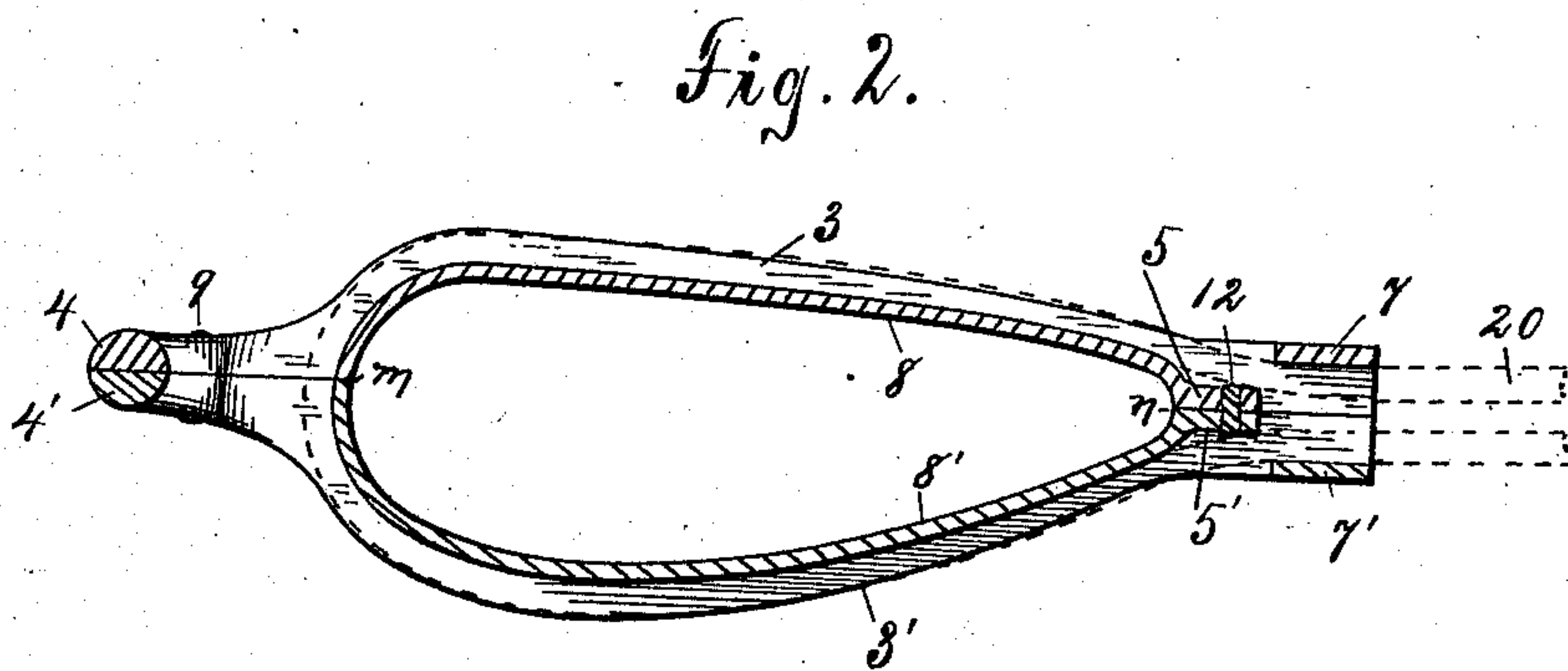
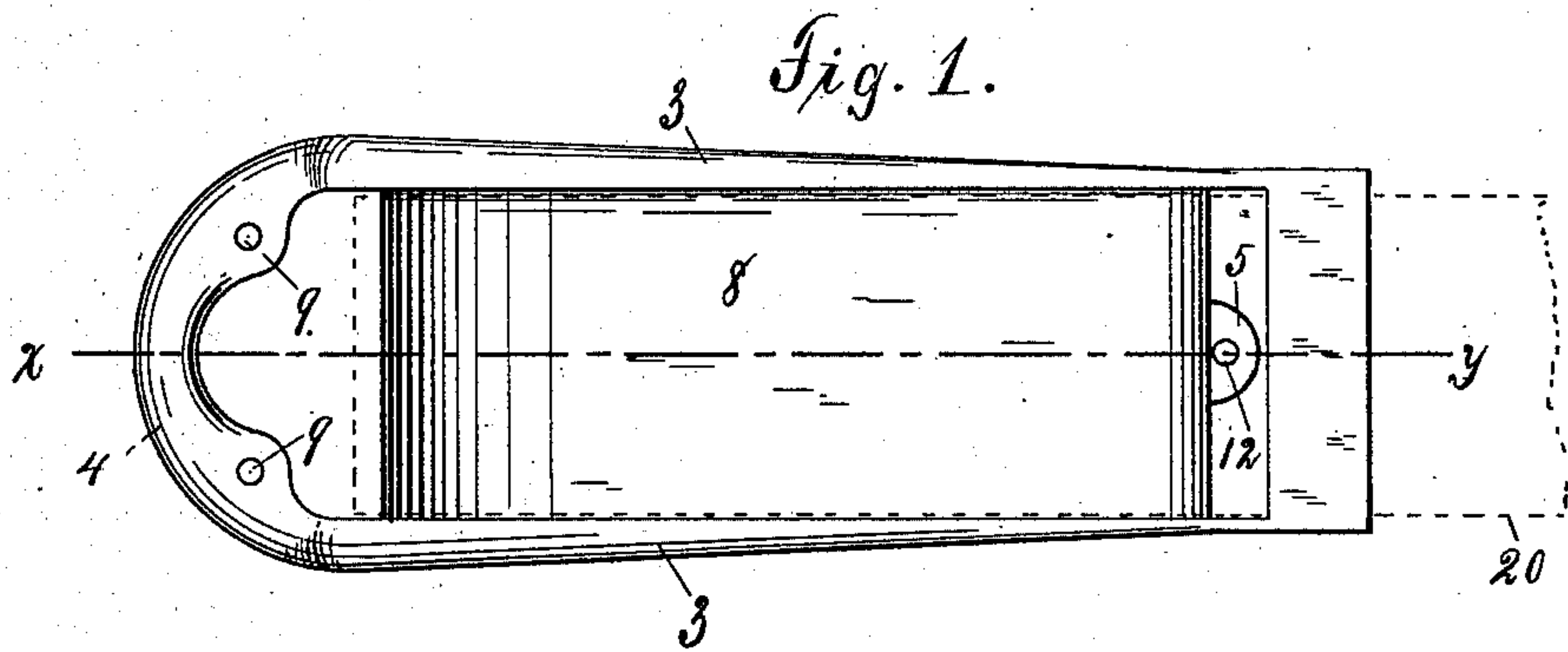


(No Model.)

J. LOOS.  
MARTINGALE LOOP.

No. 413,676.

Patented Oct. 29, 1889.



Witnesses

Geo. H. Lamar.  
Harry S. Roberts.

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John Loos

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# UNITED STATES PATENT OFFICE.

JOHN LOOS, OF FREEPORT, ILLINOIS.

## MARTINGALE-LOOP.

SPECIFICATION forming part of Letters Patent No. 413,676, dated October 29, 1889.

Application filed February 5, 1887. Renewed March 29, 1889. Serial No. 305,337. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN LOOS, a resident of Freeport, in the county of Stephenson and State of Illinois, have invented certain new and useful Improvements in Martingale-Loops; 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 pertains to make and use the same.

This invention relates particularly to means for strengthening the loop through which the girth passes at its lowest point.

It is common in heavy harness to attach a strap to the lower part of the collar to connect it with the girth at its lowest point, and also with the breeching, auxiliary straps being employed for the latter purpose. When in use, said strap passes downward and backward, bends around the girth, and returns upon itself, the end being secured by an adjustable fastening to the body of the strap itself. A sliding loop of leather is usually placed upon the doubled portion of the strap near the girth to prevent too great separation of the parts. To strengthen and render more durable this double portion, to obviate the necessity for the sliding loop, and to afford a convenient means for attaching straps connecting this strap to the breeching are the objects of this invention. The first of these objects is attained by providing a metallic loop to serve as a lining for that portion of said strap that would otherwise come in contact with the girth, the second by providing with said loop an integrally-formed metallic guide for retaining the doubled portion of said strap, the third by forming integrally with said loop and at the end thereof opposite to said guide a loop suitable for the attachment of other parts of the harness.

As the invention lies wholly in the loop itself, and as the strap it is intended to protect need be introduced only for the purpose of conveying a clear idea of the location and use of the loop, the strap is shown only in dotted lines.

Figure 1 shows the loop in projection, seen from above in the position it has when in

use. Fig. 2 is a section on the line  $xy$  of Fig. 1.

In the drawings, 8 is the body of a loop, which, like the cylinder, has all its elements parallel, but which is an irregular oval in cross-section. Through this loop the girth end, with buckle and ordinary loop, passes readily. The length of the parallel loop elements is approximately equal to the width of the strap to be protected, and which passes around the loop and lies in contact with its entire surface 8. The lateral displacement of the loop is prevented by flanges 3 3', formed integrally with and projecting outwardly from the ends of the surface 8 at all points. At what is in use the front end of the loop the flanges 3 3' project some distance farther than at the sides of the loop near its middle, and are joined, respectively, by integrally-formed bars or webs 7 7'. At the opposite end of the loop the flanges 3 3' also project and are connected, respectively, by integrally-formed bars 4 4' of suitable form.

The loop is formed in two parts, as indicated at  $m n$ , Fig. 2, whose meeting faces are plane, and the bars 7 7' are so placed that with the flanges 3 3' they form, when the two parts are united, a closed guide for the two folds of the bent strap passing around the body of the loop. The bars 4 4' are in such position upon the two parts of the loop that when the parts are properly joined they form a single bar. The two parts of the body 8 8' of the loop are provided, respectively, with lugs 5 5', which meet at the forward end of the loop when the two parts are properly placed together. The two parts are permanently united by rivets 9 9, passing through the bars 4 4', and a rivet 12, passing through the lugs 5 5'.

The strap to be protected (shown at 20 in the drawings) passes then through the guide 7 7', around the body of the loop, and again through the guide 7 7'. The girth passes through the space inclosed by the body of the loop 8 8', and the devices for attaching the loop to the breeching are secured to the bar 4 4'.

What I claim is—

The metallic harness-loop consisting of the independently-formed halves 8 8', having at their opposite margins the flanges 3 3 3' 3', respectively, the bars 4 7, joining the flanges 5 3 3, the bars 4' 7', joining the flanges 3' 3', the uniting-lugs 5 5', and the rivets 9 9 12, uniting the two parts into a rigid whole, substantially as and for the purpose set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JOHN LOOS.

Witnesses:

C. W. GRAHAM,  
J. A. CRAIN.