

S. W. YOUNG.

PROCESS OF MAKING EYELETS.

No. 183,878.

Patented Oct. 31, 1876.



FIG. 1.



FIG. 2.



FIG. 3.



FIG. 4.



FIG. 5.



FIG. 6.



FIG. 7.

WITNESSES.

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SOLOMON W. YOUNG, OF PROVIDENCE, RHODE ISLAND.

IMPROVEMENT IN PROCESSES OF MAKING EYELETS.

Specification forming part of Letters Patent No. **183,878**, dated October 31, 1876; application filed July 21, 1876.

To all whom it may concern :

Be it known that I, SOLOMON W. YOUNG, of the city and county of Providence, in the State of Rhode Island, have invented a new and Improved Process for Making Eyelets; and declare the following to be a specification thereof.

In the accompanying drawings, Figures 1 and 2 show the old method; and Figs. 3, 4, 5, 6, and 7 show my improved method, of forming eyelets.

Heretofore eyelets have been made by drawing out the stock into cup shape, (see Fig. 1,) and then cutting out the bottom of the cup, (see Fig. 2,) and finally cutting out from the stock the eyelets thus formed. By this process, it will be observed that the cup must be drawn out to be of the same length as the eyelet itself, and also that the disk or planchet of metal cut from the bottom of the cup becomes waste.

My improved process relates to the manufacture of the notched or serrated eyelets invented by me, and for which invention I have already made application for Letters Patent.

It effects a great saving in stock, because, first, the cup is not drawn out to so great a length as by the former process; and, secondly, the bottom of the cup is not cut out at all, but wholly utilized to form the prongs or points of my improved eyelet thereby saving all the waste now suffered in this respect.

I strike up my cups about two-thirds as long as in the usual process. (See Fig. 3.) In the

next operation, a plunger having on its end sharp diametrical cutters enters the cup, and, striking within and against a flat-bottomed die, cuts the bottom of the cup partially through, forming transverse lines, crossing each other at the center in a star-shaped figure.

Fig. 4 is a vertical section on the line of one of these diametrical or transverse cuttings; and Fig. 5 shows the cup from above, with the bottom cut as described.

In the next operation, a plunger having a sharp conical point strikes the center of the cup-bottom at the place where the diameters intersect, pierces the same, and, as it continues on, causes the metal to divide along these lines, and spreads it apart and outwardly, to form a continuation of the body of the eyelet, and the notches or serrations peculiar to my newly-invented eyelet, as shown in sections in Fig. 6, and in perspective in Fig. 7. The eyelet thus formed is then cut out and cleared from the stock in the usual manner.

I claim as a novel and useful invention, and desire to secure by Letters Patent—

The improved process of making eyelets herein described, consisting substantially in cutting diametrically the bottom of the cup, and puncturing and spreading apart the same, as and for the purpose specified.

SOLOMON W. YOUNG.

Witnesses:

H. A. MCKENNEY,
L. ASPINWALL.