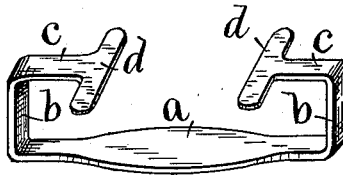


W. E. DIPPERT.  
Harness-Loop.

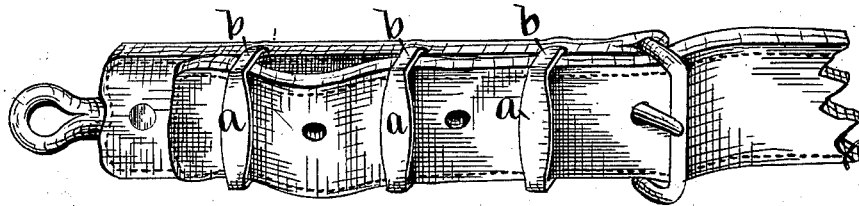
No. 216,027.

Patented June 3, 1879.

*Fig. 1*



*Fig. 2*



Witnesses:  
Frank W. Heers,  
Erastus W. Smith.

Inventor:  
William E. Dippert,  
By Thomas G. Orwig,  
Attorney.

# UNITED STATES PATENT OFFICE.

WILLIAM E. DIPPERT, OF DES MOINES, ASSIGNOR OF ONE-HALF HIS RIGHT  
TO JAMES E. JOLLIFFE, OF OTTUMWA, IOWA.

## IMPROVEMENT IN HARNESS-LOOPS.

Specification forming part of Letters Patent No. **216,027**, dated June 3, 1879; application filed  
July 19, 1878.

*To all whom it may concern:*

Be it known that I, WILLIAM E. DIPPERT, of Des Moines, in the county of Polk and State of Iowa, have invented an Improved Harness-Loop, of which the following is a specification.

My invention is a metal loop formed complete in one piece, in such a manner that it can be secured to a hame-tug or similar piece, to hold down the free end of an adjustable trace or other lapping piece. Heretofore metal loops have been used for the same purpose; but when the ends of the loop inclosed between the leather were wide they would cause a break in the stitching and a weak point in the tug, and when they were narrow the loop would turn and not always stand out at right angles from the tug, as required, to receive and hold the end of a trace. My improvement contemplates forming the part of the loop designed to be inclosed and concealed in the tug in such a manner that it will not cause a break in the stitching and will not turn, but remain rigidly fixed and at right angles to the tug.

It consists in forming an open loop with T-ends or cross-heads on its ends, as hereinafter fully set forth.

Figure 1 of my drawings is a perspective view of my loop in an inverted position. Fig. 2 is a perspective view, showing my loop applied to a hame-tug.

Jointly considered these figures clearly illustrate the construction, application, and operation of my invention.

*a* is the top bar of the loop, designed to span the outside of the tug in such a manner that the free end of a trace can be readily passed under it to be retained flat upon the tug. This part of the loop is preferably flat, and widest in its center. Its ends are formed with right-angled ends *b*, and the ends *b* terminate in narrow

and short bars, *c*, standing inward at right angles to the ends *b* and parallel to the top bar, *a*. Each short bar, *c*, has a cross-head or T-end, *d*. The complete loop is thus formed in one piece, preferably by casting in a mold. They may be made of any suitable material, and vary in size and ornamental design and finish, as desired.

In the practical use of my invention the T-ends can readily be slipped between the straps of a tug at the point where the loop is to be fixed, and then secured by stitching the tug along its edges in a common way, and without a break, by drawing the stitch over the narrow and short bars, *c*, in such a manner that there will be no perceptible difference in the rows of stitches excepting irregularity in length. The T-ends *d* that are thus inclosed are parallel with the rows of stitches, and serve to prevent the loop from rocking, turning, or escaping, and to hold it rigid and square in its place on the tug.

To use my loop in repairing old harness, it is not necessary to rip the stitching all the way from the end of the tug to the point where the loop is to be fixed, but simply to open the stitching at that point sufficiently to allow the T-ends to be slipped in from the sides.

My improved loop, adapted for new and old harness, can be readily and advantageously used in place of leather loops by all harness-makers, and will therefore be a valuable addition to saddlery hardware.

I claim—

As an improved article of manufacture, an open metal loop having T-ends or cross-heads substantially as and for the purposes set forth

WILLIAM E. DIPPERT.

Witnesses:

FRANK W. HEERS,  
A. L. COOPER.