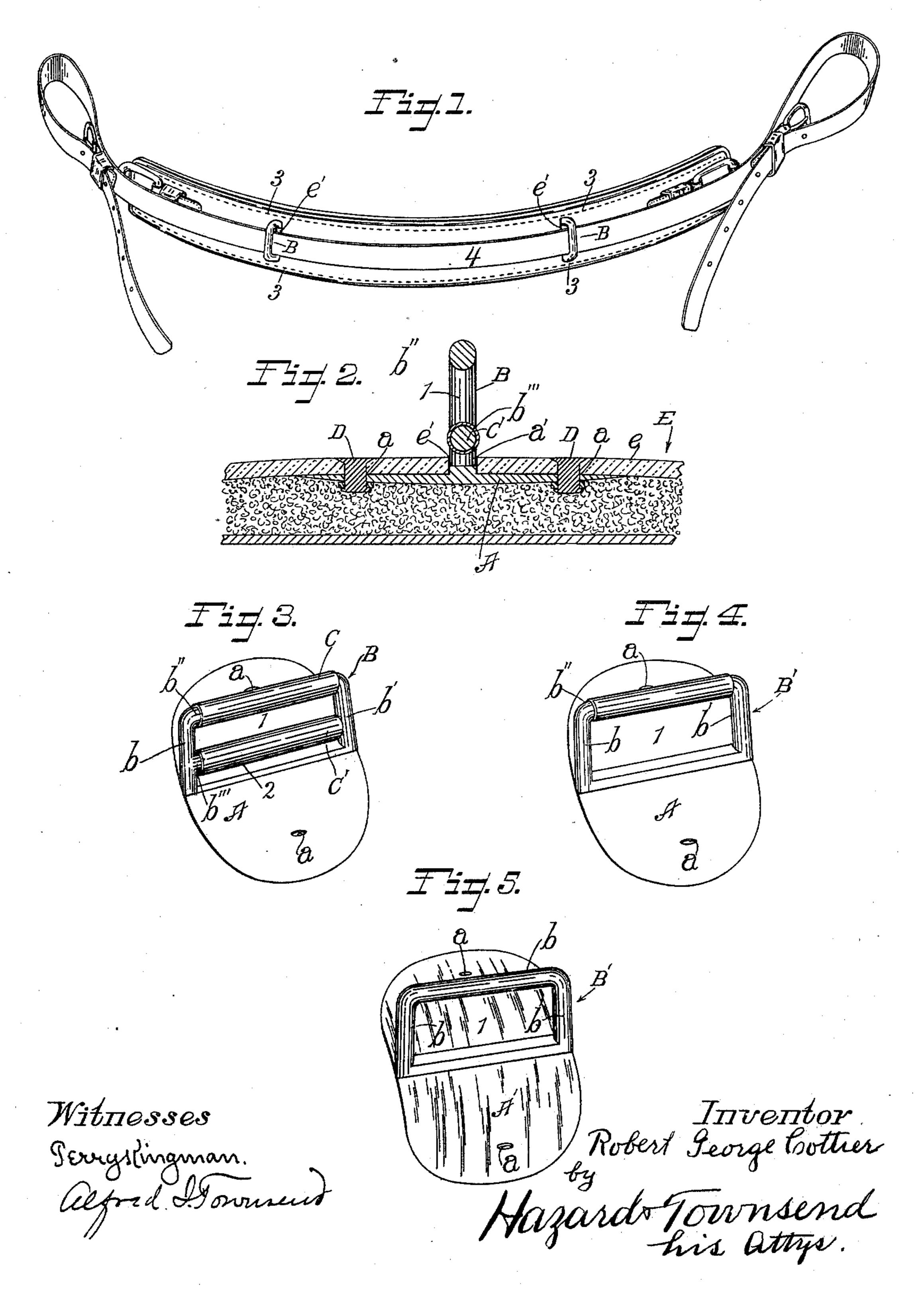
(No Model.)

R. G. COTTIER. HARNESS LOOP.

No. 600,478.

Patented Mar. 8, 1898.



United States Patent Office.

ROBERT GEORGE COTTIER, OF LOS ANGELES, CALIFORNIA.

HARNESS-LOOP.

SPECIFICATION forming part of Letters Patent No. 600,478, dated March 8, 1898.

Application filed July 2, 1896. Serial No. 597,876. (No model.)

To all whom it may concern:

Be it known that I, ROBERT GEORGE COT-TIER, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles 5 and State of California, have invented a new and useful Harness-Loop, of which the following is a specification.

My invention relates to loops for use in different places on harness, and while it is more so particularly designed for use on the saddlegirth for attaching the slip girth to the inner girth, it is applicable to other parts of the harness; for instance, for a shaft tug or the bottom of a saddle.

In the present manner of making girths with leather loops for the slip band the loop is cut in the process of sewing and is liable to tear out and when it has broken loose it is very difficult to repair the girth.

An object of my invention is to provide a girth loop which will be free from this objection. Also to provide for less friction between the slip band and the girth. Also to reduce the expense. Also to give the harness a 25 neater appearance. A girth provided with my improvement can be machine sewed all the way round.

The accompanying drawings illustrate my invention.

30 Figure 1 is a perspective view of a girth provided with my invention, a fragment of the slip band being shown in position. Fig. 2 is a sectional elevation of one form of my invention applied to a girth, a fragment of 35 which is shown in section. Fig. 3 is a view of another form of the loop with two antifriction rollers. Fig. 4 is a perspective view of another form of my newly invented loop. Fig. 5 shows the loop without any antifric-40 tion roller.

My newly invented harness loop consists of a base plate A (A'), a projecting loop B (B') opposite edges of one side of the base plate, 45 and one or more cross bars b'' (b''') connecting the standards of the loop, a space or spaces 1, 2, being provided between the bar or bars and the plate. The space 1 is for the slip-band 4 or other strap. The cross bar or 50 bars may or may not be provided with antifriction rollers (C C' respectively) and the lower cross bar b''' may be omitted if desired.

On the billet of a shaft tug and on the bottom of a saddle the lower bar b''' would preferably be omitted, but on the girth it is preferred to 55 use the two bars and also to provide the lower bar with an antifriction roller to hold the slip-band away from the layer of the girth.

a indicates rivet holes through which rivets D are inserted for the purpose of riveting the 60 plate of the loop to the layer e of the band E or to the bottom of saddle or to the bottom of the shaft tug, as the case may be. This fastens the harness loop in place and holds the layer in place.

The purpose of the antifriction rollers on the cross bars for use with the slip-band is to allow a freer movement of the slip band.

In practice, a transverse slot e' is cut through the layer at the place where the loop is de- 70 sired and the projecting loop B is passed through the same from inside outward and the plate is brought snug against the inside of the layer and rivets are inserted through the rivet holes a and the layer and then fas- 75 tened.

The base plate is made sufficiently narrow to allow room for sewing by a machine between its edges and the edges of the layer as at 3, Fig. 1. The rivets and plate hold the 80 middle of the layer from pulling to spread the slot e'.

The base plate may be straight as indicated at A in Fig. 2, or it may be curved as indicated at A' in Fig. 5. The straight form is 85 preferable for the girth, while the curved form is preferable for the shaft tug. The plate preferably tapers in cross section toward the ends so as to give a snugger fit to the curving layer of the girth.

The purpose of the cross bar b''' with or without the antifriction roller C' is to hold the slip-band away from the face of the layer and this allows freer movement of the slipcomposed of standards b b' projecting from | band and it also prevents any wearing or 95 marring of the layer by the movement of the slip-band; and the friction of the slip-band on the roller being less than it would be on the layer it will not be marred as it would be if allowed to rub on the layer. a' indicates 100 a projecting ridge between the bases of the standards of the projecting loop. This ridge fits in the slot e' made in the layer. It also strengthens the plate at the place where the

projecting loop is attached. It may be used or omitted as desired, but I prefer to use it.

Now, having described my invention, what I claim as new, and desire to secure by Letters 5 Patent, is—

The combination of the layer provided with a slot; the plate with projecting loop and ridge on one side and provided with rivet

holes near the ends of the plate and arranged with the ridge in the said slot; and rivets ro through the layer and the rivet holes.

ROBERT GEORGE COTTIER.

Witnesses:

JAMES R. TOWNSEND, ALFRED I. TOWNSEND.