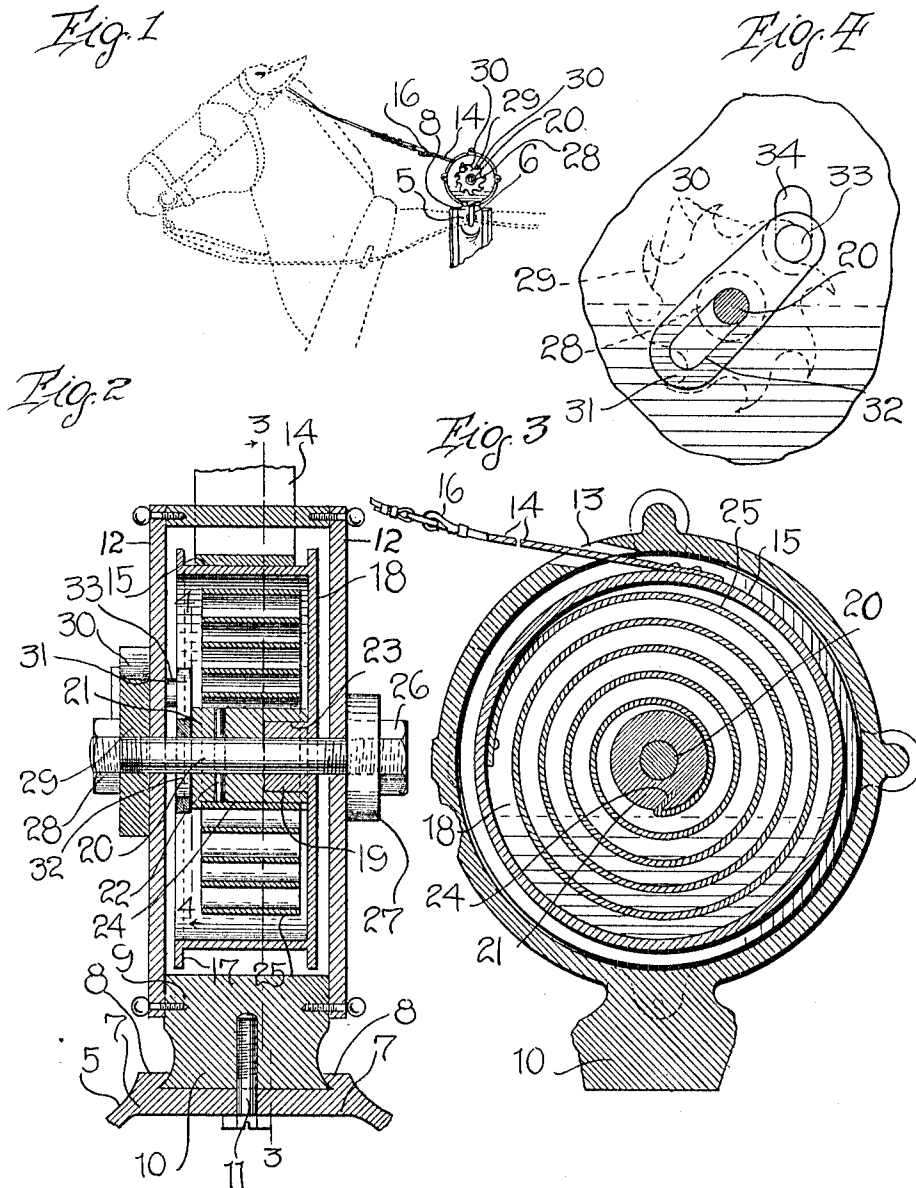


I. G. MITCHELL.
CHECKREIN HOLDER.
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Patented Aug. 4, 1914.



Inventor
IRA G. MITCHELL

Witnesses
Robert M. Sutphen.
A. S. Lind.

334 *Watson & Coleman*
Attorney

UNITED STATES PATENT OFFICE.

IRA G. MITCHELL, OF MEEKER, COLORADO, ASSIGNOR OF ONE-HALF TO REUBEN S. BALL, OF MEEKER, COLORADO.

CHECKREIN-HOLDER.

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To all whom it may concern:

Be it known that I, IRA G. MITCHELL, citizen of the United States, residing at Meeker, in the county of Rio Blanco and State of Colorado, have invented certain new and useful Improvements in Checkrein-Holders, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to an improved check rein holder and has for its primary object to provide simple and novel means for yieldingly exerting a backward pull upon the animal's head so as to hold the same upright but which will permit the animal to lower its head, thus obviating liability of the check rein being broken by a sudden jerk or pull thereon.

The invention has for a more specific object the provision of a rotatable drum mounted upon the back band of the harness, a spiral spring yieldingly holding said drum against rotation in one direction, and means for regulating the tension of said spring.

A still further object of the invention is to provide a device for the above purpose having certain improved structural features which render the same reliable and efficient in practical operation, while at the same time the invention consists of a comparatively small number of parts and may be produced at nominal manufacturing cost.

With the above and other objects in view as will become apparent as the description proceeds, the invention consists in certain constructions, combinations and arrangements of the parts that I shall hereinafter fully describe and claim.

For a full understanding of the invention, reference is to be had to the following description and accompanying drawing, in which—

Figure 1 is a side elevation showing the present invention applied to the back band of a harness; Fig. 2 is a section taken on the line 2—2 of Fig. 1; Fig. 3 is a section taken on the line 3—3 of Fig. 2; Fig. 4 is an enlarged detail section taken on the line 4—4 of Fig. 2.

Referring in detail to the drawing, 5 designates a metal base or saddle plate which is adapted to be secured upon the leather back band of the harness. Upon this plate the guide rings 6 for the reins are mounted in any ordinary or approved manner. The sad-

dle plate 5 at its central portion is formed with an extension 7 upon the opposite edges of which the flanges 8 are provided. Between these flanges the base 10 of a drum casing is adapted to be seated, said casing being securely held in position upon the plate 5 by a screw or bolt 11.

9 indicates the annular body wall of the casing with which the base 10 is integrally formed and 12 designates the face plates which are secured upon the opposite edges of said annular wall. The wall 9 is provided at a suitable point with an opening 13 through which the strap 14 extends. One end of this strap is riveted or otherwise secured to the body wall of the drum 15 while the other end thereof is provided with a snap hook indicated at 16 to which the usual check rein extending from the bridle is adapted to be connected. The drum 15 is open upon one side, and at said open side of the drum the annular wall thereof is provided with an outwardly projecting flange 17, having a diameter equal to that of the opposite end wall 18 of the drum. This wall 18 is provided with a central opening and an inwardly projecting boss or cylindrical extension 19 is formed upon said plate around the opening therein.

Each of the face plates 12 is provided with a central opening to receive the opposite ends of a bolt or shaft 20, said shaft extending through the boss 19 of the drum, as clearly shown in Fig. 2. A sleeve 21 is arranged upon said shaft and secured in position by means of a pin 22 which is adapted to be disposed through an opening in the sleeve and a coinciding opening in the shaft. One end of this sleeve is provided with an annular recess 23 surrounding the bore thereof, and said recess is designed to receive the projecting boss 19 upon the wall 18 of the drum. A slot or kerf indicated at 24 is cut in the periphery of the sleeve 21 and is adapted to receive one end of the spiral clock spring 25, the other end of which is securely fixed to the inner face of the drum 15 as shown.

The opposite ends of the shaft 20 are provided with right and left hand screw threads respectively and upon one end of this shaft, a nut 26 is adapted to be engaged, to tightly secure a washer plate 29 against the face plate 12. A similar nut 28 is adapted to be threaded upon the opposite ends of said

shaft for engagement with the ratchet disk 29 which is keyed upon the shaft in the conventional manner as shown. The periphery of this disk is provided with a plurality of spaced notches forming a series of cam surfaces 30, the purpose of which will be fully pointed out in the following description.

Between one end of the sleeve 21 and the opposed face plate 12 of the drum casing, an arm or plate 31 is arranged upon the shaft 20, said arm being provided with an elongated slot 32 to receive said shaft whereby the arm may be moved radially with respect to the shaft. This slot is formed in one end of the arm and a pin 33 is fixed to the other end thereof. This pin projects through a short slot 34 formed in the face plate 12 and is adapted to engage in any one of the notches in the periphery of the disk 29.

From the above description, it will be seen that by grasping the disk 29 with the fingers or a suitable tool, the drum 15 may be rotated and the spring 25 placed under tension by tightening up the check rein and connecting the same to the strap 14. As the shaft is rotated, the cam surfaces 30 on the disk 29 successively engage with the pin 33 and force the arm 31 radially with respect to the shaft. After the spring has been wound up, the same is held against unwinding by the pin 33 seating in one of the notches of the disk 29. After the check rein has been attached to the snap hook 16, the device is in condition for use. It will be apparent that the animal may move his head downwardly, but in such movement the spring 25 is placed under further tension and will act to pull backwardly upon the check rein and thus elevate the animal's head. In this manner, the animal is permitted a certain freedom of movement of his head, while at the same time the head will be drawn up and backwardly as soon as the pull upon the check rein is relieved.

From the foregoing, it is believed that the construction and manner of operation of my invention will be clearly and fully understood.

As will be readily understood, the tension

of the spring 25 may be regulated by simply tightening or loosening the check rein.

The invention may be easily and quickly applied to the harness, and as the same consists of comparatively few elements, which are all of simple form, it will be obvious that the device can be produced at small manufacturing cost.

The invention is also highly reliable as well as durable and serviceable in practical use.

While I have shown and described the preferred construction and arrangement of the several elements employed, it is to be understood that my invention is susceptible of considerable modification therein and I therefore reserve the right to resort to all such legitimate changes as may be fairly embodied within the spirit and scope of the invention as claimed.

Having thus described the invention, what is claimed is:

A check rein holder comprising a casing, a shaft rotatably mounted in the opposed walls of said casing, a drum loosely mounted upon said shaft, connecting means for the check rein attached to the periphery of said drum, a sleeve fixed upon said shaft, a spiral spring secured at its ends to the drum and sleeve respectively, a ratchet on one end of said shaft exteriorly of the casing, a radially movable arm arranged within the casing and provided with a longitudinal slot to receive said shaft, a pin fixed to one end of said arm, the casing wall being provided with a slot through which said pin extends, said pin engaging the teeth of said ratchet to hold said spring under tension and prevent rotation of the shaft when said drum is rotated in one direction, whereby said spring is placed under additional tension to reverse the rotation of the drum.

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

IRA G. MITCHELL.

Witnesses:

A. L. STREHLKE,

CHARLES H. CROCKETT.