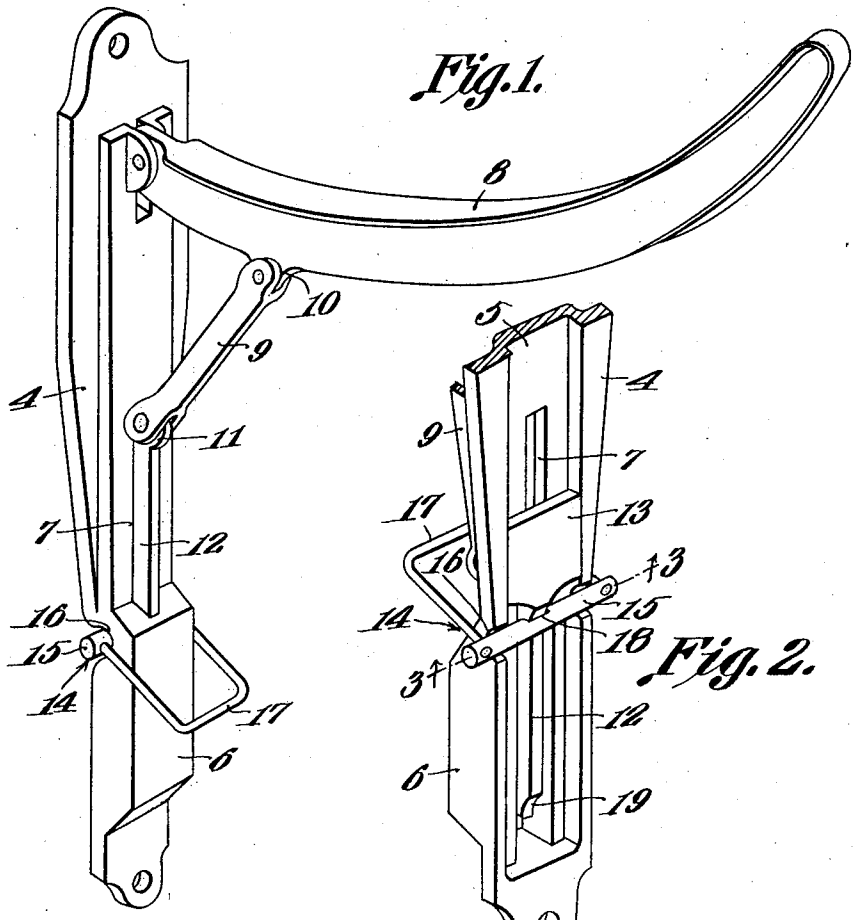


Fig. 2.

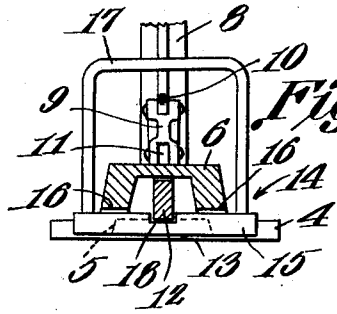


Fig. 3.

Witnesses

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OLER P. VROOM, OF LINNEUS, MISSOURI.

AUTOMATIC HARNESS-HOOK.

1,100,637. Specification of Letters Patent. **Patented June 16, 1914.**

Application filed November 20, 1912, Serial No. 732,518. Renewed November 22, 1913. Serial No. 802,556.

To all whom it may concern:

Be it known that I, OLER P. VROOM, a citizen of the United States, residing at Linneus, in the county of Linn and State of Missouri, have invented a new and useful Automatic Harness-Hook, of which the following is a specification.

The present invention appertains to harness hooks, and aims to provide a device of this character embodying a supporting arm adapted to be normally held in a raised position and adapted to be released so as to gravitate in order that the harness may be readily removed therefrom and mounted thereon.

The present invention also contemplates the production of a device of the character indicated, which shall be simple, substantial, durable, compact and inexpensive in construction as well as efficient, serviceable, and convenient in its use.

To the above and other ends, which will appear as the description proceeds, the invention resides in the combinations and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

The preferred embodiment of the invention has been illustrated in the accompanying drawings, wherein:—

Figure 1 is a perspective view of the improved harness hook in position to support a harness. Fig. 2 is a fragmental perspective of the device, showing the several parts as arranged when the supporting arm is depressed. Fig. 3 is a section view taken on the line 3—3 of Fig. 2.

Referring specifically to the drawing, the numeral 4 designates an upright or erect base plate of any suitable character, and which is provided at its ends with apertures for the passage of securing members for fastening the same to a wall or other upright. The base plate is provided with a rear longitudinal channel 5 and with an outstanding housing 6 at its lower end, the base being further provided with a slot 7 extending upward from the housing. A curved supporting arm 8 is pivoted to the upper end of the base plate and a brace link 9 is pivoted to an ear 10 depending from the arm 8 adjacent its fulcrum, the other end of the link 9 being pivoted to an ear 11 projecting from an elongated slide or bar 12 working in the slot 7 of the base plate. The slide 12 passes through the upper end of the housing 6 so as to project thereinto and is provided at its upper ends with a flat head 13 working in the channel 5. The head 13 retains the slide in position, and is adapted to work against the wall or support to which the base plate is secured.

In order to normally support the slide, there has been provided a latch designated generally by the numeral 14, and consisting of a pivot pin 15 journaled through the notches 16 provided in the rear edges of the sides of the housing 6, and the U-shaped lever 17 having its end secured to or riveted through the ends of the pivot pin 15, this lever 17 straddling the housing. The pivot pin 15 is provided with a recess or notch 18 through which the rear edge of the slide is adapted to pass, and the slide is provided with a notch 19 in its rear end in which the pivot pin is adapted to engage when the lever 17 is raised or elevated. The pivot pin 15 is held against the wall or support to which the base plate is secured and is therefore prevented from being displaced, although when the base plate is removed, the latch is free to be removed from the base plate, as will be understood.

In use, when the supporting arm is raised, the slide 12 will be elevated so as to bring the notch 19 adjacent the pivot pin 15, in which event, the weight of the lever 17 will swing the pivot pin to such a position that it will engage in the notch 19 to prevent the slide from being depressed. Thus, the arm 8 is supported in an inclined position so as to effectively support the harness or any other object. When it is desired to remove the harness, the lever 17 may be raised, which

will swing the pivot pin 15 so that the rear edge of the slide may pass through the notch 18 of the pivot pin and the arm 8 will therefore swing downward in order to permit the harness to slide therefrom and onto the arm of the operator. The harness may thus be readily positioned on the operator's arm so that it may be conveniently applied to the horse, and when it is desired to again hang the harness up, the same may be inserted over the declining arm 8, after which, the arm 8 may be raised so that latch may engage the slide.

Having thus described the invention, what is claimed as new is:—

1. A harness hook embodying a base plate, a slide carried thereby, a supporting arm pivoted to the base plate, a link connecting the slide and arm, and a latch for the slide constituting a pivot pin journaled to the base plate and a lever secured to the pivot pin, the pivot pin and slide coöperating so as to support the slide when the lever is depressed.

2. A harness hook embodying a base plate, an elongated slide carried thereby, a supporting arm pivoted to the upper end of the base plate, a link connecting the slide and arm, and a latch for the slide constituting a pivot pin journaled to the base plate and a lever secured to the pivot pin, the slide having a notch to normally receive the pivot pin and the pivot pin having a notch to permit the slide to gravitate when the lever is raised.

3. A harness hook embodying a base plate, a supporting arm pivoted thereto, an elongated slide mounted on the base plate, a link connecting the said slide and arm, and a latch coöperating with the said slide and adapted to swing downwardly for normally maintaining the slide in elevated position when the arm is raised, the slide maintaining the latch in raised position when the arm is lowered.

4. A harness hook embodying a base plate, a supporting arm pivoted thereto, a slide mounted on the base plate, a link connecting the said slide and arm, and a pivoted latch mounted on the base plate and embodying a lever adapted to swing downwardly, the latch coöperating with the slide when the lever is swung downwardly for normally supporting the slide in raised position.

5. A harness hook embodying a base plate, having outstanding housing at its lower end and a slot extending upward from the housing, an elongated slide fitting in the slot and through the upper end of the housing, a supporting arm pivoted to the upper end of the base plate, a link connecting the said slide and arm, and a latch pivoted through the housing and embodying a lever adapted to normally swing downwardly, the latch coöperating with the slide when the lever is swung downwardly to normally detain the slide in raised position.

6. A harness hook embodying a base plate having a lower outstanding housing and a slot extending upward from the housing, an elongated slide fitting in the slot and through the upper end of the housing, a supporting arm pivoted to the upper end of the base plate, a brace link connecting the said slide and arm, and a latch for the slide constituting a pivot pin journaled through the sides of the housing and a U-shaped lever straddling the housing with its ends secured to the ends of the pivot pin, the pivot pin and slide being constructed so as to support the slide when the lever is depressed.

7. A harness hook embodying a base plate having a lower outstanding housing and a slot extending upward from the housing, an elongated slide fitting in the slot and through the upper end of the housing, a supporting arm pivoted to the upper end of the base plate, a brace link connecting the said slide and arm, a latch for the slide constituting a pivot pin journaled through the sides of the housing, a U-shaped lever straddling the housing with its ends secured to the ends of the pivot pin, the slide having a notch to normally receive the pivot pin and the pivot pin having a notch to permit the slide to gravitate when the lever is raised.

8. A harness hook embodying a base plate having a rear longitudinal channel and an outstanding housing at its lower end, the base plate also having a slot extending upward from the housing, an elongated slide fitting in the said slot and through the upper end of the housing, the slide having a head fitting in the said channel, a supporting arm pivoted to the upper end of the base plate, a link connecting the said slide and arm, and a latch for the slide constituting a pivot pin journaled through the sides of the housing and a U-shaped lever straddling the housing with its ends secured to the ends of the pivot pin, the pivot pin being designed to engage the slide so as to support the arm when the lever is depressed.

9. A harness hook embodying an erect base plate having a rear longitudinal channel and an outstanding housing at its lower end, the base plate also having a slot extending upward from the housing and the rear edges of the housing having notches therein, an elongated slide fitting in the said slot and through the upper end of the housing, the slide having a head fitting in the channel and having a notch in its rear edge, a supporting arm pivoted to the upper end of the base plate, a link connecting the said slide and arm, and a latch for the slide constituting a pivot pin journaled through the

said notches of the housing and a U-shaped lever straddling the housing with its ends secured to the ends of the pivot pin, the pin being designed to fit into the notch of the slide so as to support the arm when the lever is depressed, and having a notch to permit the slide to gravitate when the lever is raised.

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

OLER P. VROOM.

Witnesses:
GEORGE W. ANDERSON,
T. S. STEPHENSON.

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