

(No Model.)

A. LATHAM.

DIE FOR COVERING EYELETS WITH PLASTIC MATERIAL.

No. 568,360.

Patented Sept. 29, 1896.

Fig. 1.

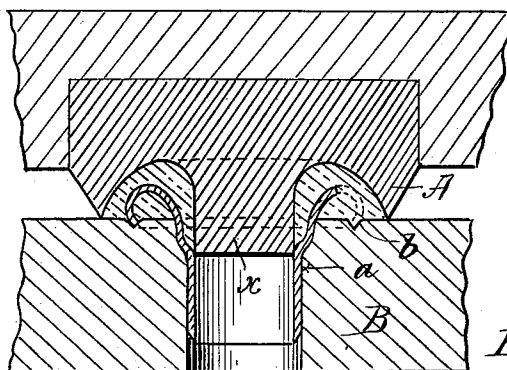


Fig. 2.

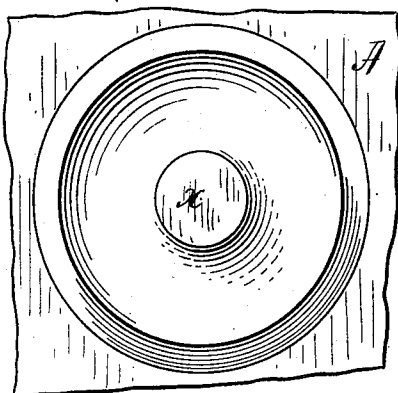


Fig. 3.

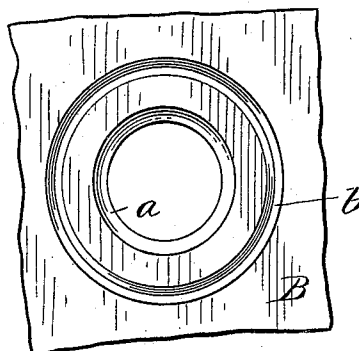


Fig. 4.

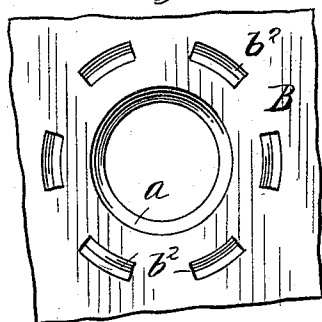


Fig. 5.

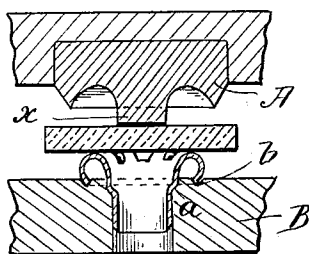


Fig. 6.

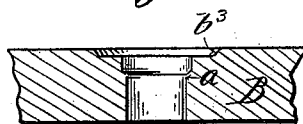
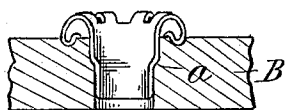


Fig. 7.



Witnesses:

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UNITED STATES PATENT OFFICE.

ALBERT LATHAM, OF SPRINGFIELD, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO JAMES WILLIAM NOURBOURN, OF SAME PLACE.

DIE FOR COVERING EYELETS WITH PLASTIC MATERIAL.

SPECIFICATION forming part of Letters Patent No. 568,360, dated September 29, 1896.

Application filed December 13, 1895. Serial No. 572,018. (No model.)

To all whom it may concern:

Be it known that I, ALBERT LATHAM, a citizen of the United States, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented certain new and useful Improvements in Dies for Covering Eyelets with Plastic Material, of which the following is a full, clear, and exact description.

10 This invention relates to improved dies for covering eyelets and lacing-studs with a plastic material, such as pyroxylin, and it particularly relates to dies for covering eyelets or studs substantially such as patented to me 15 August 13, 1895, No. 544,311, and having at the head or top thereof downturned prongs or hooks, the object of the invention being to provide the eyelet-receiving die member of the set of dies employed with a suitable surface or surfaces especially for engaging the 20 prongs or hooks while the eyelet is in the die, (and while the pressure and covering operations are in progress,) thereby restraining the hook-prongs against becoming distorted by the applied pressure and assuring uniformity 25 in the form of the heads of the eyelets.

The invention is fully described hereinafter in conjunction with the accompanying drawings, and is set forth in the claims.

30 Reference is to be had to the accompanying drawings, in which—

Figure 1 is a sectional view of a set of eyelet-covering dies as operating on an eyelet to cover same. The lower one of these dies is 35 constructed in accordance with this invention. Fig. 2 is a plan view of the upper die inverted. Fig. 3 is a plan view of the lower die. Fig. 4 is a plan view of the lower die of a construction modified in form but not in principle. 40 Fig. 5 is a sectional view similar to Fig. 1, but showing the eyelets separated, as previous to the pressure and covering operation. Figs. 6 and 7 are sectional views comprising illustration of modified forms of the lower die, which 45 are, however, made under this invention.

The invention consists in a set of covering-dies for applying the plastic top or head to an eyelet or stud having marginal depending hoops or prongs, of the eyelet-receiving die 50 member of such set of dies, having, surrounding the orifice of the socket or depression into

which the tube or shank of the eyelet rests, a surface or surfaces for restraining the hook-prongs against distortion, especially against spreading outwardly, although preferably 55 also against undue inward deflection.

A represents the upper covering or head-forming die, while B is the lower and eyelet-receiving die, having, in practice, a plurality of the sockets or holes *a*, in which the shanks 60 of the eyelets rest.

The prong-restraining surface of the lower die is essentially constituted by a surface against which each of the prongs may bear while in such lower die, and is preferably constituted by the annular V channel or groove 65 *b*, concentrically surrounding the orifice of the eyelet-receiving socket, into which the lower ends of the depending hook-prongs may bottom. This continuous annular groove 70 is preferable because the eyelets may be placed into the sockets *a* of the dies B promiscuously, no care being necessary to adjust the prongs, as would be the case in the employment of the die having the restraining-surfaces formed separated for the individual prongs, as seen at *b*² in Fig. 4. 75

Inasmuch as the chief aim is to prevent outward distention of the prongs, a restraining annular shoulder, as seen at *b*³ in Fig. 6, (or 80 a series of outlying shoulders,) is a useful provision. To prevent the outward distention of the hooks or prongs and yet permit them to curl inwardly, the annular groove (or a series of the individual grooves) into which 85 the extremities of the prongs rest may, as seen in Fig. 7, be rather wide and of U or rounded form in transverse contour.

The projection *x* on the die member A, which has a punch-like operation down 90 through the plastic covering material, while a feature of my own devising, is not regarded as a portion of this invention, but constitutes in part the subject-matter of an application for Letters Patent of the United States filed 95 by me under date of January 6, 1896, Serial No. 574,499.

The provision within the top of the die B of the groove or a series of depressions for the reception of the bottoms of the prongs insures 100 in the finished eyelet the projection of such bottom portion of the prong below the sur-

face of the base of the head, all as fully set forth and claimed in an application for Letters Patent of the United States filed by me December 6, 1895, Serial No. 571,261.

5 I claim—

1. In a set of dies, for covering an eyelet or stud having at the top depending hook-prongs, an eyelet-receiving die having, surrounding the orifice of the socket in which
10 the shank of the eyelet rests, a surface or surfaces for restraining the hook-prongs against outward distention in the covering operation, and a covering or head-forming die, substantially as described.

15 2. In a set of dies, for covering an eyelet or stud having at the top depending hook-

prongs, a covering or head-forming die and an eyelet-receiving die having an eyelet-receiving socket, and having at its top surrounding the mouth of said socket, a circular groove 20 or channel which is of V shape whereby while the body of the eyelet is in said socket the extremities of the hook-prongs engage in said groove and are, by the walls thereof restrained against transversal displacement in 25 the head-covering operation, substantially as described.

ALBERT LATHAM.

Witnesses:

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