E. BELCHER.

TENSION DEVICE.

APPLICATION FILED SEPT. 20, 1907.

913,680. Patented Mar. 2, 1909.

Fig. 1.

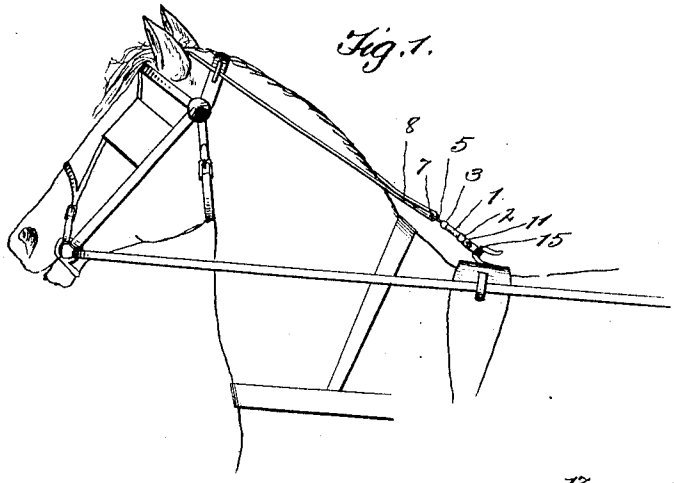


Fig. 2.

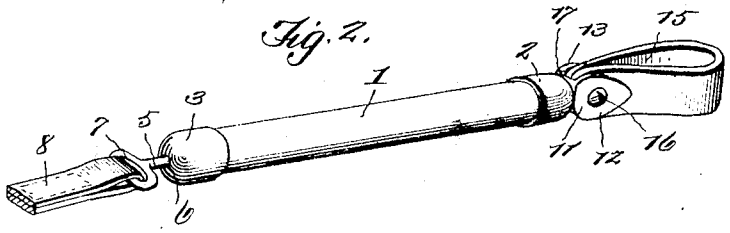


Fig. 3.

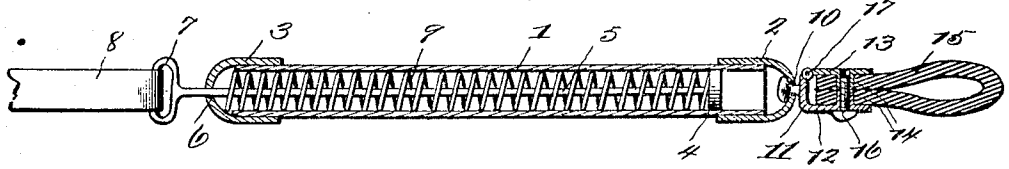
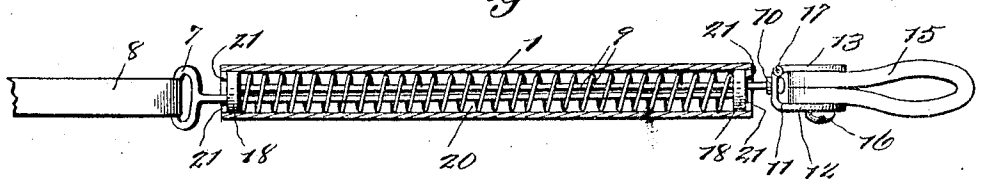


Fig. 4.



Witnesses

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TENSION DEVICE.

No. 913,680. Specification of Letters Patent. Patented March 2, 1909.

Application filed September 20, 1907. Serial No. 393,856.

To all whom it may concern:

Be it known that I, EUGENE BELCHER, a citizen of the United States, residing at Olyphant, in the county of Lackawanna and State of Pennsylvania, have invented a new and useful Tension Device; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention pertains to a new and useful tension device, adapted for use in connection with check reins of harness, whereby a resilient yielding or spring action is provided to counteract the effect of sudden jerks of the horse's head, and the invention in its widest latitude has for an object to provide a device of this type, by the use of which the breaking of the overcheck rein, or the lacerating of the horse's mouth, in case the horse should stumble, is obviated.

The invention aims as a further object to provided a device as hereinafter described, comprising an open ended shell, a piston and rod mounted therein and a spring coiled about said rod and adapted to coact between the said piston, and a permanent closure for the shell. There being two closures for the open ends of the said shell, and which are permanently fixed thereto. The said rod operates through an aperture in one of the closures, while the other closure is provided with a swiveled element, to which is fastened a leather loop adapted to be fastened to the saddle of a harness. This swiveled element is constructed in such wise as to allow the said loop to be removed when the same has become worn or broken, for the placement of a new loop.

In Figure 4 of the drawings, the device is shown as having a pair of pistons and rods, coacting against the tension of the spring disposed between the pistons.

This invention comprises further objects and combinations of elements which will be hereinafter more fully described, shown in the accompanying drawings, and the novel features thereof will be pointed out by the appended claims.

To obtain a full and correct understanding of the details of construction, combinations of features, elements and advantages, reference is to be had to the hereinafter set forth description and the accompanying drawings in connection therewith, wherein—

Fig. 1 is a perspective view of the device, showing the same as applied to a harness. Fig. 2 is an enlarged perspective view showing the improved device detached. Fig. 3 is a longitudinal sectional view through Fig. 2. Fig. 4 is a longitudinal sectional view, showing a pair of pistons and rods.

Like reference characters are used to indicate similar features throughout the several illustrations.

In regard to the drawings, 1 designates an open ended shell, the ends of which are closed by permanent closures 2 and 3 as shown in Fig. 2. Disposed within the said shell is a piston 4, carried by a piston rod 5, adapted to move through an aperture 6 of the closure 3, and is provided with a loop 7, to which is connected the lower end of the overcheck rein 8 of a harness as shown clearly in Figs. 1 and 2. The said closures are fastened permanently to the shell by any suitable means, preferably by brazing or soldering, that is, after the piston, rod and the spring 9 are positioned within said shell, as will be clearly manifest. The spring 9 operates between the piston 4 and the closure 3 as shown in Fig. 3 of the drawings.

Swiveled to the closure 2, as at 10 is an element 11, comprising a fixed member 12, and a movable member 13, each of which is provided with a hollow threaded lateral extension 14, which when said extensions are in engagement a pivot is formed, for the leather loop 15 as clearly shown in Fig. 3. To hold the said members 12 and 13 and their extensions, close together a screw 16 is adapted to engage the thread of said extensions. The said member 13 is movable upon a pivot, as shown at 17, that is when it is desired to remove said loop, when broken or worn so as to place a new one in engagement with the pivot.

In Fig. 4 a modification of the invention is illustrated in which figure a pair of pistons 18 having rods 19, adapted to coöperate with the spring 20, which is disposed between said pistons. The said pistons are held within the shell 1 by the lugs 21 as shown clearly in Fig. 4.

From the foregoing, it will be plainly observed how the removal of the leather loop is accomplished without detaching the entire tension device, and the essential features, elements and the operation of the device, together with the simplicity thereof will be clearly apparent.

Having thus fully described the invention,

what is claimed as new and useful by the protection of Letters Patent is:

A device of the character described, comprising a tubular casing having applied to its ends fixed caps or closures, a piston arranged within said casing and having fixed thereto its rod member extending out through one of its end closures or caps for the attachment of the checkrein thereto, a loop-member for engagement with the water-hook or terret and a clasp having swiveled connection with the other of said caps or closures, said clasp receiving the inner end-portion of said loop and itself formed of a fixed member and a movable member pivoted to the aforesaid member, said clasp-members having opposed meeting tubular extensions forming a pivot, and a screw-member insertible within, and engaging said tubular extensions for securing said loop-member within said clasp.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EUGENE BELCHER.

Witnesses:
STEPHEN REAP,
JAMES MUCKRELL.