

(No Model.)

A. LATHAM.

DIE FOR APPLYING PLASTIC COVERINGS ON EYELETS.

No. 571,837.

Patented Nov. 24, 1896.

Fig. 1.

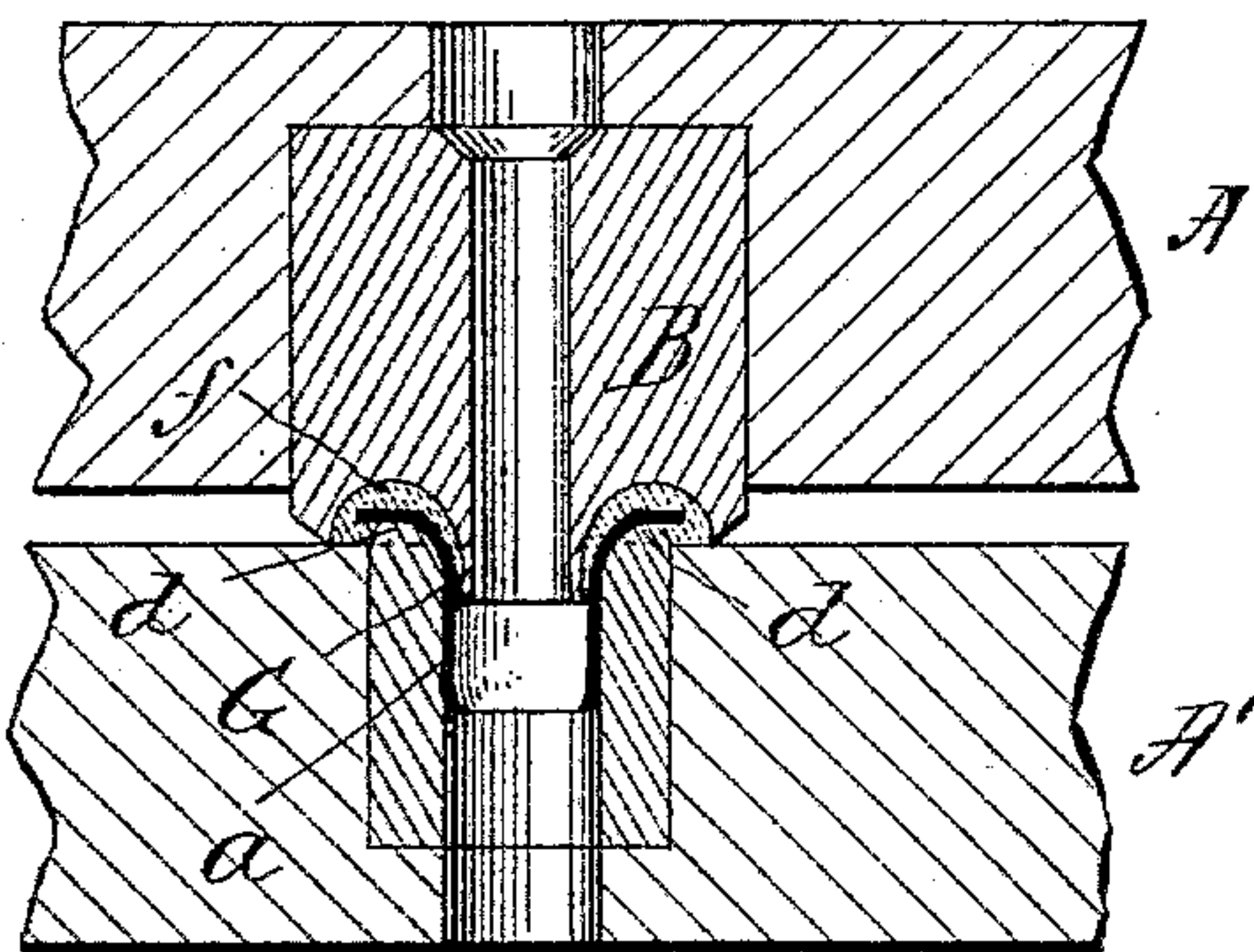


Fig. 3.

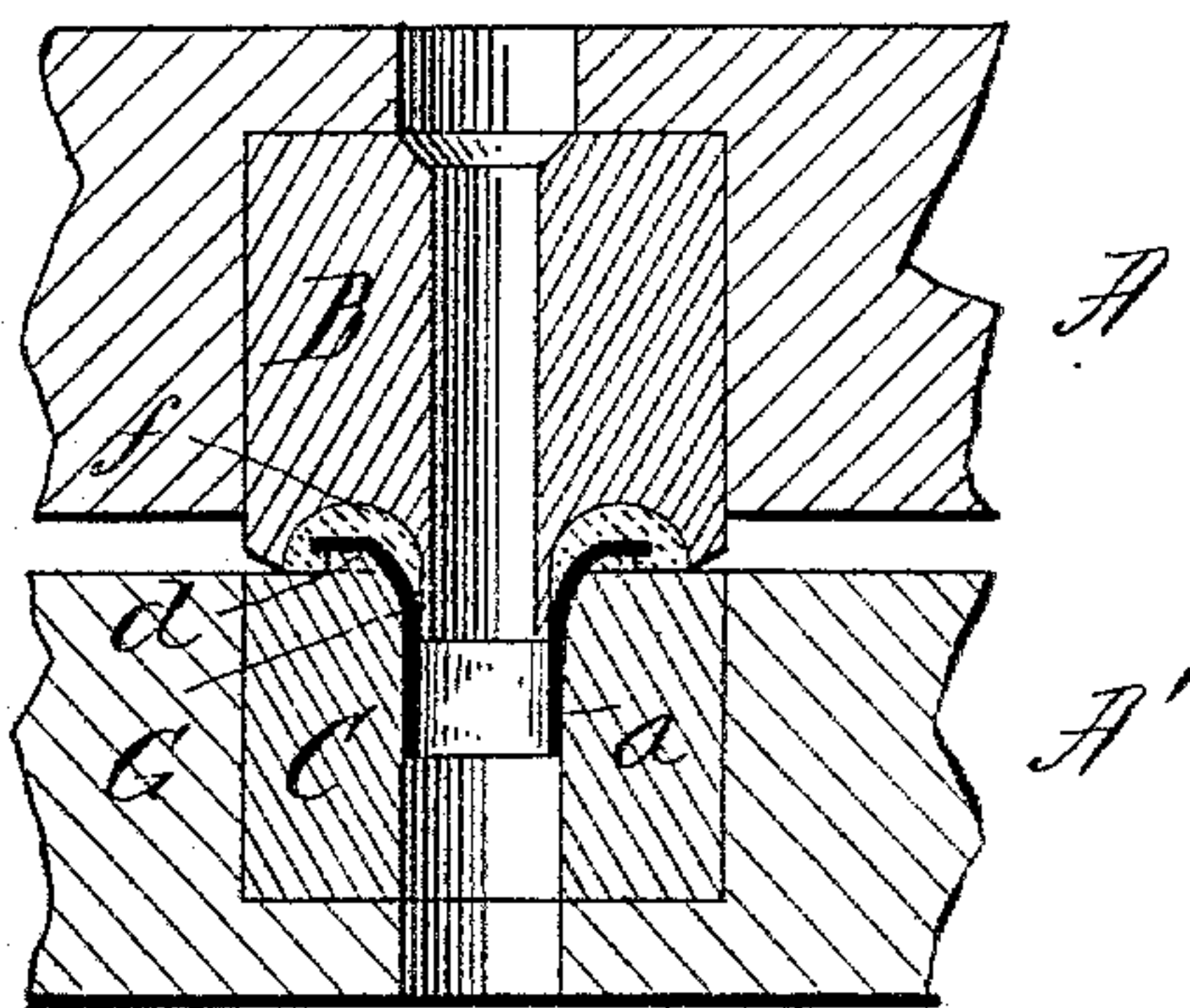


Fig. 2.

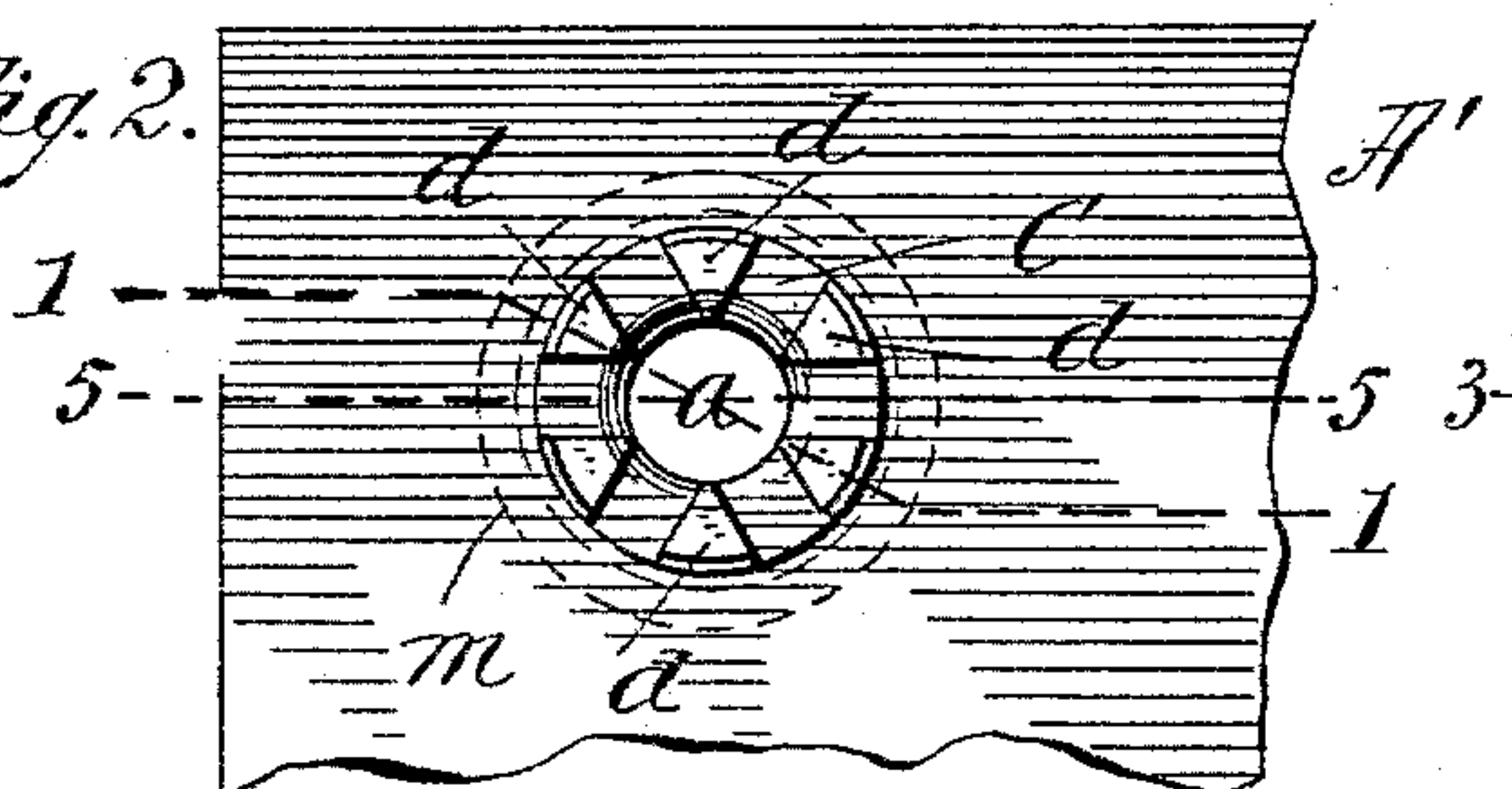


Fig. 4.

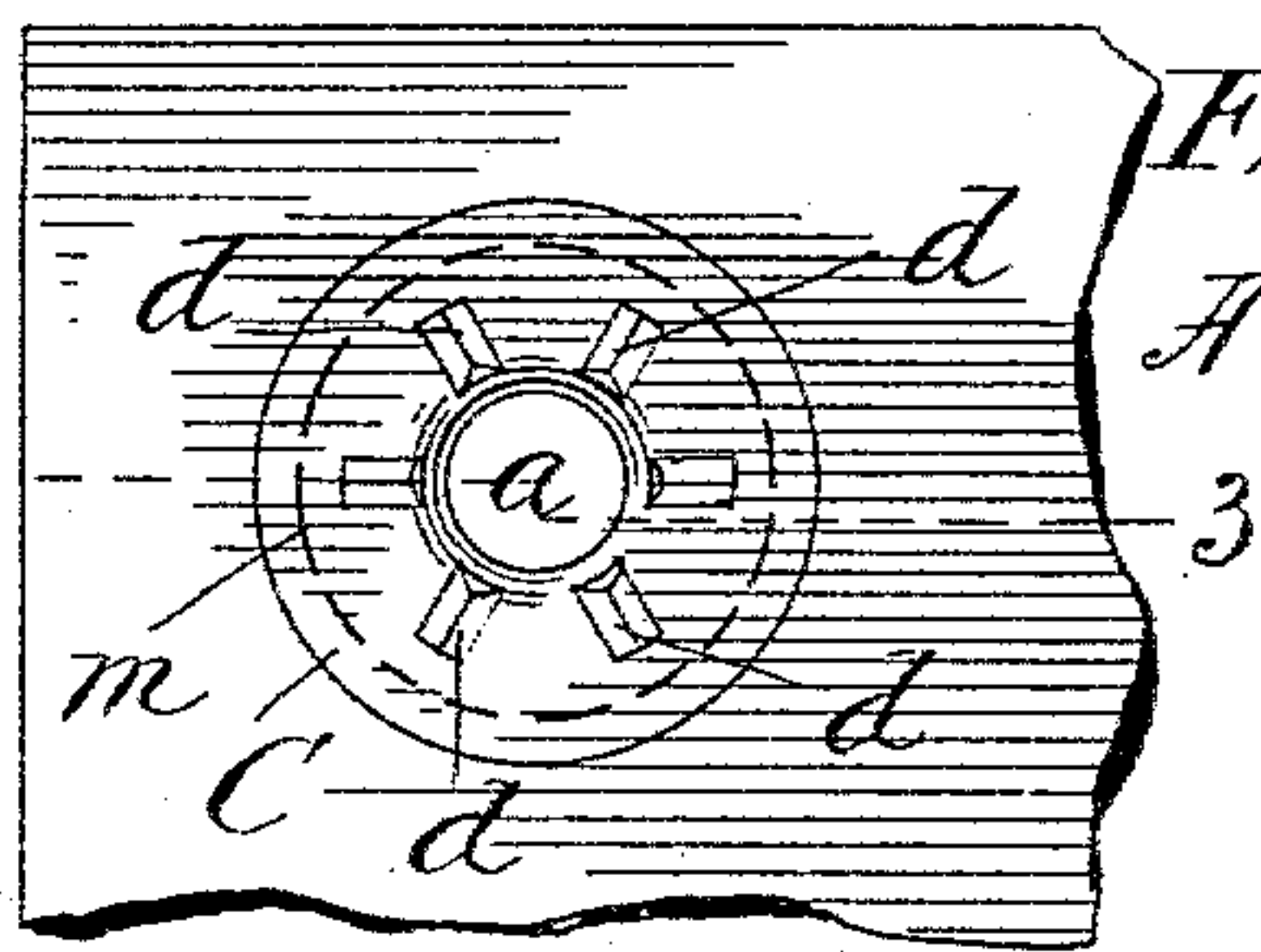


Fig. 5.

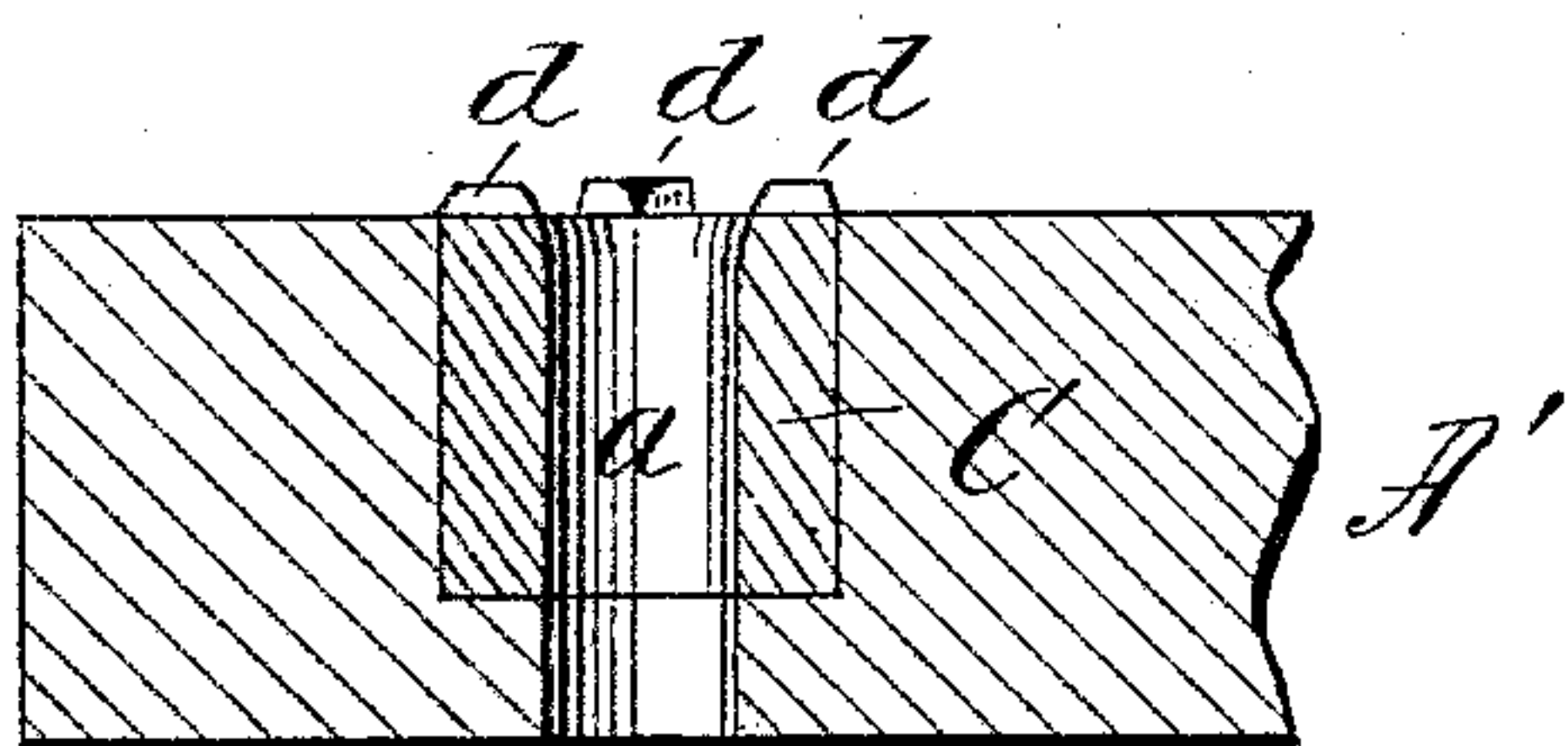


Fig. 6.

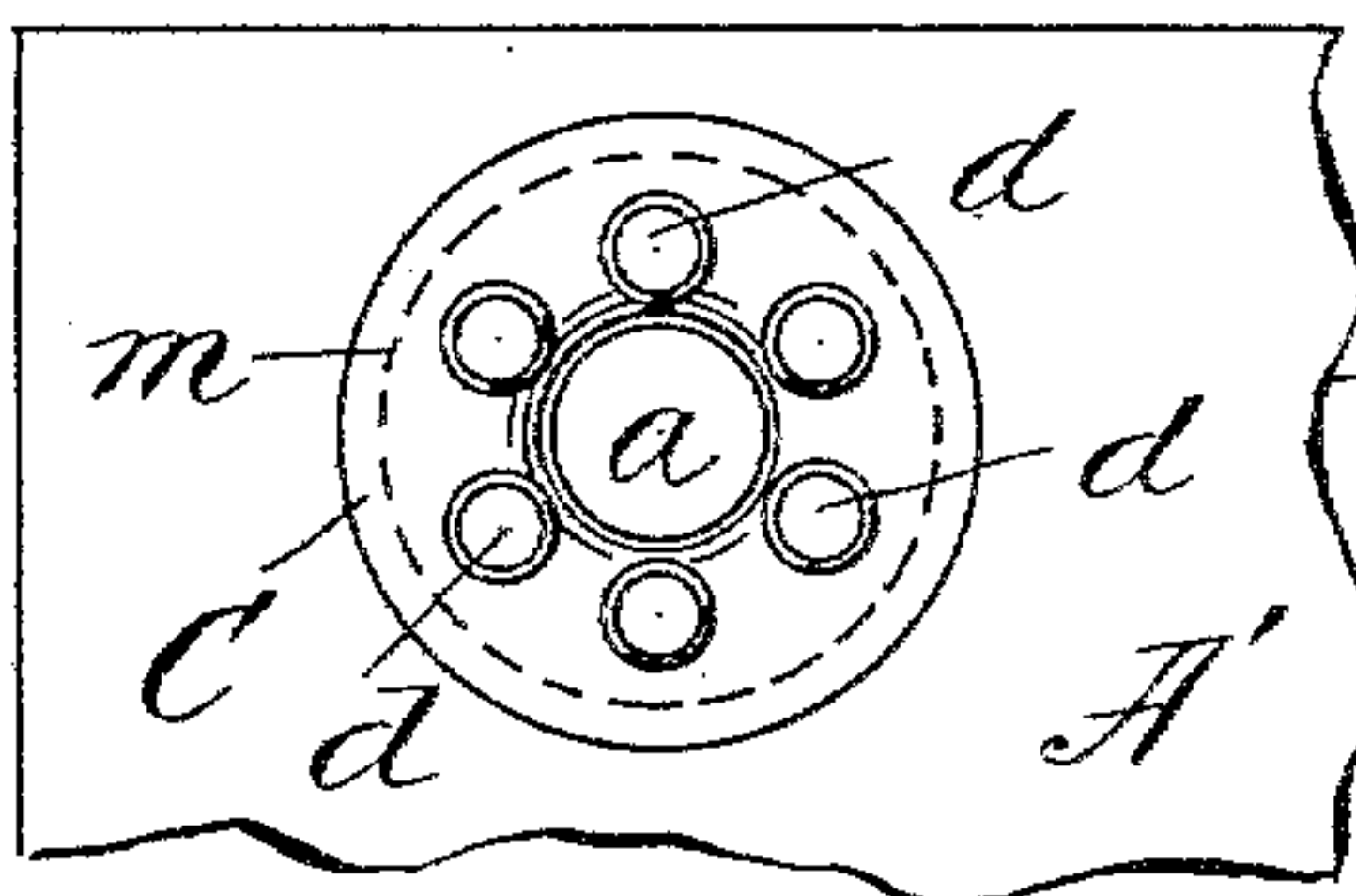
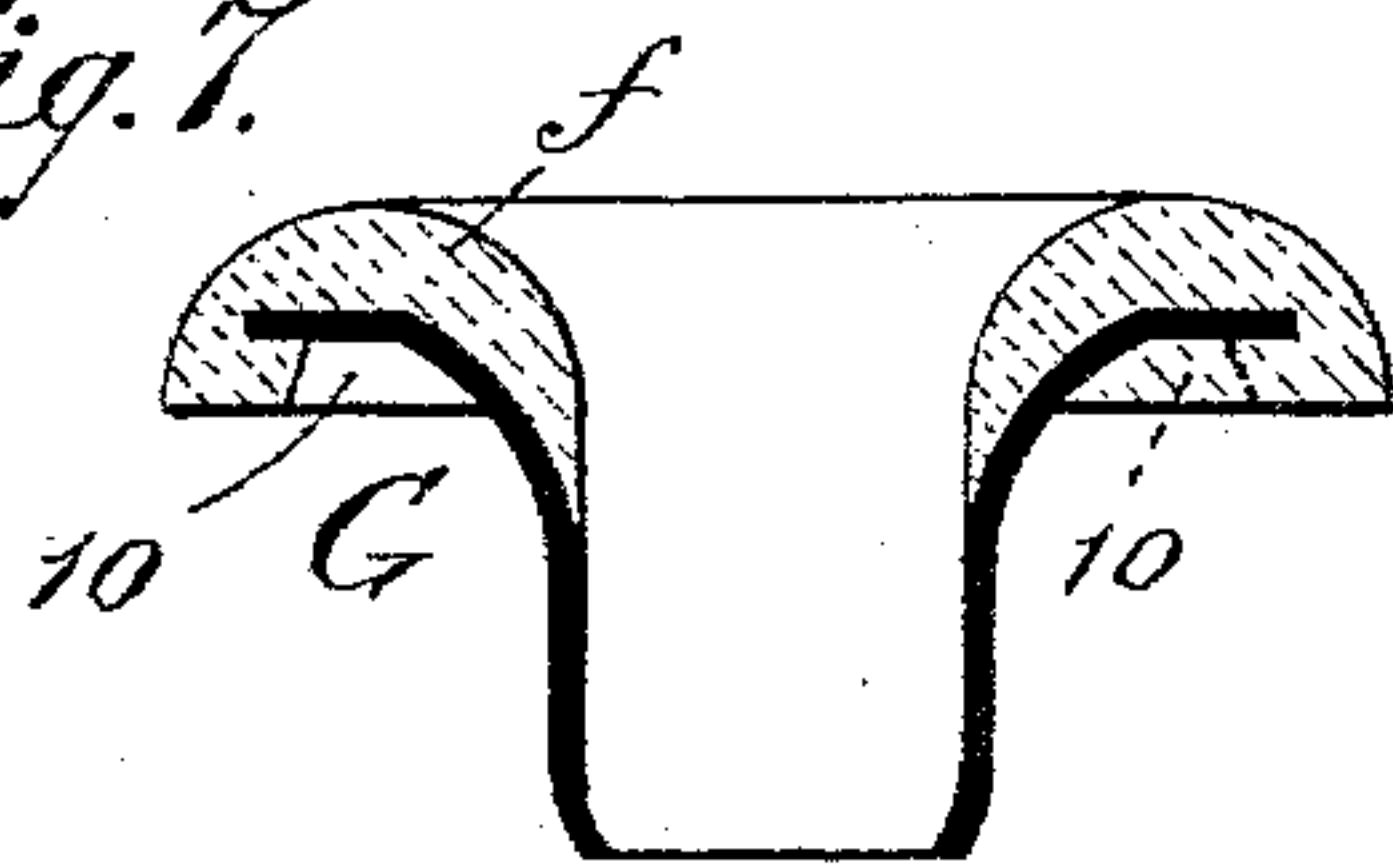
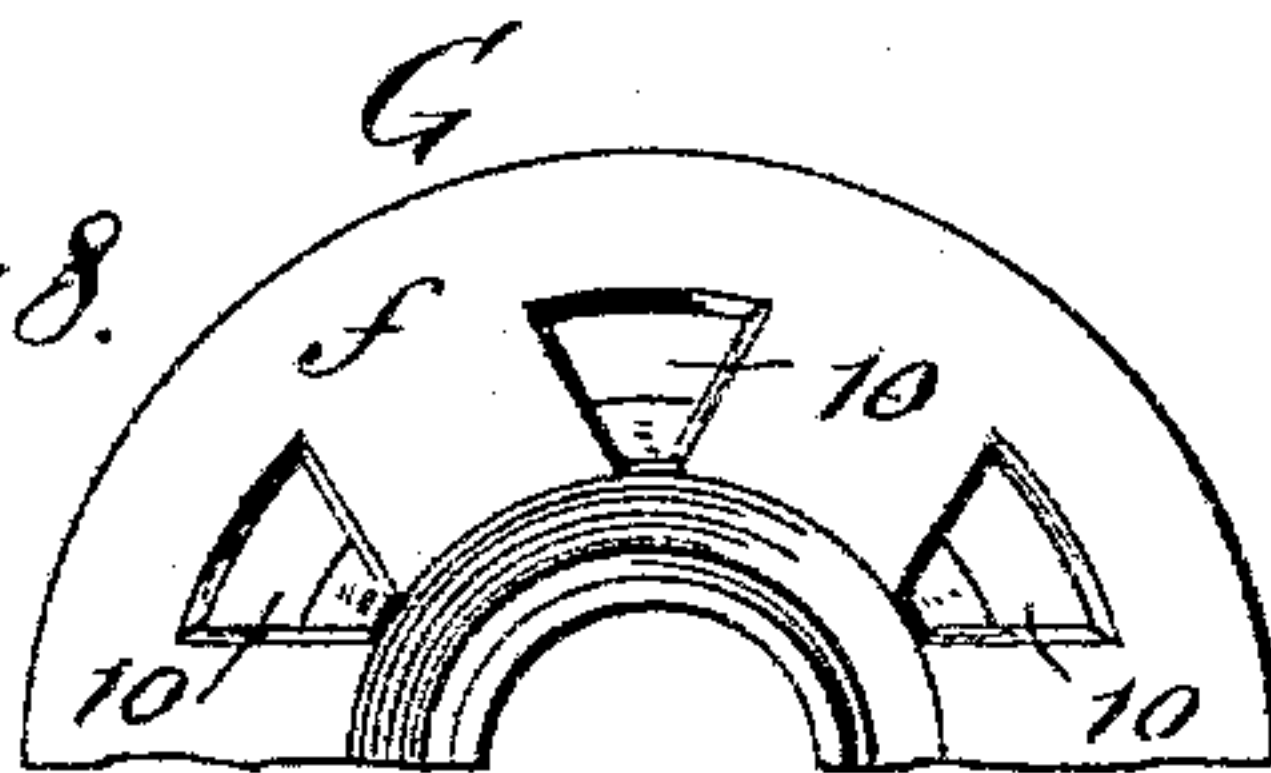


Fig. 7.



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Fig. 8.



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DIE FOR APPLYING PLASTIC COVERINGS ON EYELETS.

SPECIFICATION forming part of Letters Patent No. 571,837, dated November 24, 1896.

Application filed March 16, 1896. Serial No. 583,396. (No model.)

To all whom it may concern:

Be it known that I, ALBERT LATHAM, a citizen of the United States, and a resident of Springfield, in the county of Hampden and State of Massachusetts, have invented certain new and useful Improvements in Dies for Applying Plastic Coverings on Eyelets, of which the following is a specification.

This invention relates to improvements in dies for use in applying plastic coverings to the flanged tops or heads of eyelets.

The present improvements in dies relate more particularly to the lower die of the set, that is the one having a hole or socket for the reception of the tubular shank of the eyelet, and above and around the mouth of which the flange-head lies; and the principal object of the improvement is to provide in the lower die means whereby the flange-head of the eyelet will be properly supported during the covering operation to allow the plastic material to be molded around the edge of and under the flange, preventing the flange from being, under the extreme hydraulic pressure necessarily employed, forced down to the general plane or top surface of the receiving-die, whereby would be defeated in whole or degree the effectual head-covering operation; and another object of the invention is to assure the production of eyelets of uniformity as to their plastic covering, and which, moreover, possess, by reason of the peculiarities of the die, features of value which become especially apparent in the setting of the eyelets in the leather or fabric.

Other advantages accrue from the exercise of the improvements, as will hereinafter more fully appear.

The invention consists, in a set of eyelet-covering dies, in the combination, with the head-covering die, of the lower or eyelet-receiving die having the hole or socket therein adapted for the reception of the tubular eyelet-shank, and having at its top, arranged around the mouth of said socket and preferably, though not necessarily, inside of the area to be overlaid by the completed eyelet-head, several separated upstanding piers or projections upon which the flange-head of the eyelet rests and is efficiently supported against crushing or collapsing, allowing the

plastic material to flow around the edge of the head and under the same.

The improvements in plastic-covering dies for eyelets are fully and clearly shown in the accompanying drawings, in which—

Figure 1 is a vertical sectional view, on an enlarged scale, through the set of dies as in the operation of covering the eyelet, the eyelet being therein shown. Fig. 2 is a plan view of the lower die. The section-line 1 1 on Fig. 2 indicates the plane on which the section Fig. 1 is taken. Fig. 3 is a sectional view similar to Fig. 1, but showing a slightly-modified form of the separated piers or supporting-abutments, which form is more clearly apparent in Fig. 4, which is a plan view of the lower die. Fig. 5 is a sectional view of the lower die of Fig. 2 as taken on the line 5 5. Fig. 6 is a plan view of a lower or eyelet-receiving die in which still another modified form of the head-supporting piers are shown. Fig. 7 is a central sectional view, still further enlarged, of the eyelet as produced in these dies; and Fig. 8 is a half bottom plan of the eyelet.

In the drawings, A A' represent the die-plates, having preferably separately formed and respectively set therein the hardened head-forming die B and the hardened eyelet receiving and supporting die C.

The head-forming die B possesses no novelty so far as this invention is concerned. The lower die C has the socket or hole *a* for the reception of the shank of the eyelet G, and at its top it has arranged around the orifice of the eyelet-receiving socket the several upstanding abutments or piers *d*, so that while the eyelet-shank is in said socket therefor the flange-head is supported above the ordinary surface of the top of die C with great stability and where the support is most needed.

It will be perceived that while the piers have their positions or extensions from adjacent the neck of the eyelet and outwardly from such neck sufficiently far to give ample support their outer edges or ends are within the circle which corresponds to the edge of the head as constituted by the applied molded pyroxylin *f* or other equivalent material employed, and which circle is repre-

sented at *m* in the plan views, Figs. 2, 4, and 6. In the views, Figs. 2 and 5, the regularly-spaced abutments *d* are shown as having a triangular form with their apices inwardly convergent, and this I regard as the preferred form for these upwardly-projecting parts.

In Fig. 4 the abutments are indicated as of rectangular plan, the lateral and inner end surfaces being upwardly convergent, whereby they partake of approximately pyramidal forms, and in Fig. 6 the abutments are shown circular. The forms of the separated abutments may, however, be varied infinitely without affecting their susceptibility for useful employment for the results set forth.

By reason of the upstanding abutments or piers *d d* the comparatively deep depressions 10 10, corresponding in form to such piers, are formed in the under side of the overhanging head of the eyelet which is constituted by the molded celluloid or equivalent plastic material; and it is to be stated that under this invention eyelets of common construction can be readily covered with plastic material, no expensive tools or machinery being required for the manufacture of specially-formed eyelet-shells or the flanges thereof; that it is possible to cover eyelet-shells of very thin metal, and that such light eyelets are specially desirable in the art of setting; that in the operations of covering where the head-flanges of the eyelet-shells are devoid of corrugations, depressions, spurs, or other specially-provided formations there is greatly increased facility in the handling of the shells and their introduction into the dies; that by the aid of these dies it becomes easy to mold

on heads of eyelets of such delicacy and uniformity as to render them adaptable for use in articles of the lightest possible character; that eyelets having plastic covering-heads, as here produced with small though comparatively deep depression 10 in the under side of the overhanging head allow portions of the leather to project into such depressions, and the set eyelets are prevented from rotating or working loose in the holes, and that the provision of the indentations or depression serves to economize in the amount of plastic covering material required, which economy, when the manufacture is carried out on a large scale, is quite material.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

In a set of eyelet-covering dies the combination with the head-covering die, of an eyelet-receiving die having a hole or socket therein for the reception of the tubular eyelet-shank and having at its top, arranged around the mouth of the socket, several separated upstanding piers or projections upon which the flange-head of the eyelet is supported against crushing or collapsing, allowing the plastic material to flow around the edge of, and under, the head, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two witnesses.

ALBERT LATHAM.

Witnesses:

WM. S. BELLOWS,
N. M. BELLOWS.