

(No Model.)

W. J. BITTER.

CHECK REIN SWIVEL FOR BRIDLES.

No. 318,443.

Patented May 26, 1885.

Fig. 1.

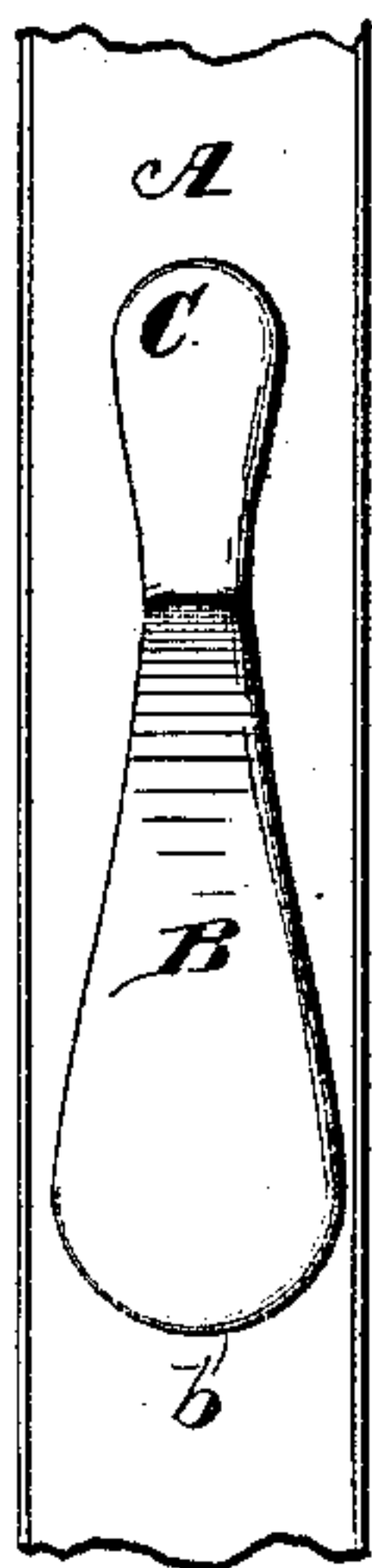


Fig. 2.

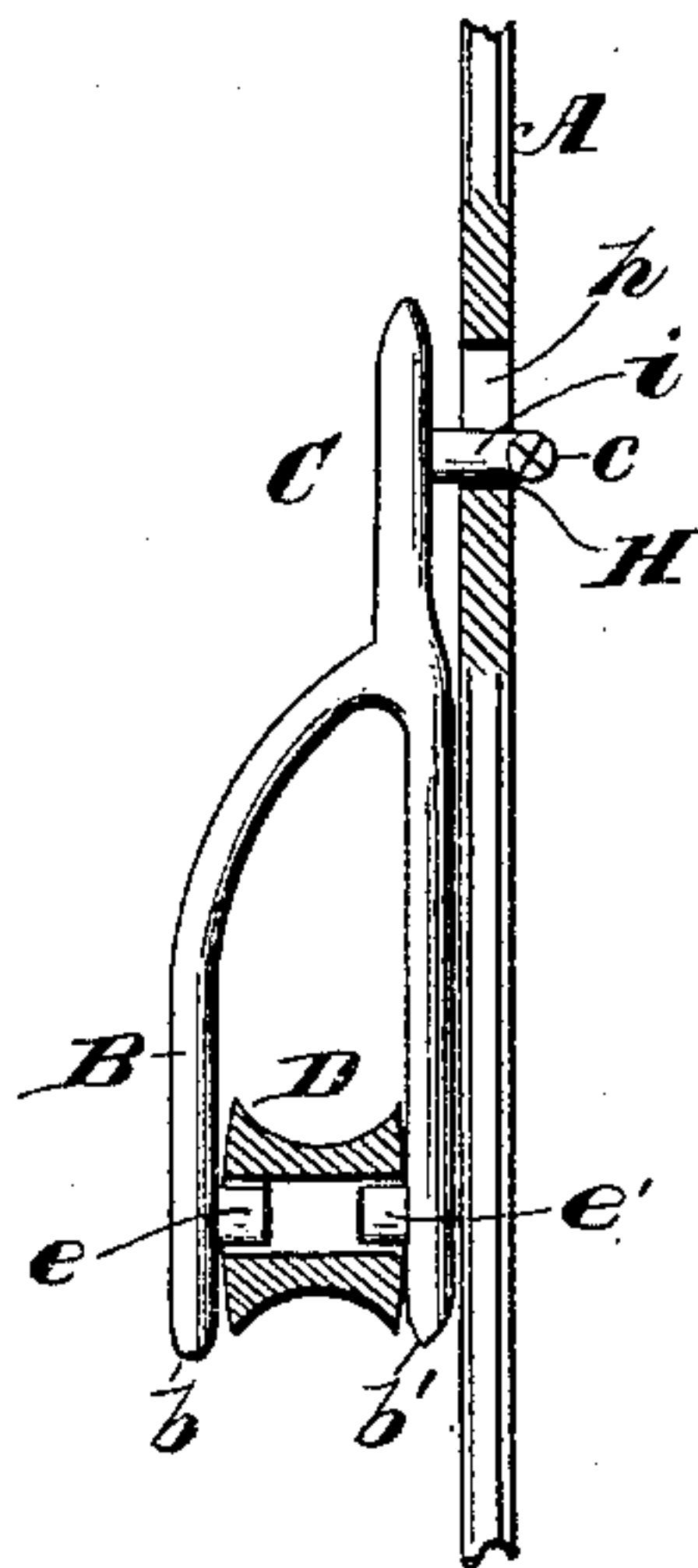


Fig. 3.

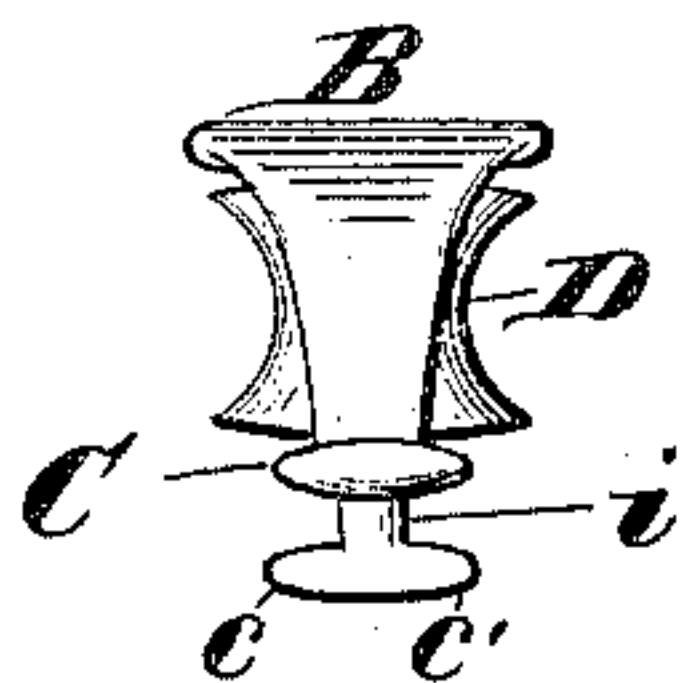


Fig. 4.

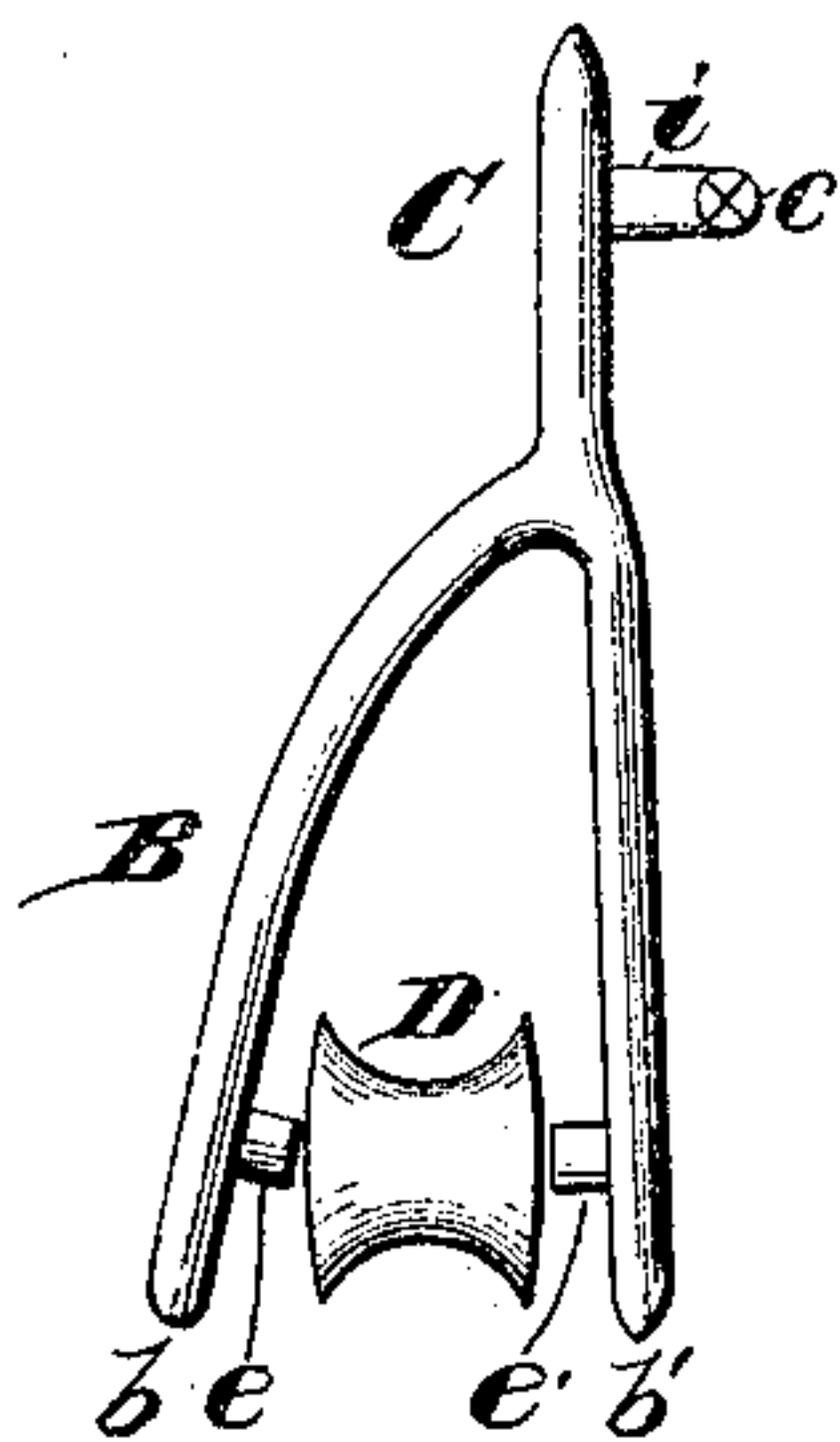
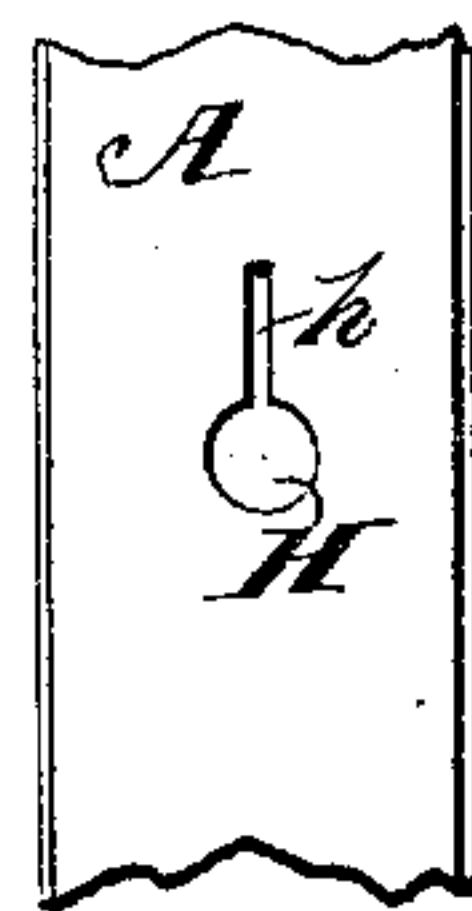


Fig. 5.



Witnesses.

Robert Everett.

J. A. Rutherford

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UNITED STATES PATENT OFFICE.

WILLIAM J. BITTER, OF TOLEDO, OHIO.

CHECK-REIN SWIVEL FOR BRIDLES.

SPECIFICATION forming part of Letters Patent No. 318,443, dated May 26, 1885.

Application filed July 30, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. BITTER, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented new and useful Improvements in Check-Rein Swivels for Harness-Bridles, of which the following is a specification.

My invention relates to check-rein swivels for harness-bridles; and it consists in the novel construction hereinafter described, and more particularly pointed out in the claim, due reference being had to the accompanying drawings, in which—

Figure 1 is a plan view of my device secured in position upon a portion of a bridle-strap. Fig. 2 is a side view showing the roller and a portion of the strap in cross-section. Fig. 3 is an end view, looking down from above, the strap not being shown. Fig. 4 is a side view of the device before the roller is secured in position; and Fig. 5 is a plan view of a portion of the strap, showing the means of attaching the device to the same.

Referring to the drawings, A designates a portion of the strap of a bridle to which the swivel is attached.

B designates the frame of the swivel, which consists of two arms, *b b'*, terminating in an arm, C.

e e' designate studs or journals, which are situated near the extremities of the arms *b b'*, and are cast integral therewith.

i designates a shank, which is provided at its outer end with a cross-bar, *c c'*, arranged at right angles to the length of the bar C, both the cross-bar *c c'* and the shank *i* being cast integral with the frame of the swivel.

D designates a roller bored centrally to receive the studs or journals *e e'*, upon which it is adapted to rotate.

In applying the roller to the frame the arms *b b'* are sprung or bent apart, as shown in Fig. 4,

and the rollers slipped between them. The arms are then bent toward each other to the position shown in Fig. 2, the studs or journals *e e'* entering the bore of the roller and securely holding it in position, but at the same time allowing it to rotate freely.

The strap to which the swivel is designed to be attached is perforated, as at H, and a radial slit, *h*, is cut from said perforation in the direction of the length of the strap.

To apply the swivel to the strap the frame is held at right angles to the length of the strap, and the cross-bar *c c'* forced or pushed through the slit and perforation, and the frame is then turned until it lies parallel with the strap.

It will be readily seen that the check-rein passing around the roller will yield to the various motions of the horse's head and relieves the check-rein of friction at this point, and the entire frame is free to swing upon the shank *i* to accommodate itself to the difference in the direction of the strain brought to bear upon the roller.

The entire device, with the exception of the roller D, is cast in one piece, making a strong and at the same time cheap swivel.

What I claim is—

The frame B, consisting of the arms *b b'*, provided with studs *e e'*, and terminating in an arm, C, and the shank *i*, having the cross-bar *c c'* arranged at a right angle to the arm C, all cast in one piece, in combination with the roller D, journaled between the arms *b b'*, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

WILLIAM J. BITTER.

Witnesses:

J. N. CLOUSE,
W. B. TUCKER.