No. 676,527. Patented June 18, 1901.

G. W. BEGOLE & O. ANDERSON.

CHECKREIN HOOK.

(Application filed Oct. 1, 1900.)

(Model.)

Fig. 1.

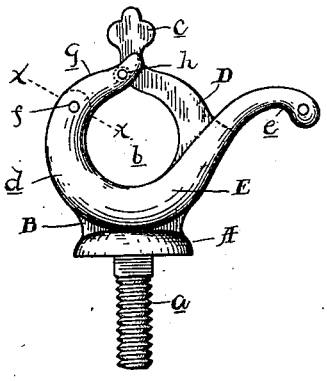


Fig. 6.

Fig. 2.

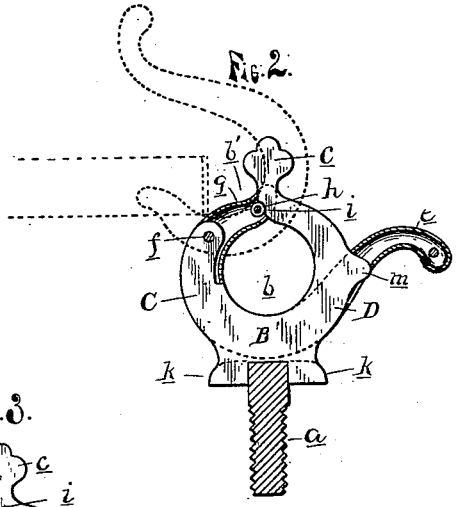


Fig. 7.

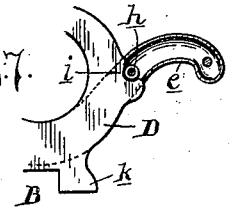


Fig. 3.

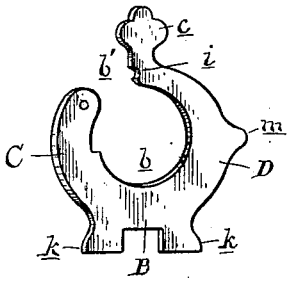


Fig. 5.

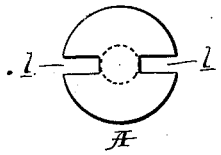
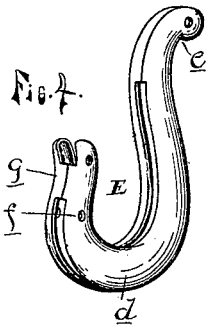


Fig. 4.



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UNITED STATES PATENT OFFICE.

GORDON W. BEGOLE AND OLIVER ANDERSON, OF YPSILANTI, MICHIGAN.

CHECKREIN-HOOK.

SPECIFICATION forming part of Letters Patent No. 676,527, dated June 18, 1901.

Application filed October 1, 1900. Serial No. 31,607. (Model.)

To all whom it may concern:

Be it known that we, GORDON W. BEGOLE and OLIVER ANDERSON, citizens of the United States of America, and residents of Ypsilanti, in the county of Washtenaw and State of Michigan, have invented certain new and useful Improvements in Checkrein-Hooks, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention refers to a device for holding the checkrein of a harness and prevent it from being accidentally disengaged; and the invention consists in the novel construction and arrangement of parts, all as more fully hereinafter described, and shown in the accompanying drawings, in which—

Figure 1 is an elevation with the hook closed. Fig. 2 is a like sectional elevation. Fig. 3 is a detached elevation of the hook-post. Fig. 4 is a detached perspective of the retaining-lever. Fig. 5 is a detached plan of the base-plate. Fig. 6 is a cross-section on line x x, Fig. 1. Fig. 7 is a modification specifically referred to hereinafter.

A is a base-plate provided with a threaded shank a, by means of which the device is secured to the harness-saddle in the usual manner.

B is a ring-shaped post formed of sheet metal, with a central circular aperture b and an opening b' leading into it and dividing the ring into two separate standards C and D, the latter being extended upwardly and terminating in a tongue c.

E is a retaining-lever formed with a hook-shaped portion d, corresponding to the post, and an extension or finger-piece e. This lever is pivotally secured at f to the top of the standard C and forms a short arm g and a long arm, which is slotted and adapted to fold upon the standard C and the lower portion of the post D. The arm g of this lever is slotted at its extreme end to embrace the tongue c, and in this slotted portion is secured by a suitable transverse pin a small antifriction-roller h, adapted to engage in a notch i of the tongue c, and thereby frictionally lock the retaining-lever in the closed position shown in Fig. 1.

The parts being constructed as shown and described, the operation of the device is intended to be as follows: When the retaining-lever is in position, (shown in Fig. 1,) it is firmly locked in position frictionally by the engagement of the roller h into the notch i, and a checkrein engaged into the eye formed by the post and lever together is securely held in position, and all strain is taken up by the hook or standard C. By pressing the finger-piece e upwardly the lever can be unlocked and turned as far up as shown in dotted lines in Fig. 2. In this position the arm g projects forwardly and upwardly, and if in this position a checkrein is engaged with it and the lever then pressed down and locked it will draw the checkrein right into the eye of the hook. Likewise at the reverse movement the lever itself carries the checkrein out of the eye of the post.

To form a good friction-lock and make the device in a simple manner which at the same time imparts a wearing quality to it, the post B is stamped out of sheet metal, which gives the standard D sufficient spring to lock the roller h firmly. This post, as shown in Fig. 3, is made at the base with two projections k, and the base-plate is provided with corresponding slots l, adapted to receive these projections, which are then fastened thereto by riveting together.

The lever E is formed in two halves stamped out of sheet metal, which when united together by suitable rivets form a substantially tubular cross-section of suitable strength and finished appearance, and with a slot formed between them to embrace the post and with the closed ends of the slots forming stops to prevent the lever from being moved any farther than required in the opening or closing movement. In connection therewith the post D is formed with a projection m, acting as a stop for the lever. It will be seen that the arm g of the lever and the tongue c of the post interlock with each other at right angles, or nearly so, thus locking the parts very firmly together. However, if desired, the roller h may be secured to the long arm of the lever and the notch formed on the standard D, as shown in the modification in Fig. 7.

The advantage of the roller-lock is that it reduces friction in locking and unlocking, and thus prevents the parts from wearing out. The slot in the free end of the short arm

guides the roller into the notch and prevents the standards from getting out of line with each other and, in connection with the slot in the body of the lever, which is made a good fit to create some friction between it and the post, tends to unite the parts in their closed position into a more solid ring.

What we claim as our invention is—

1. In a checkrein-hook, the combination with the base-plate provided with means for securing it to the harness-saddle, of a ring-shaped post on said base-plate having an opening in the front near the top leading into the eye of the post and separating the top of the post into a front standard or hook for holding the checkrein and a rear standard, the latter provided with an upward extension or tongue, a hook-shaped retaining-lever pivotally secured upon the top of the front standard and vertically slotted to receive the post and frictionally move upon the same, said lever having a short arm slotted at its free end adapted in the closed position of the lever to close the eye of the post and embrace the top of the rear standard and a long arm terminating in a finger-piece and adapted in the closed position of the lever to fold upon the lower portion of the post and a roller-lock comprising an antifriction-roller on the lever and a coöperating notch on the post.

2. In a checkrein-hook, the combination with the base-plate having means for securing it to the harness-saddle, of a ring-shaped post on said base-plate formed with an opening in front near the top leading into the eye of the post and dividing the ring-shaped portion of the post into separate front and rear standards, an upward extension or tongue on said rear standard, provided with a notch, a hook-shaped retaining-lever pivotally secured upon the front standard and vertically slotted to move upon said post and fold upon the same, said lever having a short arm adapted to close the eye of the post and provided at its free end with a slot to embrace the tongue of the rear standard and with an antifriction-roller to lock into the notch thereof and a long arm adapted to fold on the lower portion of the post and terminating in a rearwardly-extending finger-piece and a shoulder on the rear standard for said finger-piece to strike against in closing the lever.

3. In a checkrein-hook, the combination of the base-plate A, formed with the slots *l* and having the threaded shank *a*, the sheet-metal post B, formed with projections *k k* at its base securing said post into the slots *l* of the base-plate, the tongue *c* of the post having the notch *i*, the retaining-lever E pivotally secured upon the post, the roller *h* secured in a slot in the free end of said lever and operating as described, said retaining-lever being of tubular cross-section made in halves riveted together and forming a slot between them adapted to receive the post and hold the lever in frictional engagement therewith, the ends of the slots forming stops to limit the movement of the lever on the post.

In testimony whereof we affix our signatures in presence of two witnesses.

GORDON W. BEGOLE.
OLIVER ANDERSON.

Witnesses:
OTTO F. BARTHEL,
JOSEPH A. NOELKE.