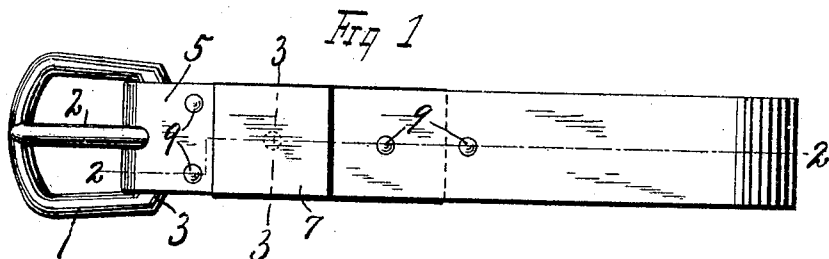
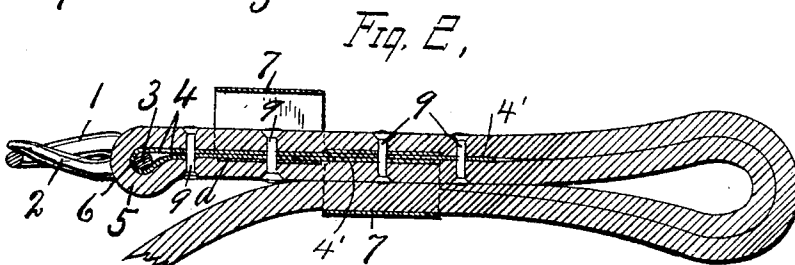
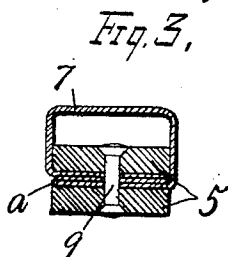
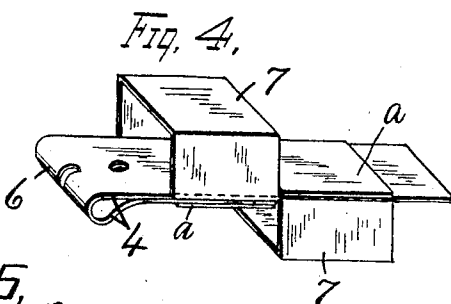
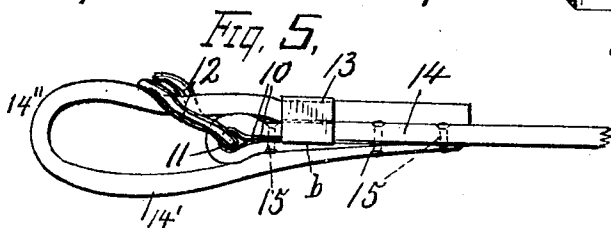
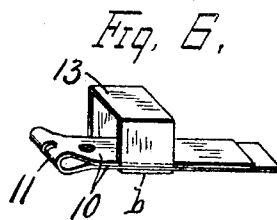
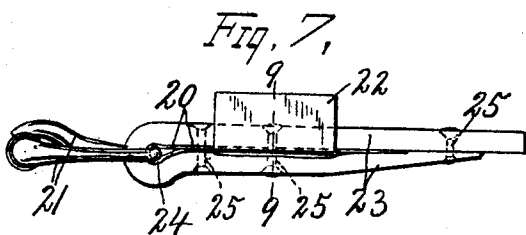
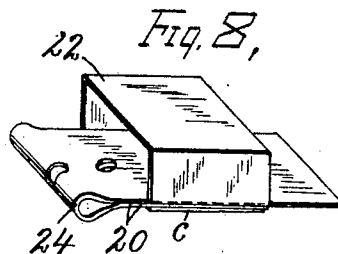
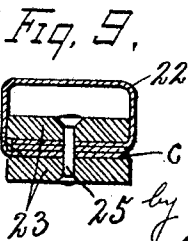


No. 805,573.

PATENTED NOV. 28, 1905.

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HARNESS LOOP.

APPLICATION FILED AUG. 22, 1904.



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HARNESS-LOOP.

No. 805,573.

Specification of Letters Patent.

Patented Nov. 28, 1905.

Application filed August 22, 1904. Serial No. 221,769.

To all whom it may concern:

Be it known that I, CHARLES A. MESSENGER, of Adams Center, in the county of Jefferson, in the State of New York, have invented new and useful Improvements in Harness-Loops, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to improvements in harness, and refers more particularly to the combined buckle and loop as applied to the straps of various parts of the harness, such as throat-latches, check-pieces, lines, martingales, breast-collars, pads, bands, bridles, and, in fact, almost any part of the harness where a buckle and loop are employed.

The primary object is to reinforce the buckle-loop of the strap by a sheet-metal strap or plate, which is bent upon itself in the form of a loop and upon the pintle of the buckle, said plate having one or more wings which are bent into the form of a loop, with its free end inserted into the folds of the leather or metal strap which forms the buckle-loop, after which the looped parts are riveted together instead of stitching or sewing.

One of the specific objects of this invention is to enable teamsters or hostlers to make or repair these parts of the harness without the aid of the skilled harness-maker by simply folding or bending the metal loops from a single piece of sheet metal and then inserting the metal strap into the buckle-loop of the leather strap and then riveting these parts together.

Other objects and uses will be brought out in the following description.

In the drawings, Figure 1 is a top plan of the leather strap and buckle equipped with my improved metal reinforcing-loop. Figs. 2 and 3 are sectional views taken, respectively, on lines 2 2 and 3 3, Fig. 1. Fig. 4 is a perspective view of the detached metal reinforcing-strap, showing the loops in their folded position. Fig. 5 is a side view of a strap and a modified form of metal reinforcing-loop. Fig. 6 is a perspective view of the metal loop seen in Fig. 5. Fig. 7 is a side view of the strap, showing a further modified form of metal reinforcing-loop. Fig. 8 is a perspective view of the metal loop seen in Fig. 7. Fig. 9 is a sectional view taken on line 9 9, Fig. 7.

In Figs. 1, 2, 3, and 4 I have shown a buckle 1, having a tongue 2 and a pintle 3, and around this pintle is folded a metal loop 4 and a leather

loop 5. The loop 4 is formed from a single plate or piece of sheet metal and is bent upon itself around the pintle 3, thereby forming an eye 6, through which the pintle passes, while the ends of the metal piece 4 are brought flatwise against each other. In stamping or cutting this metal loop one or more wings are left attached to one edge of the metal strip, and these wings are then folded transversely of the main body of the metal strap to form substantially rectangular loops 7, having their free ends *a* folded under the main body and usually between the contiguous faces of the strap, as best seen in Fig. 3. In like manner the leather strap 5 is folded around and upon the metal eye 6 and against the upper and lower faces of the metal loop 4, so as to practically inclose the contiguous parts of said metal loop, the ends 4' 4' of the metal strap, however, extending through the loops 7. These loops 7 are sufficiently large to form lengthwise openings outside of the outer surface of the leather strap and the ends of the loop 7 extending between the folds of the strap, these loops 7 being provided for the purpose of receiving the ends of said leather strap or the end of another strap which may be engaged with the buckle 1. In these views, Figs. 1 to 4, inclusive, it will be observed that I have shown two loops 7 as formed integral with the metal plate 4—that is, they are united at one end to one edge of the plate and their free ends are folded transversely to form substantially rectangular boxes or casings which are open at both ends, the free end of each loop being folded under and against the main body of the plate so as to leave a smooth inner surface for each box or loop which is adapted to receive the projecting ends of the leather strap. The metal plate 4 and leather strap 5 are secured together at suitable intervals by rivets 9, whereby the ends of the metal plate 4, as well as the free ends of the loops 7, are impinged between the contiguous faces of the ends of the strap 5.

In Figs. 5 and 6 I have shown a sheet-metal plate or strip 10 as folded longitudinally upon itself to form an eye 11, which receives the buckle 12. This metal plate has its ends lying flatwise against each other, and it is provided with a lateral extension which is bent or folded transversely into the form of a rectangular box or loop 13, one end of this box or loop being integral with the plate 10, while its other end *b* is folded under or between the adjacent faces of the contiguous ends of the

folded plate 10. In this case the leather strap, as 14, is folded around and upon the metal eye 11 with its ends arranged flatwise against the opposite flat faces of the plate 10, so as to substantially inclose said plate. After this leather strap has been folded upon the eye 11 and against the opposite faces of the remaining part 10 they are secured together by rivets 15. A strap 14' is shown as being connected to the strap 14 by the rivets 15, this strap 14' forming a loop 14'' and being engaged by a buckle 12 and having its free end passed through the rectangular box or loop 13.

In Figs. 7, 8, and 9 I have shown a metal plate 20 bent upon itself around the pintle of a buckle 21 and provided with a lateral projecting wing or extension which is bent or folded transversely to form a rectangular box or loop 22, having its free end brought under and flatwise against one end of the plate 20. A leather strap 23 is passed through the loop 22 and around the eye 24 and is folded backwardly upon the under side of the plate 20, and the opposite parts of the leather strap 23 are then secured to each other and to the interposed metal plate 20 by rivets 25.

It is now seen that in each of these forms the metal plate is folded around the pintle of the buckle with its ends lying flatwise against each other and that each plate is formed with one or more lateral projecting wings united at one end to the plate and has its other end folded transversely into a rectangular box or loop which is open at both ends, the free extremity of each wing being folded flatwise against one or the other of the ends of the plate. After this has been done the leather strap is laid flatwise upon the plate and passed around the metal eye, which receives the pintle of the buckle, and the two ends of the leather strap are then riveted together through the interposed ends of the metal plate, thereby reinforcing the metal loop which receives the buckle and at the same time affording an economical and durable box or loop for receiving the projecting ends of the straps which may be attached to the buckle. These boxes or loops may be nickel or silver plated or otherwise burnished or figured to add to the pleasing appearance of the harness.

Where my improvements are employed the loop of the leather strap is stiffened and reinforced by the folded metal plate, and the usual wear of the buckle upon the leather strap at the fold is obviated, all the wear being taken up by the metal plate, and, the leather being practically indestructible under such wear, the loop constructed as hereinbefore described will last indefinitely. The metal boxes or loops are extremely conven-

ient and serviceable for receiving and retaining the loose end of the leather strap or of any other strap which may be engaged by the buckle, and the metal of which these boxes or loops are formed being thin and strong they occupy but little space and at the same time are stronger and more serviceable than the leather loops or boxes commonly used.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In combination with a buckle, a metal plate folded around the pintle of the buckle and upon itself and having its ends brought together, said plate having a laterally-projecting wing which is folded transversely into the form of a loop and has its free end brought flatwise against one of the ends of the plate, and a leather strap folded around the loop of the metal plate and having its ends riveted to said plate.

2. In combination with a buckle, a metal plate folded around the pintle of the buckle and having its ends brought flatwise together, one of said ends having a lateral extension which is folded transversely to form a rectangular box or loop open at both ends, the end of said lateral extension bearing against said plate and a leather strap folded upon the metal plate and having its opposite ends secured to the ends of the plate by rivets passing through the strap the metal plate and the end of said extension.

3. A leather strap having one end folded backwardly upon the main body to form a loop, in combination with a metal plate having one end folded backwardly upon itself and also forming a loop, said metal plate being inserted between the folded parts of the leather strap, one of the ends of the metal plate having a lateral extension folded transversely and inclosing one of the parts of the strap and having its free extremity interposed between the opposite parts of the strap, said strap, said plate and the lateral extension of the plate being held in position by rivets passing through these parts.

4. In combination with a buckle, a metal plate folded around the pintle of the buckle and having its ends brought flatwise together, each of said ends having a lateral extension which is folded transversely to form a rectangular box or loop, and a leather strap folded upon the metal plate and riveted thereto.

In witness whereof I have hereunto set my hand this 15th day of August, 1904.

CHARLES A. MESSENGER.

Witnesses:

J. C. HEATH,

B. M. GREENE.