O. B. READ.

CHECK HOOK AND LOOP.

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929,014.

Patented July 27, 1909.

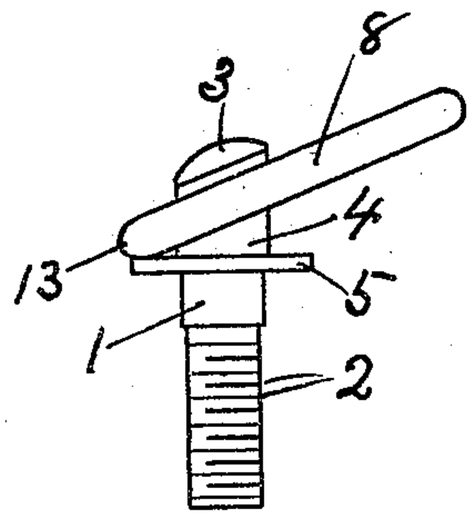

FIG 1

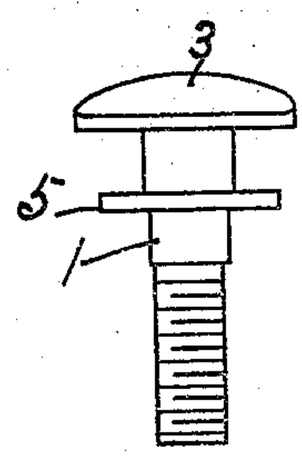

FIG 2

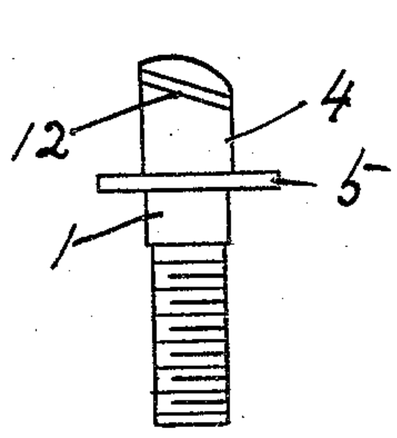

FIG 3

FIG 4

FIG 5

WITNESSES

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UNITED STATES PATENT OFFICE.

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CHECK-HOOK AND LOOP.

No. 929,014. Specification of Letters Patent. Patented July 27, 1909.

Application filed December 21, 1908. Serial No. 468,633.

To all whom it may concern:

Be it known that I, ORRIN B. READ, a citizen of the United States, residing at Troy, county of Rensselaer, and State of New York, have invented certain new and useful Improvements in Check-Hooks and Loops, of which the following is a specification.

The invention relates to such improvements and consists of the novel construction and combination of parts hereinafter described and subsequently claimed.

Reference may be had to the accompanying drawings, and the reference characters marked thereon, which form a part of this specification. Similar characters refer to similar parts in the several figures therein.

The object of the invention is to strengthen the parts without increasing their weight, and at the same time to give the parts an ornamental appearance.

The invention consists of a shank adapted to be secured in a harness-saddle, and provided at its upper end with a collar, post and head, and a loop-member having near one end an elongated longitudinal hook-or-head slot, and at the other end a rein-strap slot, the head or hook being so formed that its lower side presents a face inclined transversely of the head to correspond approximately with the inclination of the stress-line, when the loop-member is subjected to stress through the check-rein strap, as hereinafter more fully described and subsequently pointed out in the claims.

Figure 1 of the drawings is a view in side elevation of the improved check-rein holder, showing the shank, head and post supporting the loop-member in the inclined position assumed by such member when subjected to stress, by means of the check-rein strap. Fig. 2 is a view in front elevation of the shank, head and post with the loop-member detached. Fig. 3 is a view similar to that shown in Fig. 2, except that the shank has been given a quarter turn to show the side opposite that shown in Fig. 1. Fig. 4 is a plan-view of the loop-member, detached. Fig. 5 is an edge-view of the same.

Referring to the drawings, the shank 1 is shown with the screw-threads 2 at its lower end, by which it is adapted to be inserted in the harness-saddle, and at its upper end with the elongated head 3 and post 4. At the lower end of the post is located a collar, 5.

The loop-member, 8, is provided near one end with the elongated longitudinal hook-or-head slot, 9, and at the other end with the transverse rein-strap slot, 10. The loop-member is adapted to be placed on the post 4 in the usual well-known manner of securing similar loop-members to a post in a check-hook construction, the head being inserted, one end at a time, through the slot 9, while the member is held in a position such that the slot 9 extends parallel with the head, and after the head has been projected through the slot, the loop-member is given a quarter turn upon the head-supporting neck 4, which will prevent the loop-member from being disengaged from the post without turning the loop-member into parallelism with the head.

The novel feature of my check-hook consists in providing a head with a lower inclined face, 12, which is adapted to be engaged by the upper surface of the loop-member, when such member is subjected to stress while in use through the check-rein strap inserted in the slot 10.

It is well known that the check-rein in use is inclined forwardly and upwardly toward the horse's head, from the check-hook, and I have shown the loop-member occupying approximately such inclined position, in Fig. 1 of the drawings, which is the position assumed by the loop-member when subjected to stress, in use. The end 13 of the loop-member is elongated and tapered from the slot 9 to the end of the member, as shown in Figs. 4 and 5. Such an elongation of the end permits of a considerable wearing-away of the member from the slot 9 toward the end 13, without materially weakening the member. The stress or strain exerted by the loop-member upon the post, due to the pull upon the check-rein, limits the engaging surfaces between the post and loop-member to the surface at the outer end of slot 9 on the end of the loop-member, and the side of the post directly beneath the lowermost edge of the elongated head. It is obvious, therefore, that the nearer such engaging surface on the post is to the harness-saddle, the smaller and lighter such post can be made without danger of its breaking. If the lower surface of the head extended in a horizontal plane, that surface would necessarily have to be made as far away from the collar 5 as the upper portion of the inclined surface is located; otherwise the loop could not assume the inclined position shown. And if the end 13 was permitted to accidentally en-

gage the post at a higher point more remote from the collar, the breaking strain due to increased leverage upon the post would be much greater than would be the case with inclined-head construction. As a means for locating the engaging surface between the post and loop-member at the nearest possible point to the collar 5, the end 13 of the loop is tapered so that the beveled surface of the tapered end will occupy approximately a horizontal plane when in engagement with the collar, as shown in Fig. 1 of the drawings, thus permitting end 13 of the loop-member to engage a point on the neck nearer the collar than would be possible if the loop-member was not tapered. The taper is shown quite slight in the drawings, but it is obvious that the end may be tapered or beveled at any desired angle.

It is obvious that when there is no stress upon the loop-member to hold it in an inclined position, it will fall to a horizontal position resting upon the collar 5.

When the loop-member is changed from one position to the other, in use, it will be readily seen that the end 13 of such member has very little movement, so that the wear between such member and the post is reduced to a minimum.

What I claim as new and desire to secure by Letters Patent is—

1. In a check-rein holder, the combination with a loop-member having in one end an elongated longitudinal hook-slot, and in the other end a slot adapted to receive the lower end of an inclined rein-strap; of a shank adapted to be secured to a harness-saddle, and provided on its upper end with a post and elongated head adapted to be projected through the longitudinal slot of the loop-member and the loop-member turned on the post, the head having a face on its lower side inclined transversely of the head to correspond approximately with the inclination of the stress-line, when the loop-member is subjected to stress through the check-rein strap.

2. In a check-rein holder, the combination with a loop-member provided near one end with an elongated longitudinal hook-slot, and at the other end with a strap-slot, and having the end contiguous to the hook-slot elongated and tapered from the slot to its end; of a shank adapted to be secured to a harness-saddle, and provided on its upper end with a post and elongated head adapted to be projected through the longitudinal slot of the loop-member and the loop-member turned on the post, the head having a face on its lower side inclined transversely of the head to correspond approximately with the inclination of the stress-line, when the loop-member is subjected to stress through the check-rein strap; and a collar on the shank, below the head, adapted to support the loop-member when not subjected to stress through the check-rein strap.

In testimony whereof, I have hereunto set my hand this 19th day of December, 1908.

ORRIN B. READ.

Witnesses:
GEO A. MOSHER,
LILLIAN C. KENNEDY.