No. 702,199.

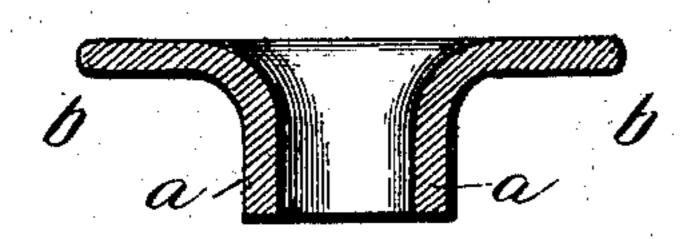
Patented June 10, 1902.

## I. W. GILES. EYELET.

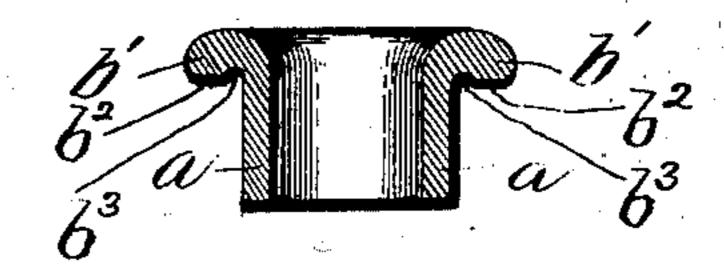
(Application filed July 29, 1901.)

(No Model.)

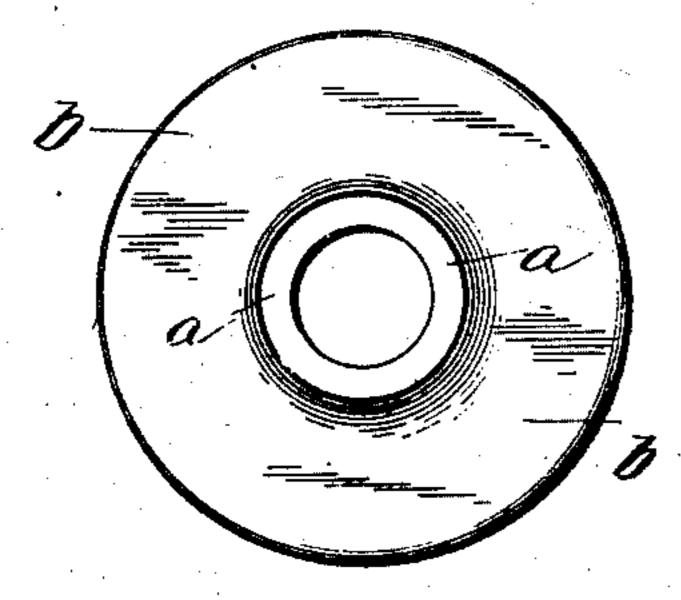
Hig.L.



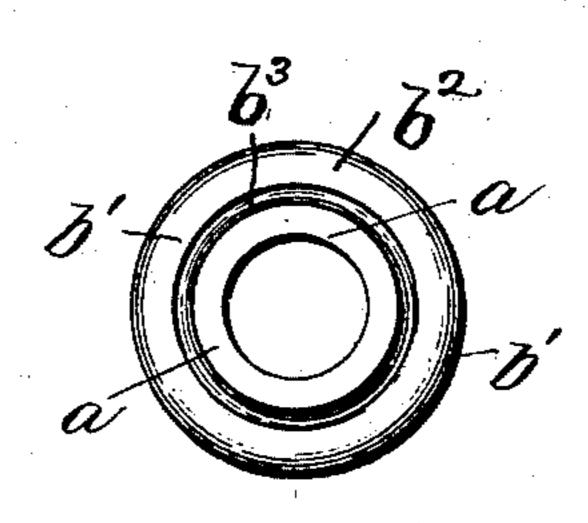
Mig.3.



Jug. R.



Jug. 4



WITNESSES:

Med Dadoso

INVENTOR Zsaac. W. Giles.

BY Munt

ATTORNEYS

## United States Patent Office.

ISAAC W. GILES, OF NEW BEDFORD, MASSACHUSETTS, ASSIGNOR TO ATLAS TACK COMPANY, OF FAIRHAVEN, MASSACHUSETTS, A CORPORATION OF NEW JERSEY.

## EYELET.

SPECIFICATION forming part of Letters Patent No. 702,199, dated June 10, 1902.

Application filed July 29, 1901. Serial No. 70,114. (No model.)

To all whom it may concern:

Be it known that I, ISAAC W. GILES, a citizen of the United States, and a resident of New Bedford, in the county of Bristol and State of Massachusetts, have made certain new and useful Improvements in Eyelets, of which the following is a specification.

My invention is an improved eyelet adapted for general use, and particularly for boots

to and shoes.

As usually constructed eyelets have a uniform thickness of metal in both the tubular body and the lateral portion or flange. In attaching the eyelet to a boot or shoe the 15 flange is bent or curved down, and in such operation it is liable to be changed and distorted in form by the pressure which is necessarily applied by the instruments employed for the purpose. To avoid this result, vari-20 ous expedients or modes of construction have been adopted. I have devised a method of construction whereby a novel eyelet is produced that will not become distorted or rendered unsymmetrical in shape in the setting 25 operation. I first produce an eyelet with a flange of unusual width or in excess of that required for the finished article. This flange is then rolled, swaged, or otherwise upset, so as to compress the metal upon itself, and 30 thereby thicken it, whereby it is strengthened so as to resist distortion in setting the eyelet. In its completed form the flange is about onethird thicker than the body of the eyelet and has a rounded upper side and is separated 35 on the under side from the body by a narrow groove. By this construction the thickened flange is adapted to be upset or pressed down in a way which would not be practicable without the provision of the groove. The latter 40 also affords space for the fabric to which the eyelet is applied, so that when the latter is compressed or upset the eyelet retains its hold upon the goods to greater advantage.

My improved eyelet is represented in ac-

45 companying drawings, in which—

Figure 1 is an enlarged central longitudinal section of the blank or primary form of the eyelet, and Fig. 2 is a plan view of the same. Fig. 3 is a central longitudinal section of the

eyelet in its perfected form, and Fig. 4 is a 50 plan view of the same.

The tubular body a has a uniform thickness in the primary form of the eyelet shown in Figs. 1 and 2, as well as in its perfected form as shown in Figs. 2 and 4

form, as shown in Figs. 3 and 4.

The flange b, Figs. 1 and 2, has a much greater width than in eyelets of the usual construction. This provides an excess of metal, which is rolled, swaged, or otherwise upset by suitable dies and forced back upon 60 itself to form the thickened and shorter curved flange b', Figs. 3 and 4, required for the complete article. Such flange b' is strong enough to avoid distortion under the action of the instruments by means of which the 65 eyelet is set or placed in position on the leather or other material whereon it is to be used. It will be noticed that the under side of the flange b' is flat at  $b^2$  and that an annular crease or groove is provided at  $b^3$  in the 70 under side of the flange b', immediately adjacent to the body  $\alpha$ , which allows the material to expand and gives a secure hold in the use of the eyelet.

Another important advantage is that the 75 flange b' has a broader edge or bearing-surface for contact with the leather. It will also hold more securely the coats of Japan var-

nish that may be applied to it.

It is practicable to produce the flange b by 80 means of a milling-wheel at one operation; but I preferably employ both a milling-wheel and dies for the purpose, the metal being forced backward toward the throat of the eyelet and so thickened and shaped into the 85 form represented in Figs. 3 and 4.

What I claim is—

As an improved article of manufacture, the eyelet composed of a tubular body having uniform thickness, and a curved flange hav- 90 ing a greater thickness, and curved on its upper side and separated from the body by a narrow groove, as and for the purpose specified.

ISAAC W. GILES.

Witnesses:

WILLIAM L. KELLEY, FRED W. PALMER.