

(No Model.)

C. W. JAMES.  
HARNESS LOOP.

No. 503,856.

Patented Aug. 22, 1893.

Fig. 1.

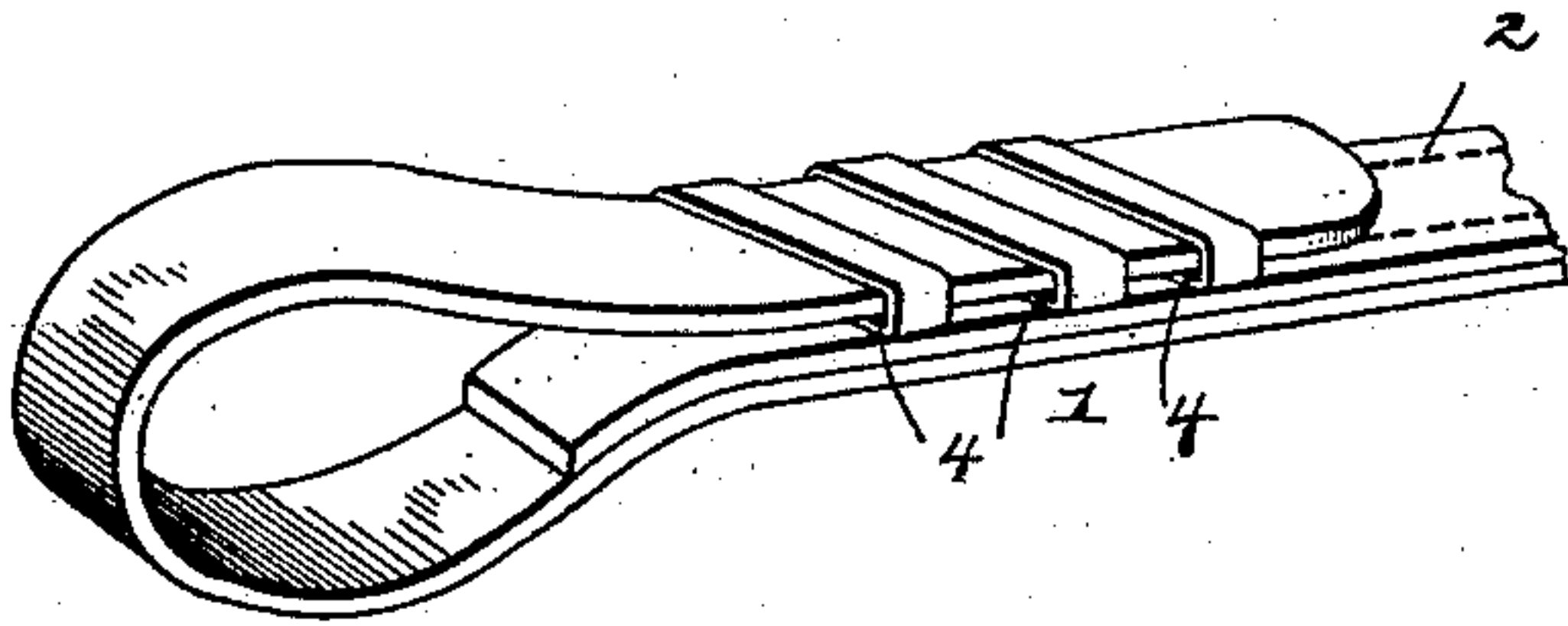


Fig. 1<sup>a</sup>.

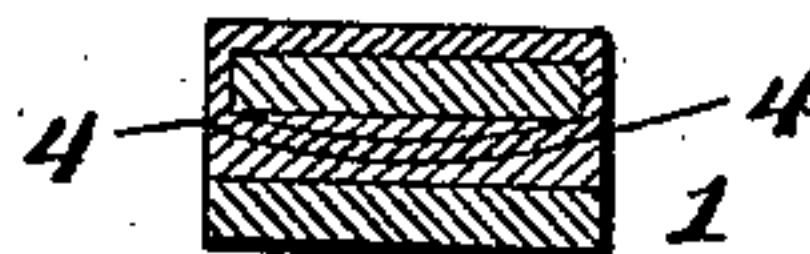


Fig. 3.

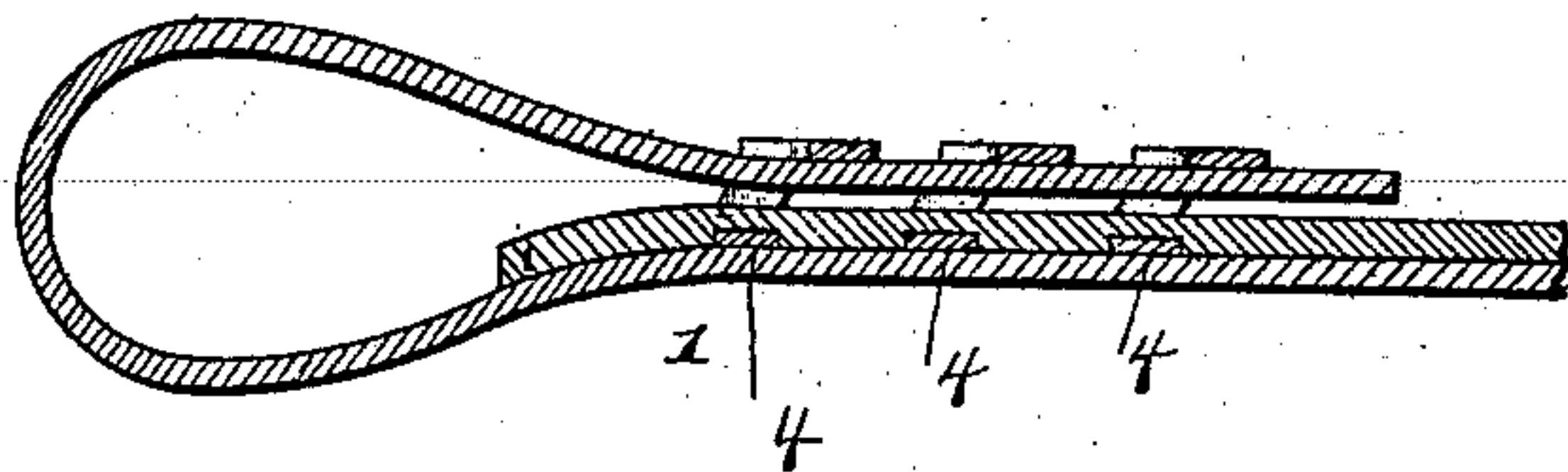


Fig. 2.

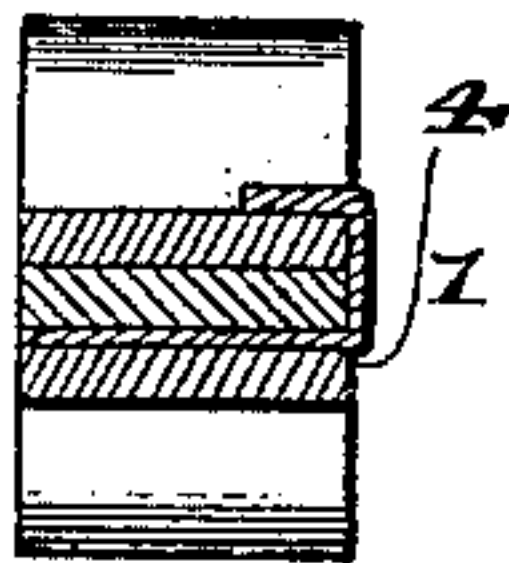


Fig. 4.

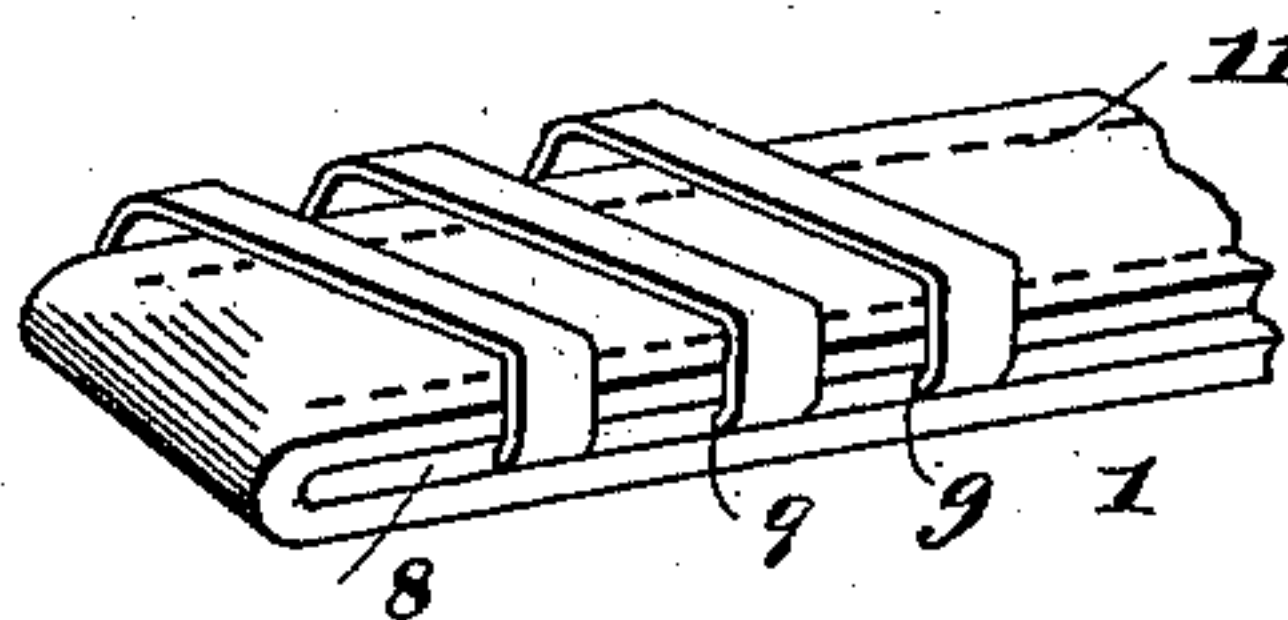


Fig. 5.

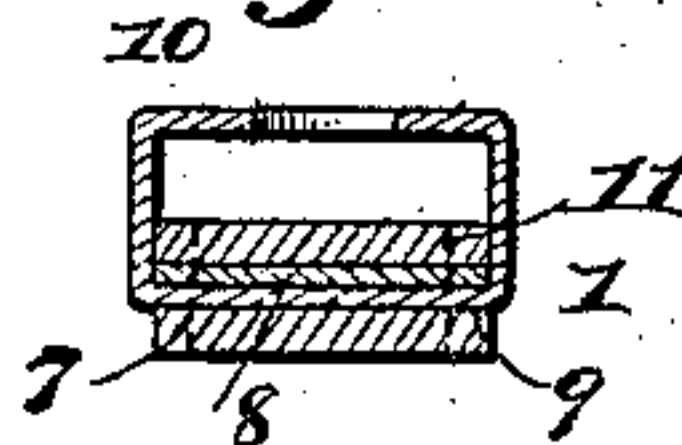


Fig. 6.

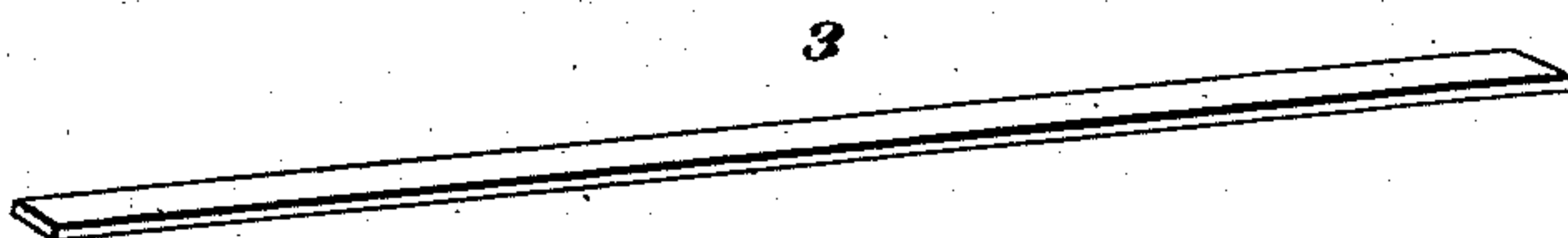
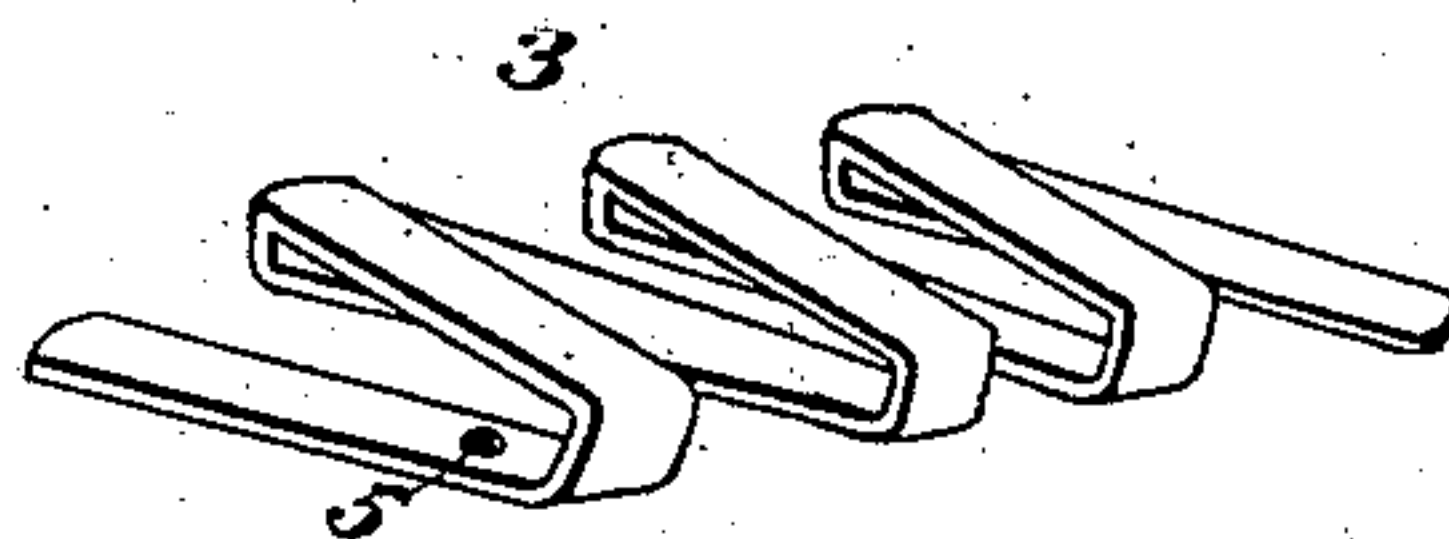


Fig. 7.



Witnesses

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# UNITED STATES PATENT OFFICE.

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## HARNESS-LOOP.

SPECIFICATION forming part of Letters Patent No. 503,856, dated August 22, 1893.

Application filed August 5, 1891. Serial No. 401,747. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES WESLEY JAMES, a citizen of the United States, residing at Quincy, in the county of Logan and State of Ohio, have invented a new and useful Harness-Loop, of which the following is a specification.

This invention relates to improvements in harness-loops and the objects in view are to improve upon the usual box-loop employed in harnesses, and which are insecure and hard to apply; and to provide a loop that may be formed of scraps of leather and conveniently applied either during or after the manufacture of the harness; which may be sewed on with machine and when attached will be very secure and not in danger of tearing out.

Other objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claim.

Referring to the drawings:—Figure 1 is a perspective of a strap provided with a harness-loop constructed in accordance with my invention, the same illustrating my preferred form. Figure 1<sup>a</sup> is a transverse section of Fig. 1. Fig. 2 is a transverse-section through a portion of the loop. Fig. 3 is a longitudinal section. Fig. 4 is a similar view to Fig. 1, of a modified construction of loop. Fig. 5 is a transverse-section. Fig. 6 is a detail of the loop-blank before being applied. Fig. 7 is a detail in perspective of the loop as it would appear after application to the strap.

Like numerals of reference indicate like parts in all the figures of the drawings.

Referring to Fig. 1, 1 designates a strap, which may be a portion of a harness, a trunk or shawl strap, or a strap for any other purpose and requiring a loop; and the same is provided, if a double-strap, with the lines of stitching 2.

3 denotes the blank from which the loop is formed (see Figs. 6 and 7) and the leading end of the loop-blank is passed transversely through slits 4, formed at intervals in the upper layer of the strap 1. The ends of the blank terminate between the straps and are riveted as at 5 or otherwise secured. By thus continuously passing the loop-blank, a loop comprising a succession of coils is formed, the

coils being inclined with relation to the strap, and passed through the slits 4, which latter occur between the lines of stitching 2, and only extend through the upper strap or layer. This is the preferred form of constructing the loop, and it will be seen may be applied to straps after the manufacture of the same, requires no stitching, and by reason of the fact that the slits are formed between the lines of stitching, the loops may be pressed to either side for the purpose of permitting a subsequent trimming of the edges of the strap. It will be obvious that where single-straps are employed, as for instance in bridles and other light trimmings, the slits will not be formed entirely through the straps, but simply transverse punches or slits made within the opposite edges of the straps, as will be obvious, and as approximately shown in Fig. 1. By thus constructing the loop I avoid any projections on the rear side of the strap that would be liable to chafe or injure the animal and form a much more comfortable arrangement.

Referring now to Figs. 4 and 5, 6 designates a strap composed of two layers 7, and an intermediate filling 8. At intervals transverse and diagonally-disposed openings 9 are formed in the filling, and the loop 10 laced continuously therethrough in the form of a coil, as previously described, and the two layers and loop sewed through and through by the stitches 11. Such latter construction is especially adapted for heavy harness or heavy portions of light harness, and to be used in straps for other purposes, where the construction required is heavy.

By my invention I provide a loop having a very neat appearance, which is much more durable than the ordinary box-loop, which can only be secured along its edges and hence is not secure and readily pulled out; furthermore that scraps of leather that would otherwise be wasted may be readily utilized in forming the loop and that the same may be much more readily applied and secured. It will be obvious that I may form the loop from a blank of light sheet-metal, in lieu of leather, otherwise the construction will be the same. It will also be seen that the loop may be stitched, cemented, riveted or otherwise se-



cured in position, and be passed between layers of straps, through straps themselves, or otherwise applied.

5 The advantages gained by the diagonal arrangement of the parts of the loop are economy in the number of fastenings required to hold the same in place, as the angle of the parts locks the same on their support against movement and thereby less fastening is re-  
10 quired. When this diagonal form of the loop is fitted between the layers of a support, it requires but one-half of the stitches or other fastenings required for the common form of loop, as the improved form wraps around the  
15 stitches and one seam only is necessary to secure the same in stable position. Further, rivets can be conveniently employed for securing the ends of this diagonal form, because the said ends are located outside of the  
20 loop proper and can be thereby conveniently engaged. This latter advantage is exceptionally important, as the loop, by this means, can be readily attached to any part of the harness without dismembering or stitching  
25 through the latter. The device in this form can be constructed by lacing over the loop stick without sewing and be made to retain its form, or it can be sewed by machine or hand by lacing between rows of stitches over  
30 loop stick. The lower or inner members of the diagonally-formed loop are at a greater

angle than the upper or outer members of the same to provide for fastening the lower or inner members from the outer side, but the horizontal plane of said inner or lower mem- 35  
bers is parallel with the plane of the upper or outer members, and by this means a rectangle is at all times approximated, and though the loop is constructed of yielding material, this form is at all times preserved. 40

Having described my invention, what I claim is—

In combination with a strap composed of layers or plies of the herein described billet loop consisting of a flat helical loop formed 45  
from a flat leather strip having outer engaging bars thereof extending diagonally across and away from the said strap at a lesser angle than the inner connecting bars thereof to expose said inner bars between the said outer 50  
bars, and fastenings passed through the layers or plies of the strap and the said inner bars to simultaneously secure the said inner bars and strap, substantially as described.

In testimony that I claim the foregoing as 55  
my own I have hereto affixed my signature in presence of two witnesses.

CHARLES WESLEY JAMES.

Witnesses:

THOS. E. RETTER,  
JOHN S. JORDAN.