J. P. HEISER.

LAYER LOOP.

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993,249. Patented May 23, 1911.

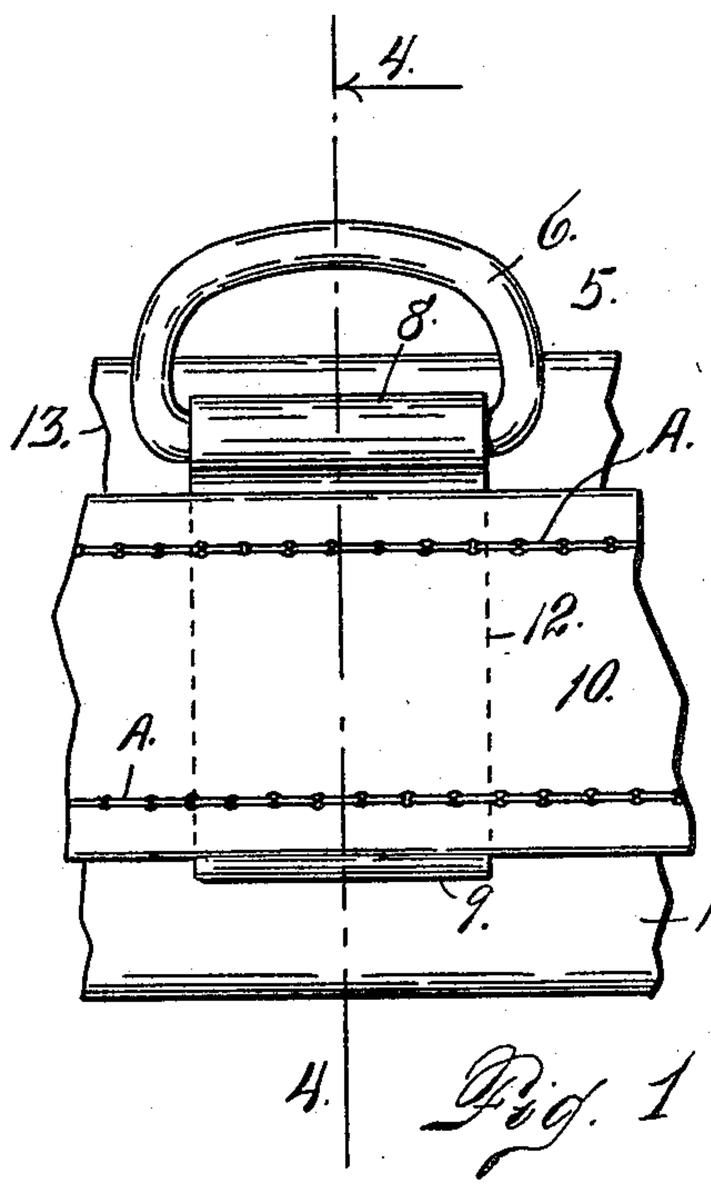

Fig. 1

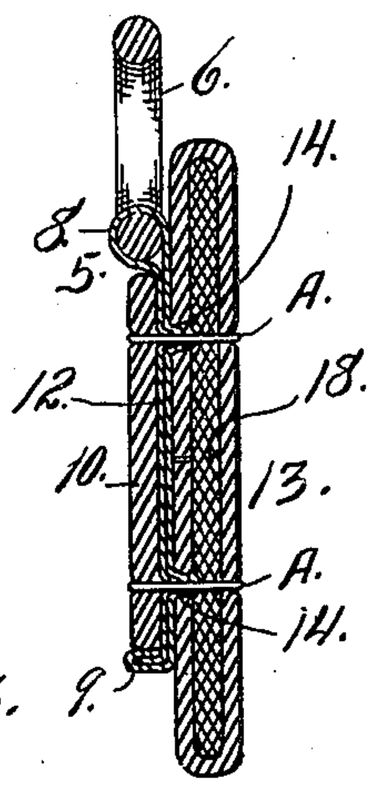

Fig. 2.

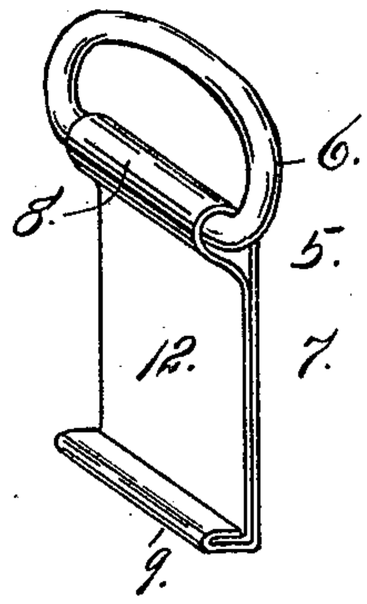

Fig. 3.

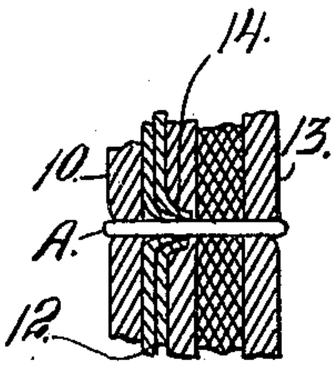

Fig. 7.

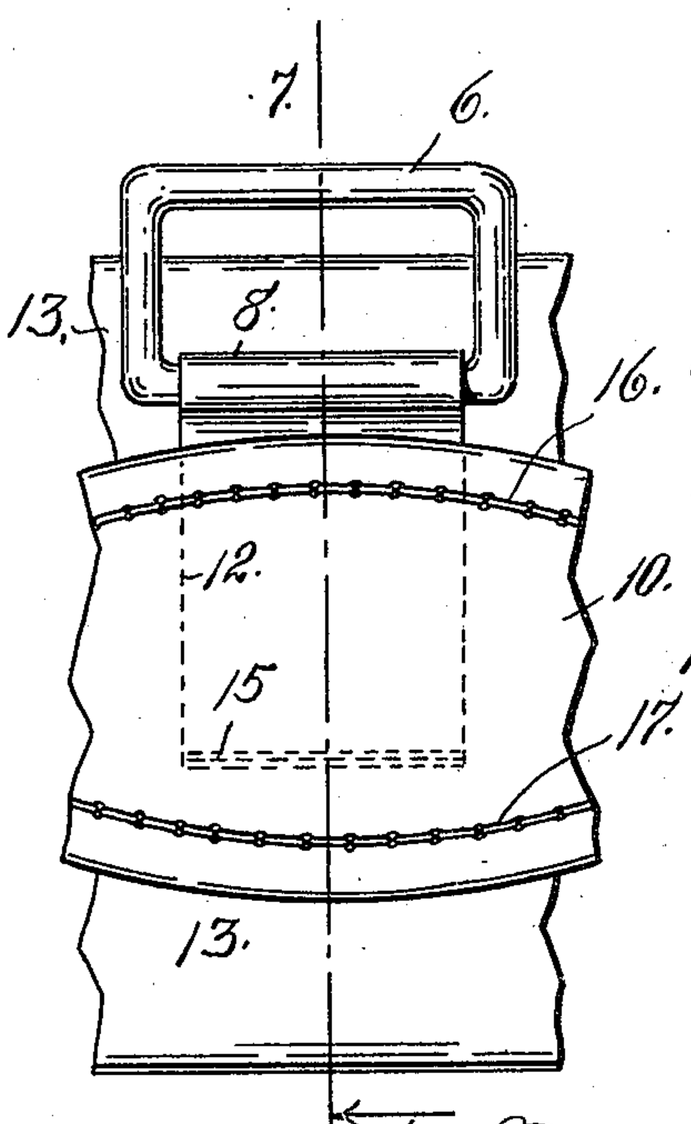

Fig. 4.

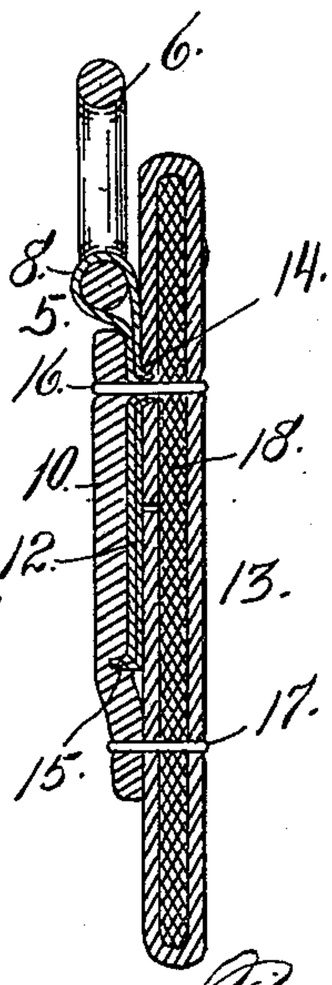

Fig. 5.

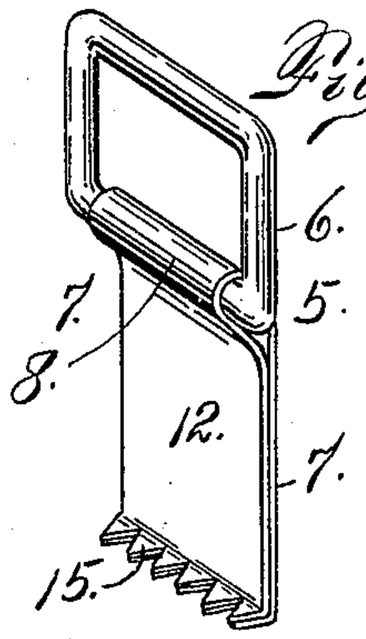

Fig. 6.

Witnesses

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LAYER-LOOP.

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To all whom it may concern:

Be it known that I, JOHANNES P. HEISER, a citizen of the United States, residing in the city and county of Denver and State of Colorado, have invented certain new and useful Improvements in Layer-Loops; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in layer loops for harness or other articles, where similar loops are employed.

An important feature of my invention consists in providing the loop with an attachment composed of metal, sufficiently soft to permit of sewing therethrough, in attaching or securing the loop to the leather parts.

The particular part of the harness illustrated in the drawing, with which the loop is shown, is the breeching, the loop being attached to the breeching strap, and a supporting strap connected therewith. It is evident, however, that my improved construction of loop may be employed in connection with other parts of the harness, and also with leather articles other than harness.

Heretofore, so far as I am aware, layer loops have been formed of an integral piece of metal, the part of the loop which is covered, and, therefore, directly attached to the leather, being rigid with the exposed member. In this event, in sewing the strap to this portion of the loop, it has been necessary to stop the needle on one side of the metal portion of the loop, and move the article along until the needle is in position to pass on the opposite side of the metal member. This makes the process of securing the loop exceedingly tedious. Furthermore, it often happens that the needle of the sewing machine is broken by coming in contact with the loop, since great accuracy is required to prevent this difficulty. I have found in practice, that by connecting with the exposed portion of the loop, relatively soft metal, as brass, and making the same fairly thin, it becomes practicable to sew therethrough without injury to the needle or the securing thread, since the needle in passing through the metal punches the latter out sufficiently where the hole is formed to make a smooth passage way for the thread, thus preventing the cutting of the thread.

Having briefly outlined my improved construction, I will proceed to describe the same in detail, reference being made to the accompanying drawing, in which is illustrated an embodiment thereof.

In this drawing: Figure 1 is a detail view in elevation, showing my improved layer loop attached, and on a larger scale. Fig. 2 is a section taken on the line 4—4, Fig. 3. Fig. 3 is a perspective detail view, showing one form of my improved layer loop. Fig. 4 is a view similar to Fig. 3, but showing still another form of the loop. Fig. 5 is a section taken on the line 7—7, Fig. 6. Fig. 6 is a perspective view in detail of the form of layer loop shown in Figs. 6 and 7. Fig. 7 is a sectional, detail view, illustrating the punching out of metal by the action of the needle in passing therethrough. In this view the parts are shown on a larger scale than in the other views.

The same reference characters indicate the same parts in all views.

Let the numeral 5 designate one form of my improved layer loop considered in its entirety. This loop is composed of an exposed member 6, and an auxiliary member 7, which is formed of a flat piece of relatively soft metal, which is bent around the member 6 as shown at 8. Beyond this bend, two layers of the member 7 are brought together forming a double layer, finally terminating in an offset member or shoulder 9. When the loop is secured in place (see Figs. 1, and 2), a securing strap 10 is placed upon the double portion 12 of the loop member 7, the strap 10 being preferably of the proper width to fill in the space between the bend 8 and the shoulder 9. Before applying the strap 10, the loop 5 is laid upon the main strap 13. The strap 10 is then applied as just explained, and secured by sewing through the straps 10 and 13, as well as the portion 12 of the member 7 of the loop, the rows of stitching being indicated by the letter A. The needle as it passes through the member 12, punches out the metal as shown at 14 (see Figs. 2 and 7).

In the form of construction shown in Figs. 4, 5, and 6, my improved loop is of similar construction, except that instead of the offset shoulder 9, the portion of the member 7, of the loop remote from the exposed member 6, is provided with teeth 15, which are

adapted to enter the securing strap 10, which is wider than the length of the member 7. In this case, it is only intended that the one row of stitches 16 shall pass through the metal portion 12 of the loop, the other row 17, being located beyond the teeth 15. These teeth, however, indent the leather to their full length, thus allowing the leather members to lie practically flat. In forming the main or base strap 13, with both forms of construction, a filler 18 of canvas, or other suitable material, is employed. The stitches of course pass through this canvas, as well as through both layers of leather surrounding it. This filler, however, is old in the art, and has nothing to do with my present invention.

It must be understood that I am not limited to the specific construction illustrated in the drawing. In this connection, it may be stated that instead of employing a double layer of soft metal to form the member 12, a single layer may also be employed; and other departures from the specific construction disclosed, may be made within the scope of the appended claims.

Having thus described my invention, what I claim is:

1. In a construction of the class described, the combination with a main strap and a securing strap, of a layer loop having a soft metal member interposed between the two straps and secured in position by stitching through the soft metal member and the straps, the said metal member having substantially rigid portions surrounding the stitches and projecting into the adjacent strap.

2. In a construction of the class described, the combination with two straps, one of which is narrower than the other, of a layer loop having a soft metal member interposed between the straps and provided at one extremity with a shoulder adapted to project beyond one of the straps, the loop being secured to the two straps by stitching through the soft metal member and the straps, the said soft metal member of the layer loop having rigid projections surrounding the stitches passing therethrough, and adapted to project into the adjacent strap, substantially as described.

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

JOHANNES P. HEISER.

Witnesses:

VIRGINIA I. DAVIS,

ELIZABETH BOWEN.