H. H. BOTTOM.

CHECKING DEVICE.

APPLICATION FILED APR. 13, 1912.

1,048,130.

Patented Dec. 24, 1912.

2 SHEETS—SHEET 1.

Fig. 1.

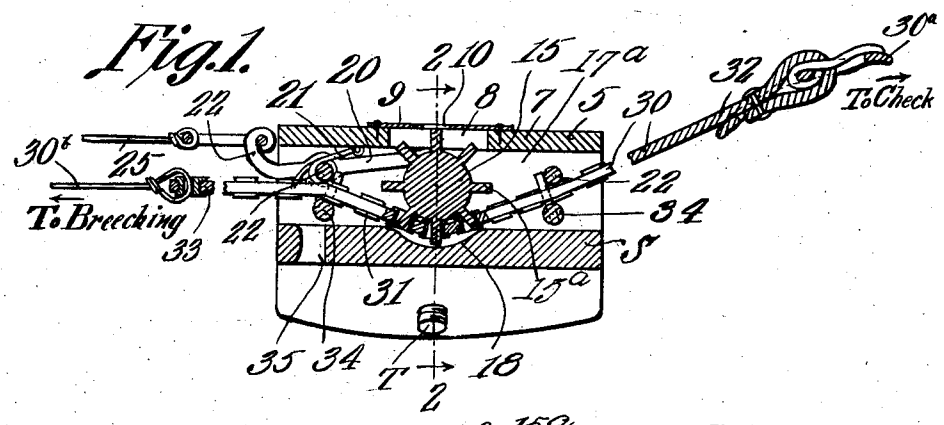


Fig. 2.

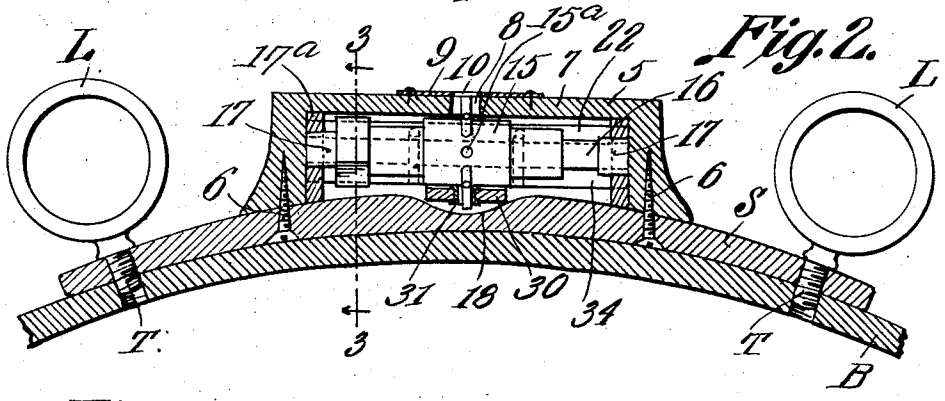
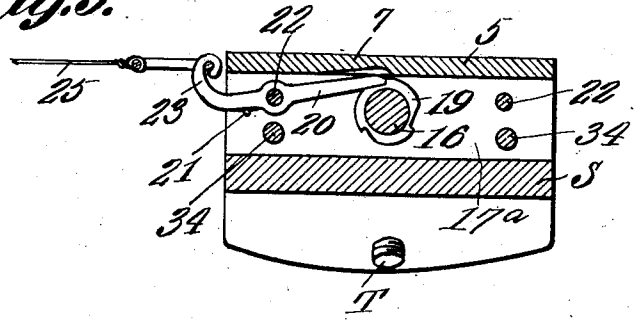


Fig. 3.



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2 SHEETS—SHEET 2.

Fig. 4.

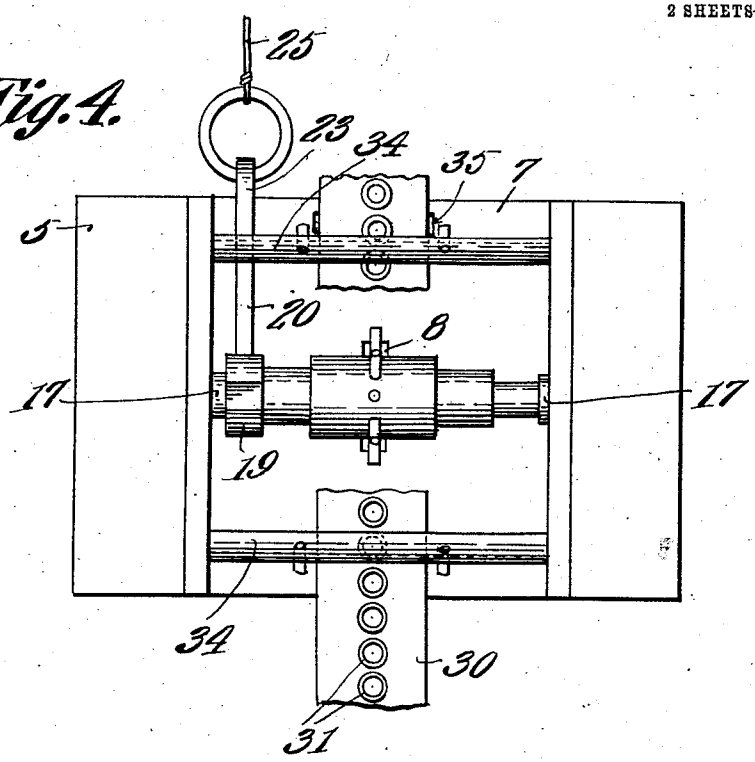
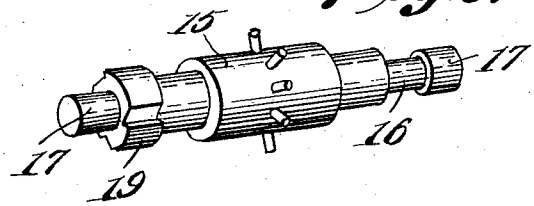


Fig. 5.



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UNITED STATES PATENT OFFICE.

HARTWELL H. BOTTOM, OF KNIFLEY, KENTUCKY, ASSIGNOR OF ONE-THIRD TO LEE R. CHELF AND ONE-THIRD TO CHARLES E. WALKER, BOTH OF WATSON, KENTUCKY.

CHECKING DEVICE.

1,048,130. Specification of Letters Patent. Patented Dec. 24, 1912.

Application filed April 13, 1912. Serial No. 690,495.

To all whom it may concern.

Be it known that I, HARTWELL H. BOTTOM, a citizen of the United States, residing at Knifley, in the county of Adair and State of Kentucky, have invented a new and useful Checking Device, of which the following is a specification.

This invention relates to harness, and more especially to checking devices; and the object of the same is to produce a neat and serviceable device of this character by means of which the check rein can be tightened or loosened by the driver without leaving his seat. This object is accomplished by the construction described below and shown in the drawings wherein—

Figure 1 is a central longitudinal section of the device. Fig. 2 is a transverse section on the line 2—2 of Fig. 1. Fig. 3 is a longitudinal section on the line 3—3 of Fig. 2. Fig. 4 is a plan, the top of the casing being removed. Fig. 5 is a detail perspective of the spur wheel and attendant mechanism.

In the drawings the letter B designates the back band of a harness, and S designates the wooden saddle which is mounted on the back band in the usual way, the threaded shanks T of the terrets L passing through the saddle and into the band. Superimposed upon the saddle S is a casing 5 held by screws 6. The top 7 of the casing 5 is provided with an opening 8 across which extends a closure plate 9 provided with an opening 10.

The spur wheel is indicated by the reference numeral 15 and is located at the center of a shaft 16 extremities 17 of which are mounted in bearings 17^a in the ends of the casing 5 so that the spurs 15^a on the wheel 15 may rotate in the opening 7 below the closure plate and above a recess 18 formed in the saddle S as seen in Figs. 1 and 2. The opening 10 in the plate 9 permits foreign matter to be removed from the spurs 15^a of the spur wheel 15 and permits an inspection of the spur wheel. The spur wheel shaft 16 carries a ratchet wheel 19 engaged by the tip of a pawl 20 which is pressed toward the ratchet wheel by a spring 21 coiled on a shaft 22 on which the pawl is pivoted. The numeral 23 indicates an L-shaped finger forming a part of the pawl. To the finger 23 is attached a cord 25 leading within easy reach of the driver.

The numeral 30 designates a strap having a series of holes, preferably surrounded by eyelets 31, the forward end 32 of the strap 30 being connected with a strap 30^a which leads to the checkrein. The rear end 33 of the strap 30 is connected with a strap 30^b which leads to the breeching. The strap 30 passes between guide rods 34 located adjacent the ends of the casing 5 and extended across the interior of the casing 5 as seen in Fig. 1. Between the guides 34 the strap 30 is passed beneath the spur wheel 15 and along the recess 18 in the bottom of the saddle 5 so that the spurs 15^a may engage the eyelets 31 and not become disengaged from the spurs until any one eyelet-engaged spur has passed beyond the recess. The saddle 5 is provided with a slot 35 in rear of the rearmost pair of guides 34, and the back strap of the breeching (not shown) may be passed through the slot 35 to aid in holding the saddle S in place.

The strap 30 is passed through the device in the manner best seen in Fig. 1, and the extremities of the strap 30 are connected with the breeching and with the checkrein as hereinbefore described. If at any time it is desired to increase the check-rein tension or the curb pressure upon the bit, the driver has but to reach forward to the breeching and draw upon the strap 30^b which is connected with the rear end of the main strap 30. This operation causes the strap 30 to pass through the guides 34 and to actuate the spur wheel 15, the spur wheel being thus rotated and the pawl 20 clicking over the teeth of the ratchet wheel 19. The forward end of the strap 30 through its connection 30^a with the checkrein meanwhile draws upon the check-rein and raises the horse's head.

When it is desired to release the check rein, the driver pulls on the cord 25 so that the tip of the pawl 20 is disengaged from the ratchet wheel 19, and the horse is then at liberty to lower its head so soon as the tension on the check-rein is relaxed. The head of the animal may be raised by drawing upon the strap 30^b. When the member 25 is released the spring 21 will force the pawl 20 into engagement with the ratchet 19 and maintain the strap 30 and the checkrein taut.

Obviously this device may be used to curb

a fractious horse or to check one which is about to run away, it being merely necessary for the driver to reach forward upon the breeching, grasp the strap 30^b, and give a sudden pull thereon; this operation throws the horse's head upwardly and backwardly, and retards the speed of the animal since it cannot lower its head to the normal position until the member 25 is drawn upon to release the pawl 20 from the ratchet wheel 19.

Changes in details may be made within the scope of what is claimed, without departing from the spirit of the invention. The use of the perforated, removable closure plate 9 above the opening 10 in the top of the casing 5 over the spur wheel 15 is of advantage since dust and dirt which accumulates within the interior of the device can be picked out through the opening 10 in the closure plate 9, or if desired the plate may be removed bodily. Access to the spur wheel 15 is had in either instance without removing the casing from the saddle S.

It is to be observed that the shaft 22 constitutes one member of the pair of guides which is located at the rear of the device. Thus the shaft 22 exercises a double function in that it constitutes at once a guide and a means for pivotally supporting the pawl 20, it is to be observed that when the saddle S is secured to the case 5, the saddle constitutes a means for holding the bearings 17^a in place within the casing.

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

1. A device for controlling a check-rein, comprising a saddle having a recess in its upper face; a casing secured to the saddle and provided with an opening alined with the recess; a closure member applied to the casing and extended across the opening in the casing, the closure member being provided with an opening; a spur wheel journaled in the casing and having spurs adapted to move in the recess and to move in the opening in the casing, the spurs being rotated below the opening in the closure; pawl and ratchet mechanism for holding the spur wheel against rotation in one direction; and manually operable means for releasing the pawl and ratchet mechanism.

2. A device for controlling a check-rein, comprising a casing; a shaft journaled for rotation in the casing and provided with a spur wheel; a flexible element engaged by the spur wheel; a ratchet wheel carried by the shaft; spaced guides between which the flexible element passes; and a spring pressed pawl journaled upon one guide and adapted to engage the ratchet.

3. In a device for controlling a check-rein, a casing open at the bottom; bearings mounted in the casing; a saddle secured to the bottom of the casing and constituting a means for maintaining the bearings in the casing, the saddle being provided with a recess in its upper face, there being an opening in the casing alined with the recess; a shaft journaled in the bearings and provided with a spur wheel moving in the recess and in the opening; pawl and ratchet mechanism for controlling the shaft; and manually operable means for releasing the pawl and ratchet mechanism.

4. In a device for controlling a check-rein, a casing open at the bottom; bearings located within the casing; a saddle applied to the casing and constituting a means for maintaining the bearings in the casing, there being a recess in the upper face of the saddle and an opening in the casing alined with the recess; a shaft journaled for rotation in the bearing; a spur wheel upon the shaft adapted to move in the recess and in the opening; a ratchet wheel upon the shaft; a flexible element adapted to engage with the ratchet wheel; guides between which the flexible element passes; a pawl pivotally carried by one guide and adapted to engage the ratchet wheel, the pawl being provided at one end with an upturned finger.

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

HARTWELL H. BOTTOM.

Witnesses:
L. O. TAYLOR,
L. T. NEAT.