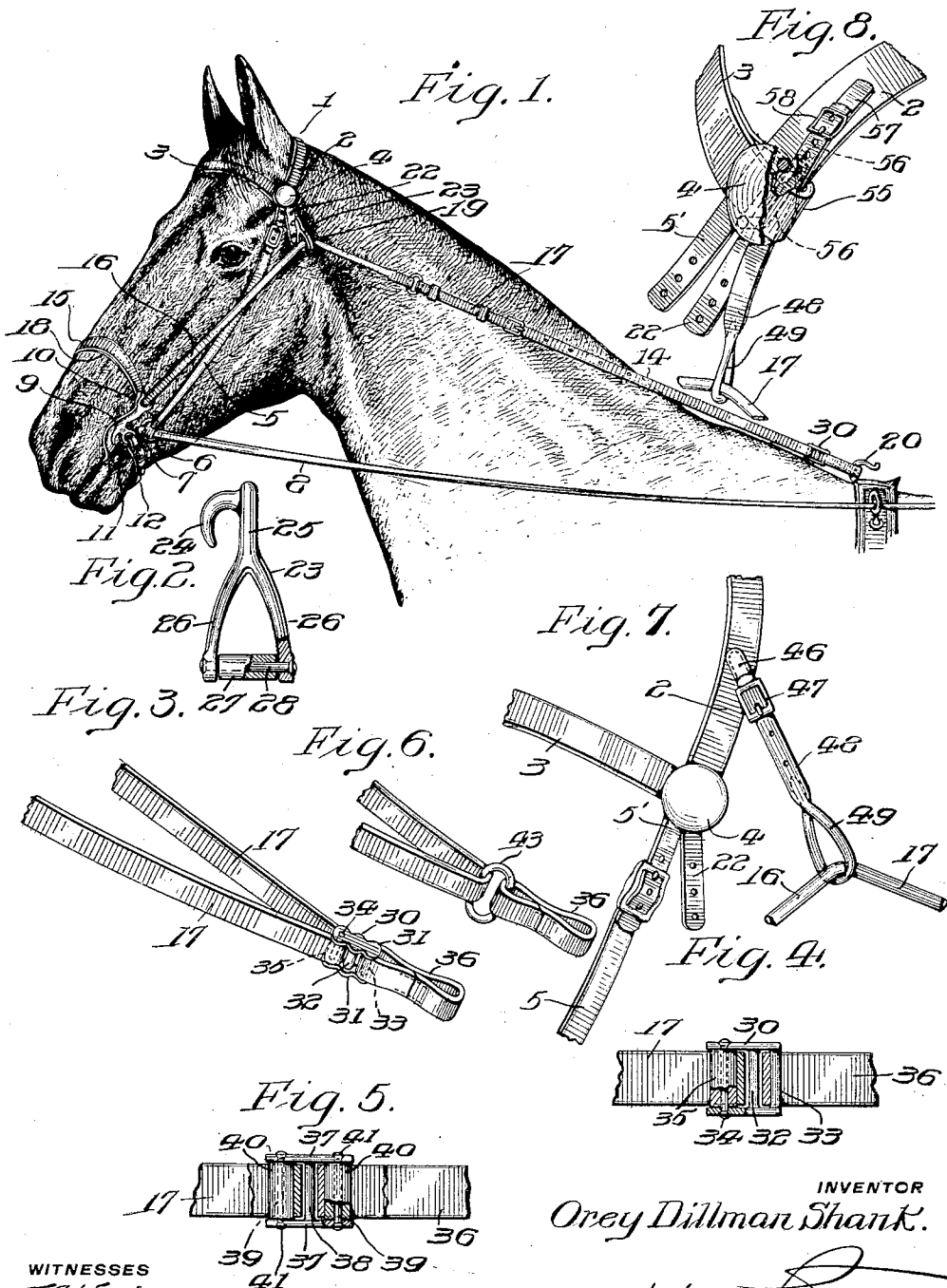


O. D. SHANK.
SIDE REIN CHECKING DEVICE.
APPLICATION FILED FEB. 9, 1911.

1,030,022.

Patented June 18, 1912.



WITNESSES
W. G. Hartman.
J. Stuart Freeman.

BY

INVENTOR
Orey Dillman Shank.

1 June 1912.
ATTORNEY

UNITED STATES PATENT OFFICE.

OREY DILLMAN SHANK, OF PHILADELPHIA, PENNSYLVANIA.

SIDE-REIN CHECKING DEVICE.

1,030,022.

Specification of Letters Patent.

Patented June 18, 1912.

Application filed February 9, 1911. Serial No. 607,642.

To all whom it may concern:

Be it known that I, OREY DILLMAN SHANK, a citizen of the United States, residing in Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented certain new and useful Improvements in Side-Rein Checking Devices, of which the following is a full, clear, and complete disclosure.

10 The present invention relates to harness, and particularly to that part which comprises side-rein checking devices.

One of the objects of the invention is to provide a check-rein that eliminates the
15 objectionable face-straps commonly deemed necessary.

Another object of the invention is to so arrange the side-line as to swing with the turning of the horse's head on a fulcrum
20 substantially in alinement with the axis of oscillation thereof, to eliminate the varying tension of the bit commonly felt on a horse's mouth by the raising and lowering of the head.

25 A further object of this invention is to provide a simple means for adjusting the position of the above mentioned fulcrum to conform to the various sizes of horses' heads to which it might be desirable to fit the device.
30 vice.

With these and certain other objects in view, the present invention consists in the details of construction and manner of operation respectively described and explained
35 in the following exposition of the accompanying drawings in which like numerals refer to corresponding parts.

In the drawings, Figure 1 is a side view of a horse's head equipped with the improved side-rein checking device in its preferred form; Fig. 2 is an enlarged view of the hooked support used in the means of adjustment shown in Fig. 1; Fig. 3 is a perspective view of the link connection between the check-rein and the harness of the
45 back; Fig. 4 is a longitudinal sectional view of the metallic link shown in Fig. 3; Fig. 5 is a second longitudinal sectional view but of a modified form of the link shown in
50 Fig. 3; Fig. 6 is a second modified form of said link connection; Fig. 7 is a perspective view of a modified form of an adjustment for use with light harness; and Fig. 8, is a modification of the device as shown in
55 Fig. 7.

Referring to Figs. 1, 2, 3 and 4, the

bridle 1 is represented as comprising a crown-piece 2 and a brow-band 3, secured together at the horse's temple beneath a rosette 4, while a cheek-strap 5, secured to the billet 5', terminates in a loop in the ring 6 of the bridle bit 7, from which also extend rearwardly the "lines", or driving
60 reins 8.

The checking device consists in a symmetrical bit 9 of any suitable type, with
65 respective rearwardly and downwardly extending apertured ears 10 and 11. Passing from the depending ear 11 adjacent one end portion of the bit to the corresponding ear
70 adjacent the other end portion is a chin-strap 12, adjustable in length, and adapted to pass around and beneath the lower portion of the under jaw. However, it is to be understood that, since one of the advantages
75 of the device lies in the omission of the chin-strap in some instances, it is not to be considered as being a necessary part of the invention.

The check or side-rein 14, substantially as
80 shown in Fig. 1, consists of three main portions, namely, the nose-strap 15, cheek portion 16 and neck portion 17. Beginning with the nose-strap 15, to which is secured padding 18 on the under side thereof and
85 in any suitable manner, the check-rein passes slidably through the rearwardly extending ears 10 of the bit 9, and along the cheek to a point 19, in alinement with the axis upon
90 which the head naturally tends to swing vertically and thence into the neck portion 17, which is itself readily adjustable in length. From this arrangement it is readily
95 seen that with a given adjustment of this strap 17, the nose-strap 15 will be automatically adjusted to fit the nose of the horse equipped therewith, since it readily
100 slides through the ears 10 of the bit 9. And furthermore, after the nose-strap has become tightened while driving, it will loosen of itself when the horse comes to a slower pace or a standing position. At the
105 rearmost part of the check-rein the neck-straps from both sides of the head converge and are secured to the harness saddle hook 20 in a manner which will be described later.

The preferred method employed by applicant to adjust the checking device to the heads of various horses consists in a perforated billet 22, which depends from the
110 rosette 4 and with the billet 5' forms the lower terminus of the crown-piece 2, and a

hooked member 23 of any suitable material, and substantially like the one shown in Fig. 2, through which the check-rein passes, and which is normally in hooked engagement with the billet 22 through one of the perforations therein. The hooked member 23 preferably comprises a Y metal casting with a longitudinally directed hook 24, integral with the end portion of the shank 25, and divergent arms 26, forming a yoke between which is mounted a roller 27 on an axial pin 28, which extends through and between the end portions of the arms 26 and is secured thereto. It is through the yoke and against the roller that the said rein passes in being carried from the bit to the harness saddle hook, and by securing the hook 24 of the hooked member 23 in a given perforation in the billet 22, the cheek portion 16 of the rein swings about the roller 27 as the horse's head is turned, raised or lowered, and consequently remains of substantially the same length, the given perforation being slightly above the point 19 in alinement with the axis upon which the head oscillates as above referred to.

At the rearmost portion of the checking device, the converging side-straps 17 pass through a link 30, which is preferably cast, and as shown in Fig. 1, constitutes substantially parallel side plates 31, between which extend two spacing bars 32 and 33, and an axial pin 34 on which is revolvably mounted a roller 35 around which part said straps pass. Extending around the bar 33 is a double looped strap 36, forming a link, which in turn connects the first-named link 30 with the harness saddle hook 20.

A modified form of the link 30 is shown in Fig. 5, and is designed to still further decrease the resistance and accompanying wear when using the link 30, by embodying a plurality of anti-frictional rollers. In the modification an H-shaped casting is employed, which comprises parallel side plates 37, and which in turn are connected integrally by the centrally situated bar 38. Adjacent the end portions and extending between the plates 37 are axle pins 39, around which loosely revolve rollers 40. The pins 39 are upset or riveted on their ends 41 to secure them to the plates 37, and around the respective rollers 40 pass the side-straps 17 and the link 36. A still further modification of the link 30 is shown in Fig. 6, in which simply the ring 43, either round or elongated, connects the straps 17 and the flexible link 36.

For light harness the adjusting means shown in Fig. 7 is designed. In this instance, a short tongue 46 of leather or other suitable material is secured in any desired manner at an angle to the crown-piece 2, and has secured thereon a buckle 47. Passing through, and in adjustable engagement

with the buckle is a short perforated billet 48, terminating downwardly in loop 49, through which the side-straps 17 pass in lieu of the hooked member 23 in the preferred form. The arrangement of the adjusting means shown in Fig. 7, however, may be altered as shown in Fig. 8. In this case the crown-piece 2 is bifurcated as before to form the depending billets 5', and 22, and the end portion of the brow-band 3 forms a loop 55 which encircles said crown-piece adjacent the upper end of the bifurcated portion. The rosette 4 is shown as having a bail 56 extending rearwardly therefrom, over one side of the loop 55, through an enlarged portion of the slit between the billets 5' and 22, over and around the opposite side of the loop 55, outwardly between said billets and under the outer side of said loop to said rosette. Secured to the crown-piece 2 is a tongue 57, similar to the tongue 46 in Fig. 7, and on the free end of said tongue is a buckle 58 to which is adjustably secured the billet 48, passing downwardly therefrom to one side of the bail 56 and through the loop 55 in the brow-band 3 and having the loop 49 through which the side strap 17 passes. Thus, while the bail 56 holds the ornamental rosette in place, it also serves to firmly secure the crown-piece 2, brow-band 3 and billet 48 together.

From the above description, it is apparent that applicant's invention constitutes a checking device which affords automatic adjustment of the nose-band, and at the same time a pair of cheek-straps which take the place of the objectionable face-straps, and which, when the supporting means below the ears are adjusted, swing in a vertical plane with the horse's head, without either lengthening or shortening on being moved above or below the normal position thereof. And furthermore, it is seen that the arrangement of cheek-straps does not cause an increase in downward pressure on top of the head when the head is lowered, nor is the bridle pulled forward against the horse's ears or the bit forward in the mouth, as when a face-strap is used.

From the foregoing, it is not to be considered that applicant desires to limit the present invention to the precise details of construction and arrangement herein set forth, as it is obvious that various modifications may be made therein without departing from the essential features of the invention as specified in the appended claims.

Having thus described the invention, its operation and advantages over all known devices designed for a like purpose, what it is desired to protect by Letters Patent of the United States is:

1. In a harness, the combination with a bridle, of a checking-bit, a chin strap having its ends attached to said bit, a nose-band

having its extremities passing freely through the opposite sides of said bit to form checking-reins arranged to extend upwardly and rearwardly on the sides of the head of a horse, and runners attached to the opposite sides of said bridle through which said reins pass and freely slide, said runners being located in substantial alinement with the axis upon which the head of the horse turns vertically, the ends of said reins being attached together, to form a continuous strap passing slidably through said bit and runners.

2. In a harness, the combination with a bridle, of a checking-bit, a chin strap having its ends attached to said bit, a nose-band having its extremities passing freely through the opposite sides of said bit to form checking-reins arranged to extend upwardly and rearwardly on the sides of the head of a horse, runners attached to the opposite sides of said bridle through which said reins pass and freely slide, said runners being located in substantial alinement with the axis upon which the head of the horse turns vertically, and the ends of said reins being attached together to form a continuous strap passing slidably through said bit and runners, and means for attaching said checking-reins to a saddle, through which means said reins also freely slide.

3. In a harness, the combination of a

checking-bit, a nose-band having its extremities passing freely through the opposite sides of said bit to form checking-reins arranged to extend upwardly and rearwardly on the sides of a horse's head, and runners through which said reins pass and freely slide, the ends of said reins being attached together to form a continuous strap freely slidable through said bit and runners.

4. In a bridle, the combination of a checking bit, a chin strap, having its ends connected to said bit, a nose-band in slidable contact with the ends of said bit and adjustable side reins operative through pivotally supported runners and attached to said nose-band through said bit.

5. In a bridle, the combination of a checking bit, a chin strap, having its ends connected to said bit, a flexible nose-band in slidable contact with the ends of said bit and adjustable side reins slidable through pivotally supported runners operative to control the tension of said nose-band.

In witness whereof, I have hereunto set my hand this 28th day of January, A. D. 1911.

OREY DILLMAN SHANK.

Witnesses:

ALEXANDER PARK,
JOHN A. LYNCH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."