No. 645,853. Patented Mar. 20, 1900.

T. HUBERDEAU.

BREAST STRAP SLIDE.

(Application filed Sept. 11, 1899.)

(No Model.)

Fig. 1.

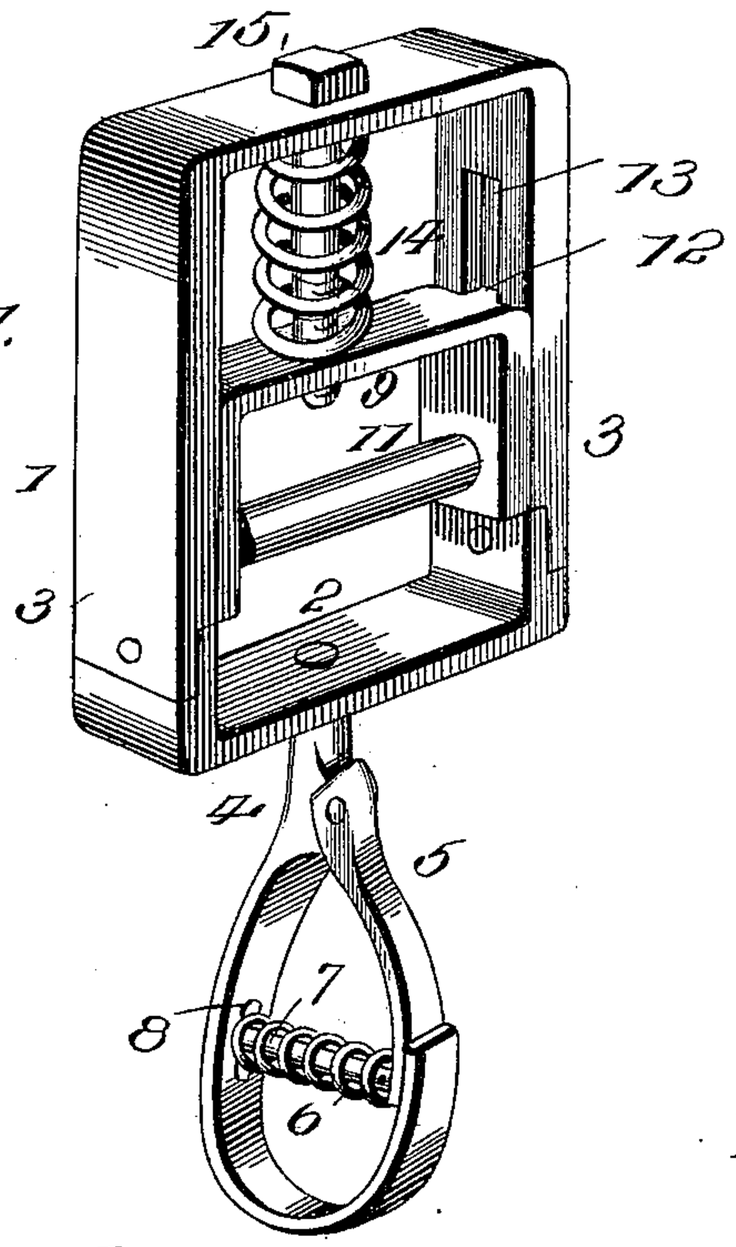


Fig. 2.

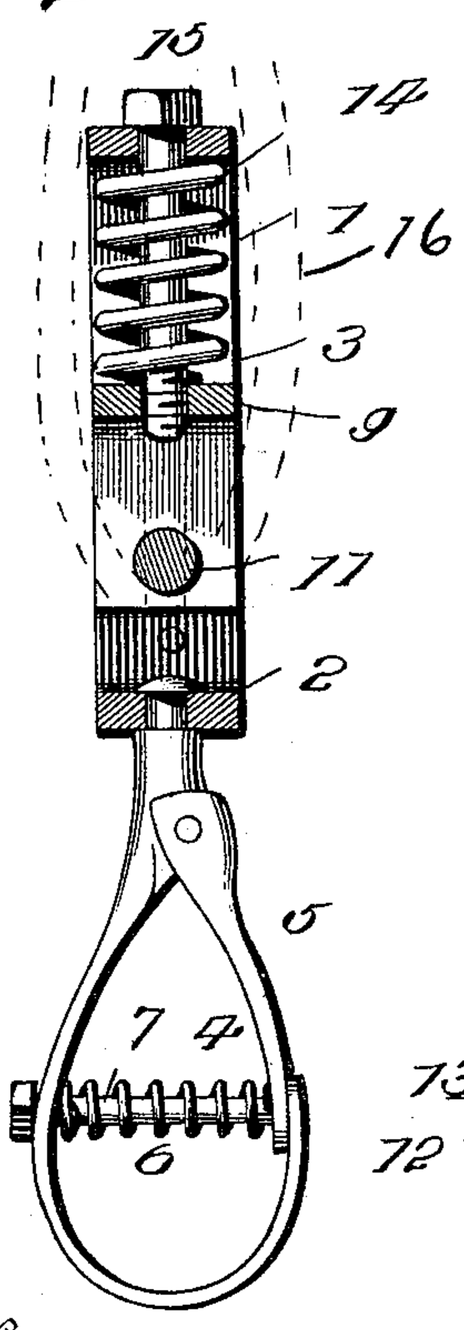


Fig. 3.

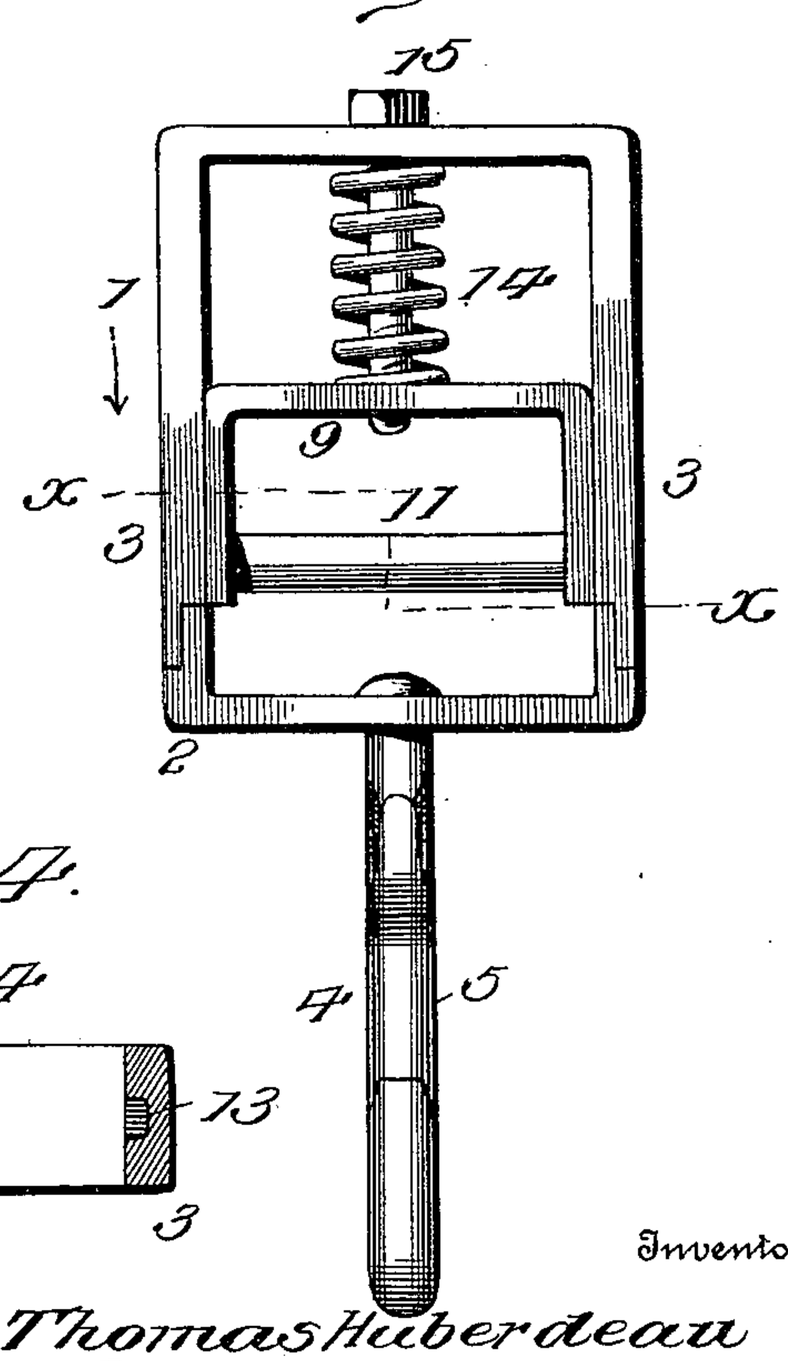
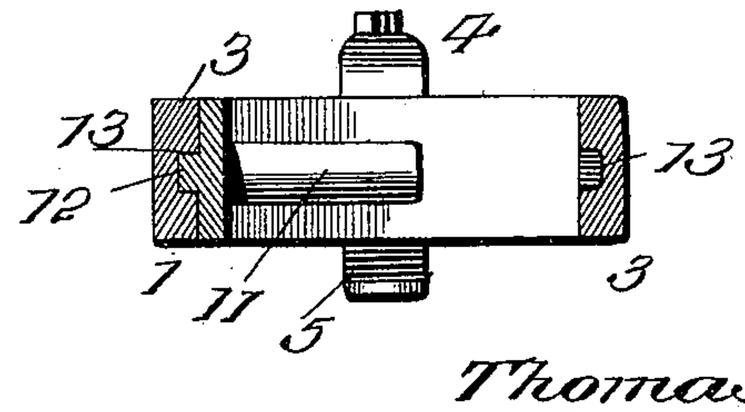


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

THOMAS HUBERDEAU, OF LARIMORE, NORTH DAKOTA.

BREAST-STRAP SLIDE.

SPECIFICATION forming part of Letters Patent No. 645,853, dated March 20, 1900.

Application filed September 11, 1899. Serial No. 730,129. (No model.)

To all whom it may concern:

Be it known that I, THOMAS HUBERDEAU, a citizen of the United States, residing at Larimore, in the county of Grand Forks and State of North Dakota, have invented certain new and useful Improvements in Harness Connections; 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.

The purpose of the invention is to provide a harness connection for relieving shock and sudden strain, particularly upon the necks of horses, occasioned by the varied movements of the pole and neck-yoke which is connected with the hames.

In accordance with this invention a spring-actuated slide is provided and mounted in a frame so as to come between the hook and the strap connecting the neck-yoke with the hames, the controlling-spring of the slide compensating for and taking up sudden strains, pulls, and jerks and relieving the animals' necks of the chafing commonly resulting therefrom.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and the drawings hereto attached.

While the essential and characteristic features of the invention are necessarily susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the connection. Fig. 2 is a central longitudinal transverse section of the frame and slide, the dotted lines showing the position of the connecting-strip. Fig. 3 is a detail view in elevation. Fig. 4 is a section on the line X X of Fig. 3 looking in the direction of the arrow.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The frame is composed of a substantially U-shaped section 1 and yoke 2, having its bent ends secured by rivets or otherwise to the terminals of the side members 3 of the section 1. A snap-hook 4 is formed with or attached to the yoke 2, and the latch 5 is pivoted to the shank and its free end underlaps the terminal portion of the bill and is held thereagainst by a spring 6, interposed between the latch and the body of the hook. A screw 7 is let into the free end portion of the latch and passes through a slot 8 in the body portion of the hook. This screw 7 prevents buckling of the spring and injury thereto when the attachment is in service. The screw can be removed when it is required to renew or open the spring when contracted and set by repeated compression.

The slide 9 is mounted between the side pieces of the frame and comprises an approximately U-shaped frame and a roller 11, journaled at its ends in the terminals of the side members of the slide. An interlocking projection 12 and groove 13 hold the slide in place and direct it in its movements. A spring 14 is interposed between the slide and the closed end of the section 1 and holds the slide at the limit of its movement in one direction. A screw 15 passes loosely through an opening in the end of the section 1, and its inner threaded end enters a screw-threaded opening in the frame 9 and is adapted to move the slide against the tension of the spring 6 to vary its tension. The journals of the roller 11 are reduced ends thereof and fit within openings of the side members of the slide, said members being spread to receive the journals when assembling the parts 9 and 11 and pressed together to hold the roller in place after its journals have been entered in the said openings.

The device is susceptible of a variety of applications in connection with harness, and the hook 4 may be snapped into the ring of the harness or the neck-yoke, as desired, the loop or bight of the strap 16 receiving the roller 11. Any sudden pull upon either the strap or the hook will be taken up by the spring 14, which will be compressed, thereby relieving the jerk which would otherwise be imparted to the breast or other strap coupled by means of the attachment.

The slide 9 is limited in its movements toward the snap-hook by means of the head of the screw 15 engaging with the closed end of the frame 1 and is limited in its movement in the opposite direction by means of the pro-

jections 12 coming in contact with the ends of the grooves 13 remote from the yoke 2. This construction prevents compression of the spring 14 to an injurious extent. It will thus be seen that the slide is limited in its movements in each direction. The slide, its actuating-spring, and the tension-regulating device are adapted to be received between the folded portions of the strap, as indicated in Fig. 2, and are protected and hidden from view thereby. Hence it is not necessary to incase these parts, and access can be readily had thereto for any desired purpose.

Having thus described the invention, what is claimed as new is—

The herein-described harness connection consisting of a frame comprising a U-shaped section 1 and a yoke 2 connecting the terminals of the side bars of said section 1, a snap-hook connected by a swivel-joint with the end bar of the yoke, a U-shaped slide fitted to the frame and directed in its movements thereby, a roller journaled to the ends of the slide, a spring interposed between the slide and the end bar of the section 1, and a headed screw passed loosely through an opening in the said end bar of the section 1 and having threaded connection at its inner end with the slide and adapted to vary the tension of the spring, substantially as specified.

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

THOMAS HUBERDEAU. [L. S.]

Witnesses:

C. O. PIATT,

S. A. SMITH.