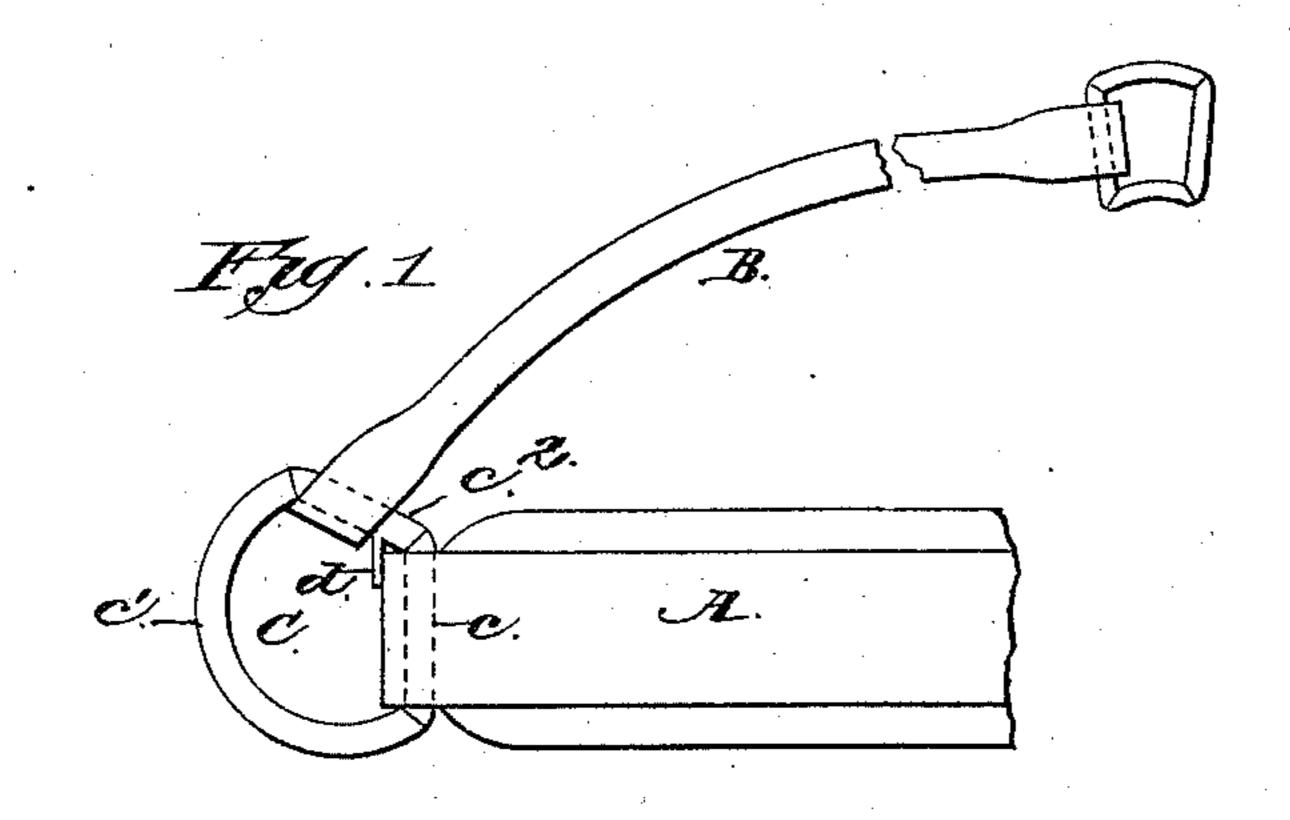
(No Model.)

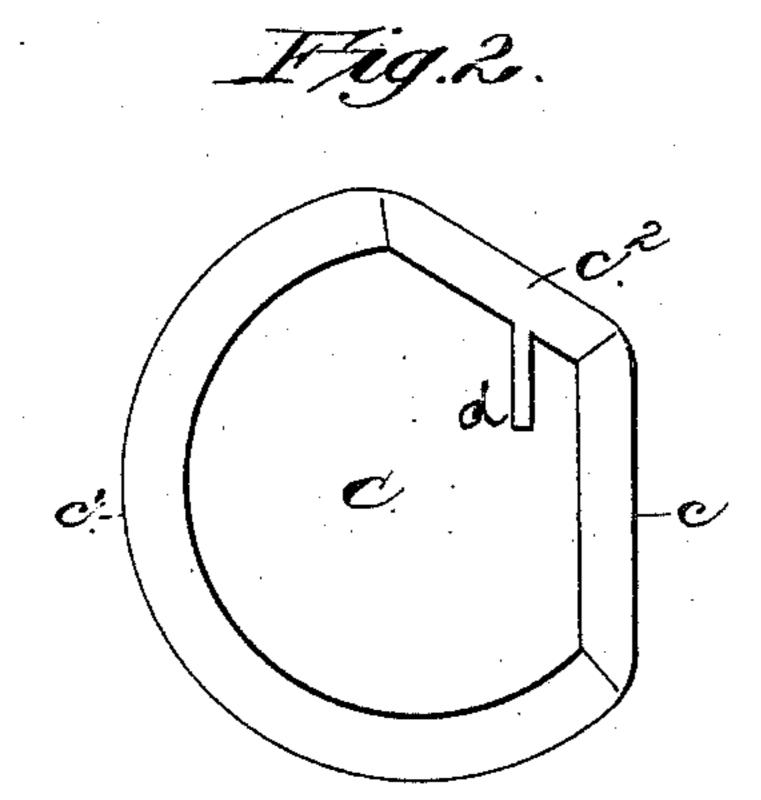
E. BARNARD.

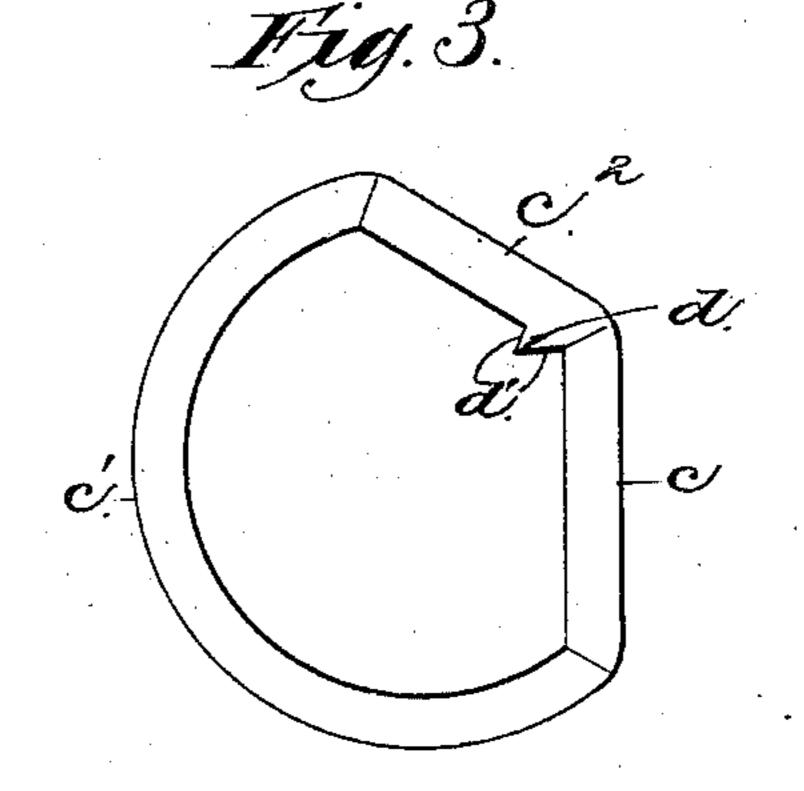
HARNESS LOOP.

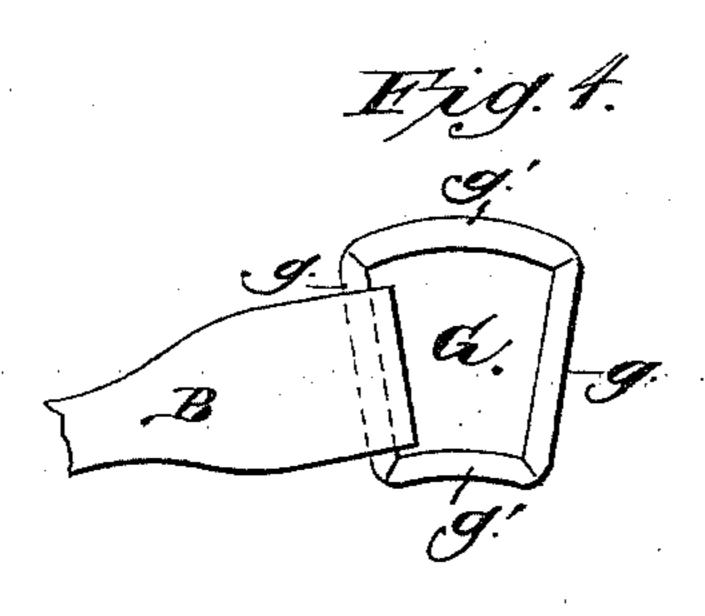
No. 341,717.

Patented May 11, 1886.









Witnesses

Houter Derukan Inventor

E. Barnard

By Fred Attorneys

Cachoutles

UNITED STATES PATENT OFFICE.

EDWARD BARNARD, OF ROME, NEW YORK.

HARNESS-LOOP.

SPECIFICATION forming part of Letters Patent No. 341,717, dated May 11, 1886.

Application filed March 4, 1886. Serial No. 194,004. (No model.)

To all whom it may concern:

Be it known that I, EDWARD BARNARD, a citizen of the United States, residing at Rome, in the county of Oneida and State of New 5 York, have invented new and useful Improvements in Harness-Loops, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to improvements in to harness-loops; and it consists of the peculiar and novel construction of parts, substantially as hereinafter fully set forth, and specifically

pointed out in the claims.

The primary object of my invention is to 15 provide an improved loop that is designed to connect the ends of a breeching-strap with the brace-strap of a harness, and which shall bring a straight draft upon the breeching-strap, thus reducing the wear upon the straps and ren-

20 dering them more durable.

A further object of the invention is to provide means whereby the ends of the brace and breeching straps are prevented from coming in contact, so that the wear on the ends of the 25 straps, which has been ordinarily caused by the friction generated by the straps rubbing together, is avoided, my improved loop being also very simple and durable in construction, cheap and inexpensive of manufacture, and 30 thoroughly effective for the purposes designed.

In the accompanying drawings, Figure 1 is a view of so much of a breeching and brace strap having my invention applied thereto as is necessary for a proper understanding of the inven-35 tion. Fig. 2 is a view of the improved loop having the lug or stud for preventing contact between the straps. Fig. 3 is a view of the loop detached from the straps and having the lug or stud. Fig. 4 is a view of the loop connecting 40 the free ends of the brace-straps to the hip-

strap of the harness.

Referring to the drawings, in which like letters of reference indicate corresponding parts in all the figures, A designates the breeching-45 strap of a harness, and B the brace-straps, connected to the ends of the breeching-strap by means of my improved loop C. This loop comprises a straight bar, c, a curved bar, c', and a cross-bar, c^2 , arranged at an angle to and con-50 necting the ends of the straight and curved bars c c', all of which are cast or formed in one

piece of metal. One of these loops is provided between the point of connection of each end of the breeching strap and the brace-straps, one end of the breeching-strap being connected to 55 the straight bar c of the loop, and the end of the brace-strap connected to the angle-bar c^2 of said loop, whereby a straight draft is insured between the two straps which reduces the strain and wear on the same.

In order to prevent the ends of the breeching and brace straps rubbing or chafing together at the points where they connect with the straight and angle bars of my improved loop, I provide an inwardly-projecting lug or 65 stud, d, which is formed with the angle-bar c^2 , at a point thereon intermediate of the line where the adjacent edges of the said straps meet when connected to their respective bars of the loop.

In Fig. 1 of the drawings the loop has the stud d, located on the angle-bar c^2 at a distance from the angle formed by the meeting ends of the bars $c c^2$ equal to the thickness of the breeching-strap at the point or line where 75 said strap is bent over the bar c, so that all play or movement of the strap is prevented, the distance between the angle formed by the ends of the bars c' c^2 coming together and the stud d being equal to the width of the brace-80 strap B, which is thus confined or held between said points.

In Fig. 3 of the drawings the stud or lug d is located at the angle formed between the bars c c^2 , and it provides two shoulders, d', which 85 are of sufficient width to adapt the adjacent edges of the straps H B to bear against or come in contact with the same without coming in contact with each other. The free ends of the brace-straps B are connected to a loop, 90 G, which comprises the two side bars, g, which are arranged at an angle to and converge toward each other at one end, and the end bars, g', all of which are cast or formed in one piece. The ends of the brace-straps B are connected 95 to the angularly-disposed bars g of the loop G, and to one of the cross-bars g' is connected one end of the hip-strap of the harness, a straight draft being insured through the brace and breeching straps by means of the peculiar dis- 100 position of the bars of the loops C.

Having thus fully described my invention,

what I claim as new, and desire to secure by Letters Patent, is—

1. A harness-loop comprising a straight bar, c, to which the breeching-strap is connected, a curved bar, c', a cross-bar, c², having the brace-strap connected thereto, and arranged at an angle to and connecting the bars c c', and a lug or stud, d, arranged between two adjacent edges of the breeching and brace straps, to hold to the same out of contact, substantially as described.

2. As an improved article of manufacture, a harness-loop cast in a single piece of metal

and comprising a straight bar, c, a curved bar, c', a cross-bar, c^2 , arranged at an obtuse angle 15 to and connecting one end of said bars cc', and a lug, d, located between or at the point of juncture of the bars cc', substantially as described, for the purpose set forth.

In testimony that I claim the foregoing as 25 my own I have hereto affixed my signature in

presence of two witnesses.

EDWARD BARNARD.

Witnesses:

K. S. PUTNAM, P. R. HUGGINS.