No. 612,848. Patented Oct. 25, 1898.

# E. KEMPSHALL.

## EYELET.

(Application filed Apr. 25, 1895.)

(No Model.)

Fig. 1.

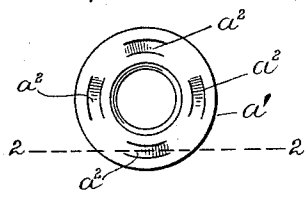



Fig. 3.

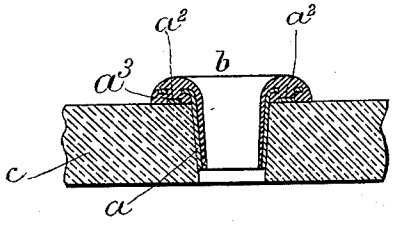



Fig. 2.

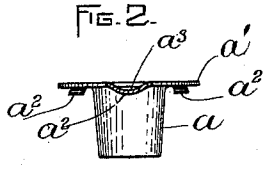



Fig. 4.

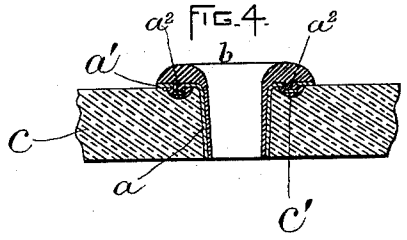
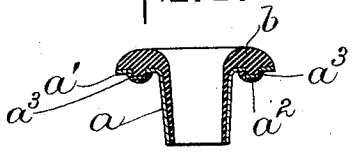



Fig. 5.




WITNESSES.
A. D. Harrison
Rollin Abell.

INVENTOR:
E. Kempshall
by Wright Brown & Quinby
Attys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

# UNITED STATES PATENT OFFICE.

ELEAZER KEMPSHALL, OF SHARON, MASSACHUSETTS, ASSIGNOR TO THE BOSTON FAST COLOR EYELET COMPANY, OF BOSTON, MASSACHUSETTS.

## EYELET.

SPECIFICATION forming part of Letters Patent No. 612,848, dated October 25, 1898.

Application filed April 25, 1895. Serial No. 547,083. (No model.)

*To all whom it may concern:*

Be it known that I, ELEAZER KEMPSHALL, of Sharon, in the county of Norfolk and State of Massachusetts, have invented certain new and useful Improvements in Eyelets, of which the following is a specification.

This invention relates to eyelets the heads or exposed portions of which are covered with a material such as pyroxylin, which is molded upon the eyelet while in a plastic condition and subsequently becomes rigid.

The invention has for its object to provide certain improvements in eyelets of this class whereby the molded head may be readily applied to the portion of the eyelet with which it comes in contact and will be securely engaged with the eyelet, so as to form an annular head of the desired form.

The invention consists in the improvements which I will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a top view of my improved eyelet before the covering is applied. Fig. 2 represents a section on line 2 2 of Fig. 1. Fig. 3 represents a sectional view showing the eyelet and its covering supported by the die-plate which holds the eyelet during the covering operation. Fig. 4 represents a view similar to Fig. 3, showing a different form of die-plate. Fig. 5 represents a sectional view of the completed eyelet as formed by the employment of the die-plate shown in Fig. 4.

The same letters of reference indicate the same parts in all the figures.

In the drawings, $a$ represents the body of the eyelet, which is of substantially cylindrical form and is preferably slightly tapered, as shown, and $a'$ represents the flange, which stands in a plane substantially at right angles to the direction of the body $a$.

In carrying out my invention I force inwardly from the body of the flange $a'$ a series of loops $a^2$, which are severed from the flange along their edges, but remain connected therewith at their ends, said loops being offset sufficiently to form openings $a^3$ between their edges and the body of the flange.

The loops $a^2$ are intended to bear upon the surface of a die-plate $c$, which supports the eyelet while the annular head or covering $b$ is being applied to the flange thereof. When it is desired to apply the covering to all parts of the bottom of the flange and to the adjacent portion of the external surface of the body thereof, the die-plate has a flat upper surface, as shown in Fig. 3, the loops $a^2$ resting on said surface and raising the flange above the die-plate, so that the material has access to all parts of the under surface of the flange, the material flowing through the spaces between the loops, and also flowing through the openings $a^3$, so that it has access to all parts of the space between the flange and the die-plate.

When it is desired simply to lock the head or covering to the flange without covering the entire under surface thereof, I employ a die-plate $c$, having an annular groove $c'$, which is formed to receive the loops $a^2$ and permit the under side of the flange to bear upon the upper surface of the plate at opposite sides of said groove. The space below the flange for the reception of the liquid is therefore limited to the interior of the groove, the material filling said groove, as shown in Fig. 4, forming in conjunction with the lower portion of the loops $a^2$ a rib on the under side of the flange, said rib being adapted to indent and enter the outer surface of a piece of leather or other compressible material to which the eyelet is applied. It will be seen that the material is permitted by the groove $c'$ to flow outwardly from the openings $a^3$ at the edges of the loops $a^2$ sufficiently to interlock the covering with the flange.

It will be observed that the material of the head or cover is molded upon both the upper and under sides of the flange and covers the loops $a^2$, so that the under side of the flange has a neat and finished appearance.

I do not claim, broadly, in this application an eyelet the under side of whose flange is provided with projections, such construction being claimed by me in my application Serial No. 547,082 of even date with this application, the claims of this application being limited to the construction and its equivalents as set forth in said claims.

I claim—

1. An eyelet having an outwardly-project-

ing flat flange which is in a plane substantially at right angles with the body or tube of the eyelet, and is provided with loop-shaped bosses projecting from its under side within the margin of the flange, each boss being separated from the metal of the flange by an outer and an inner opening, and a molded head covering the outer surface of the flange, extending through said openings, and covering the said bosses below the flange.

2. An eyelet having an outwardly-projecting flat flange provided with loop-shaped bosses projecting from the inner side within the margin of the flange, the edges of said bosses being separated from the metal of the flange by openings, a molded annular head formed on and covering the outer side of the flange, extending through said openings, and formed below the flange as an annular rib covering said bosses, and projecting from the under side of the flange.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 22d day of April, A. D. 1895.

ELEAZER KEMPSHALL.

Witnesses:
C. F. BROWN,
A. D. HARRISON.