

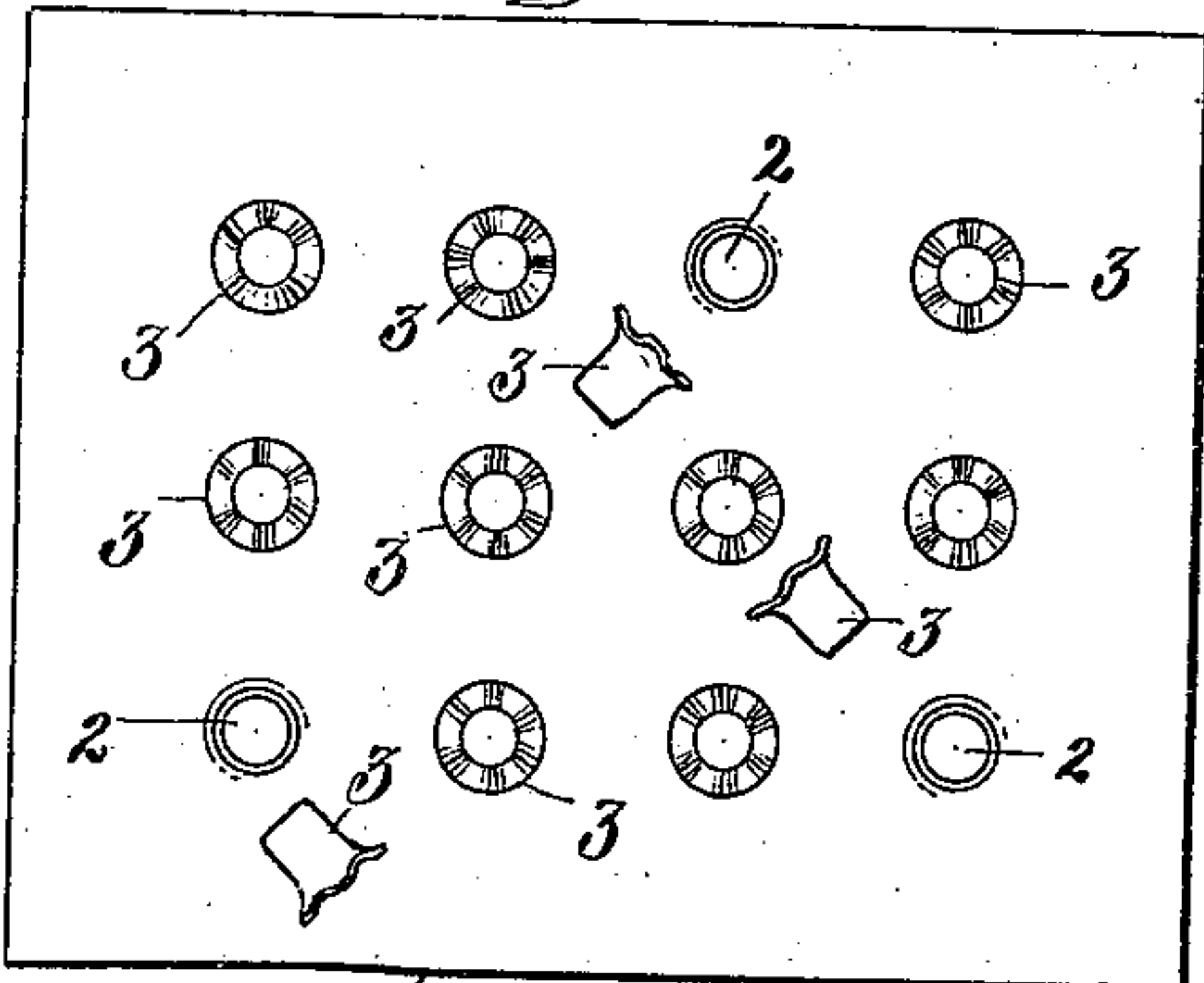
(No Model.)

A. MATHISON.  
MANUFACTURE OF EYELETS.

No. 551,593.

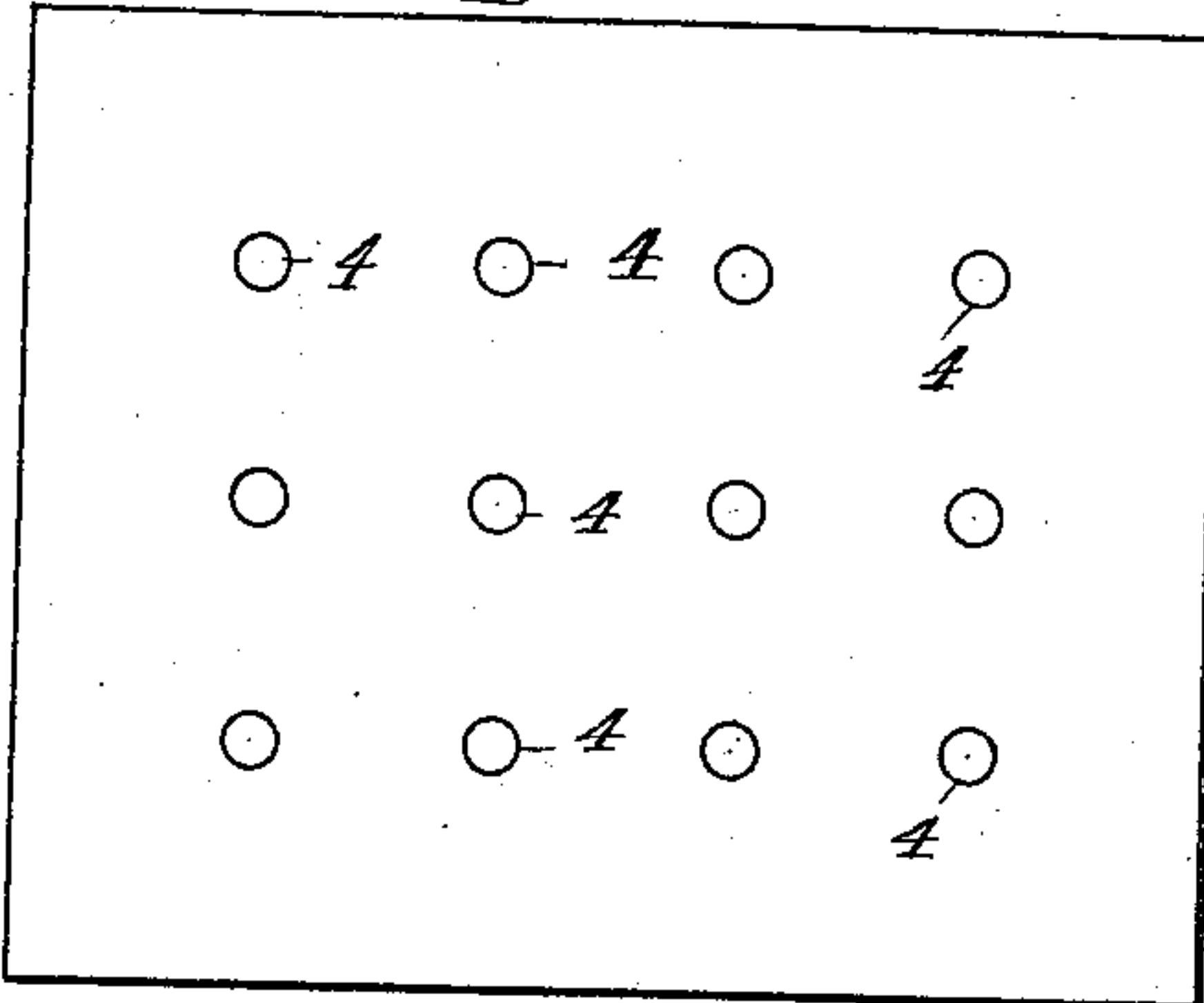
Patented Dec. 17, 1895.

Fig 1



A

Fig 2.



B

Fig 3

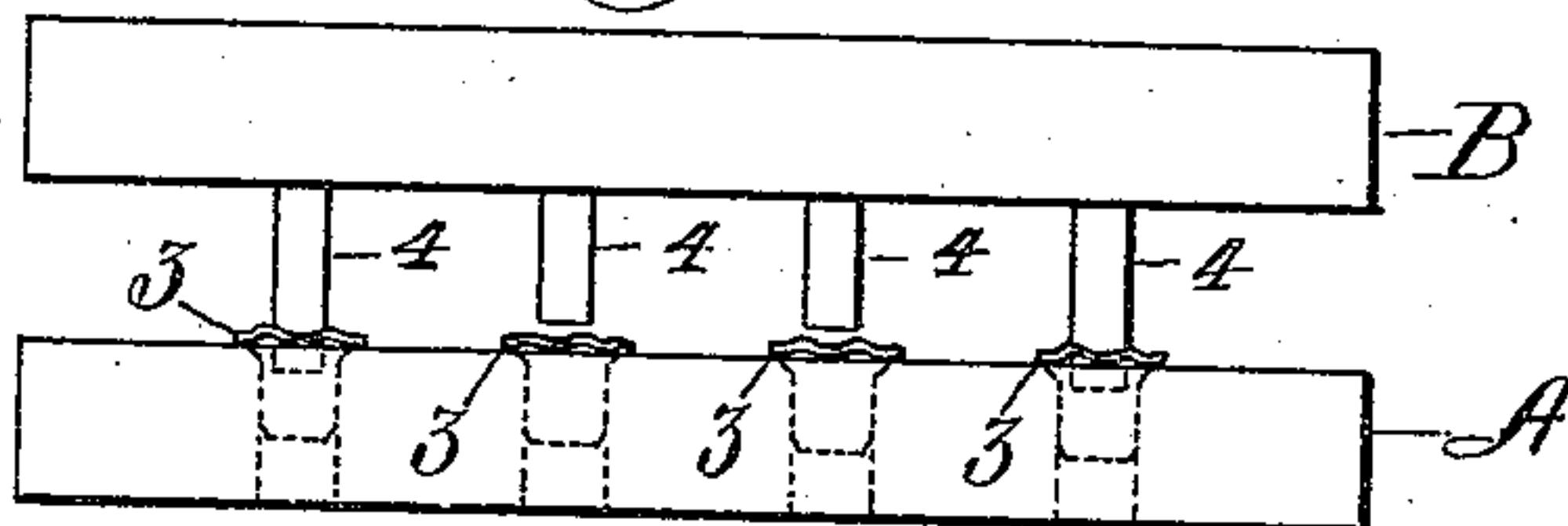


Fig 4

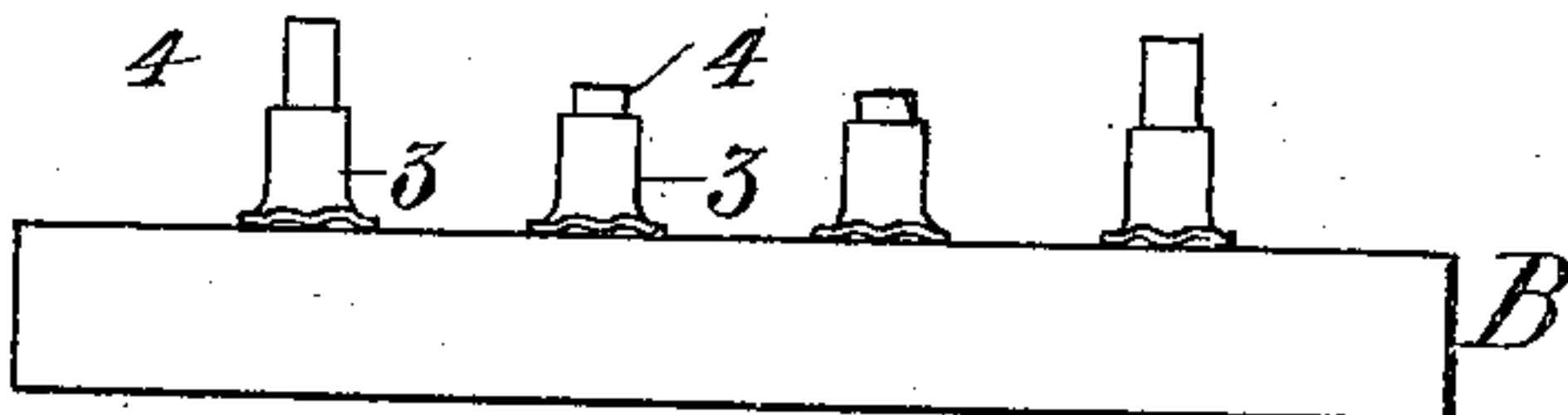


Fig 5

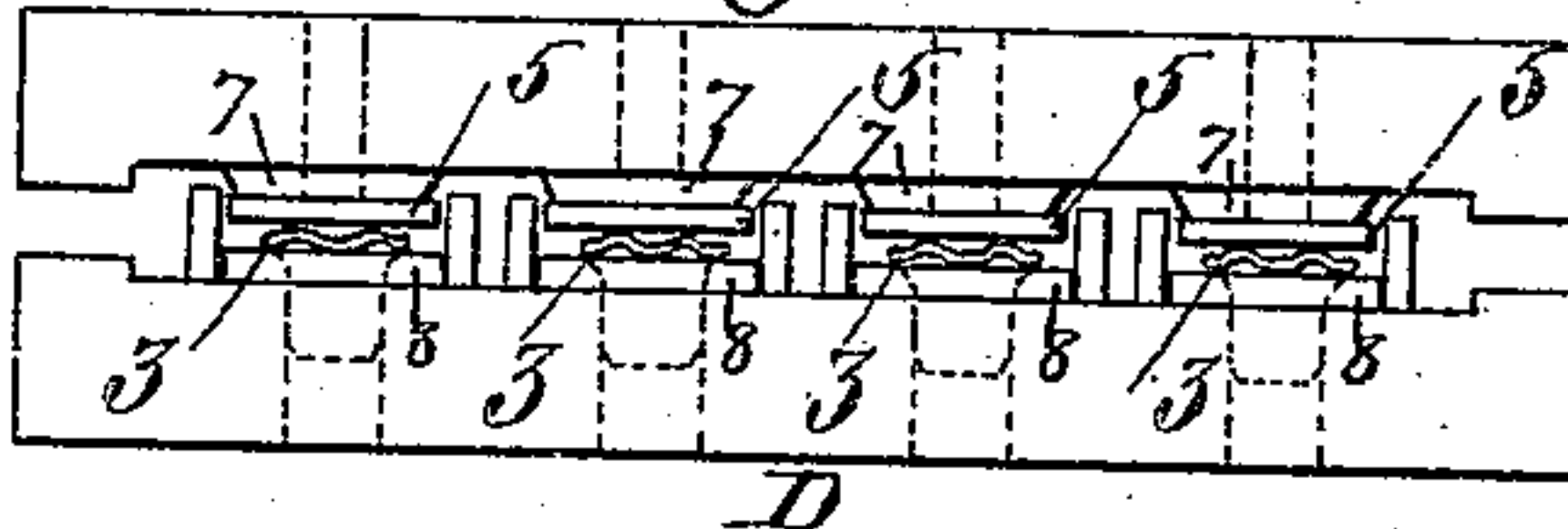


Fig 6

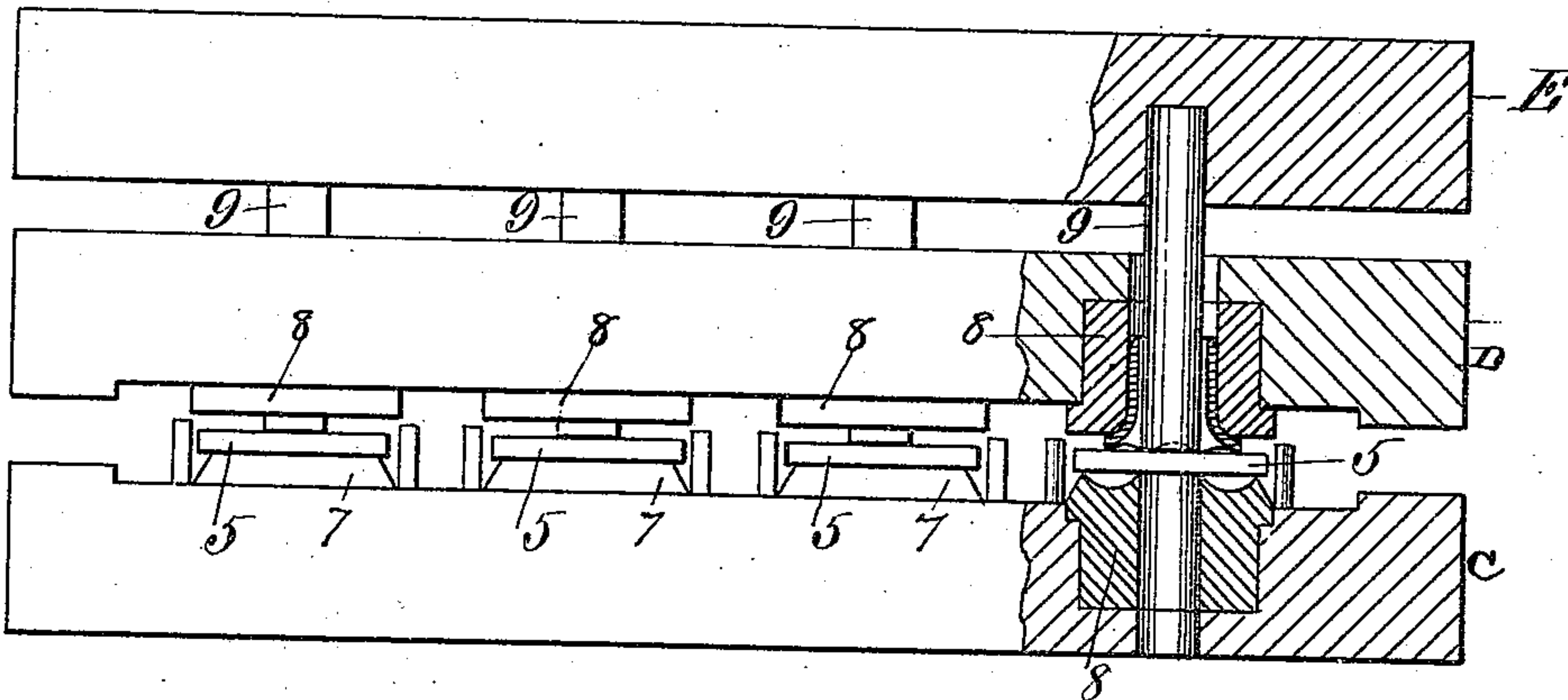


Fig 7



Fig 8

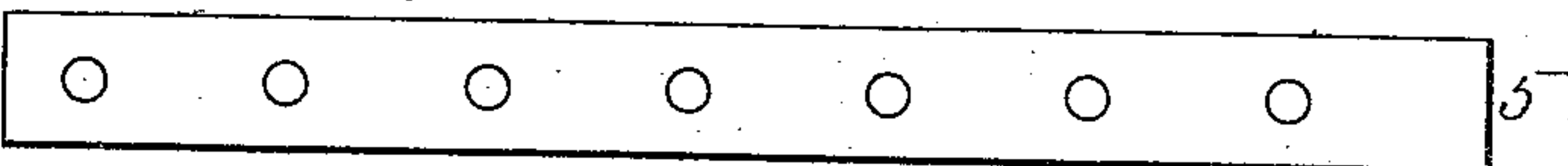


Fig. 9.



Inventor.

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Witnesses  
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# UNITED STATES PATENT OFFICE.

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## MANUFACTURE OF EYELETS.

SPECIFICATION forming part of Letters Patent No. 551,593, dated December 17, 1895.

Application filed April 3, 1895. Serial No. 544,263. (No specimens.)

*To all whom it may concern:*

Be it known that I, ARTHUR MATHISON, a citizen of the United States, residing at Springfield, county of Hampden, and State of Massachusetts, have invented certain new and useful improvements in the manufacture of eyelets having rims upon which is fixed plastic material and in devices for carrying out my invention; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to use the same.

In the drawings forming part of this specification, Figure 1 is a plan view of an eyelet separating and arranging plate. Fig. 2 is a plan view of a pin-bearing plate. Fig. 3 is an edge view of said eyelet-separating and pin-bearing plates as co-engaged in one step of the below-described use thereof. Fig. 4 is an edge view of said pin-bearing plate showing eyelets on its pins. Fig. 5 is an edge view of an upper and a lower die-plate showing eyelets in the lower one thereof, a strip of plastic material lying on the rims of said eyelets and said upper die-plate resting against said strips. Fig. 6 is an enlarged edge view, partly in section, of said two die-plates and of a strip-punching plate, having pins thereon passing through the upper die-plate and having their extremities resting on said strips. Figs. 7 and 8 are plan views, respectively, of a plain and of a punched strip of plastic material. Fig. 9 is a vertical section of an eyelet embodying my invention upon an enlarged scale.

Eyelets as heretofore made have generally been coated with japan or similar substance by dipping the eyelets therein, and then baking them to harden the japan coating. Such protection of the exposed wearing portions of the eyelets has, however, proved to be of little value, for they soon become worn and show the metallic color of the material of which they are made. This difficulty, however, is effectually obviated by covering the rims of the eyelets with a suitable plastic material, such as celluloid or similar substance, in the manner below set forth.

In carrying out my invention the eyelets 3, of brass or similar metal, are placed in a mass

in an open box or other receptacle. The eyelet separating and arranging plate A, preferably of metal, having perforations 2 therein in which to receive the shanks of the eyelets, (see Fig. 1,) is then passed into said mass of eyelets and is lifted up and gently shaken horizontally, causing eyelets gradually to drop into the several holes in the plate, as shown in some of the holes in said last-named figure.

The plate B (see Figs. 2 to 4, inclusive) having pins 4 thereon, in corresponding positions to said perforations in plate A, is then held over the latter-named plate and the pins thereon are passed through the eyelets 3. Certain of the pins 4 on plate B are longer than others, as shown, to facilitate the engagement thereof with the perforations in plate A. The plates A and B are next placed in reversed position from that shown in Fig. 3 and plate A is lifted away from plate B, leaving the eyelets 3 on the pins 4 of said last-named plate in the positions shown in Fig. 4. The metal plate D having circular raised dies 8 thereon is then placed on said plate B, the pins on the latter extending into perforations through the centers of said dies, and said united plates D and B are then reversed and the plate B is removed from the plate D, leaving the eyelets hanging by their rims on said dies 8, as shown in Fig. 5, their shanks extending into said die-perforations. Strips of plastic material or celluloid 5 are then laid upon each row of eyelet-rims on plate D and the opposite socket die-plate C is then placed upon die-plate D in the positions shown in Fig. 5, bringing said strips 5 and the eyelet-rims between the dies 7 and 8 of said plates. Suitable guide-pins for said die-plates are employed, whereby the dies on each are caused to register perfectly with each other. Said die-plates are then reversed, as in Fig. 6, so that the shanks of the eyelets are in the upper die, and the plate E having the punching-pins 9 thereon is placed over the plate D, and said punching-pins passing through perforations in said last-named plate have their extremities brought against the said strips 5. The three plates E, C, and D and the eyelets and plastic strips arranged as described and as shown in Fig. 6 are all then submitted to

heat and pressure, whereby a hole is punched through the plastic material concentric with the eyelet and the plastic material is fixed upon the rims thereof.

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

1. In the manufacture of covered eyelets the combination of a plate A, perforated to receive eyelets and in which they are gathered or assembled, with a plate B, provided with pins which correspond to and enter the perforations in the plate A, and to which pins the

eyelets are transferred only when the two plates are reversed, substantially as shown. 15

2. The combination of a plate B, provided with a series of pins upon which the eyelets are held, with a plate D provided with dies to correspond to the pins upon the plate B, and which die plate receives the eyelets from the pins when the plates are reversed and separated, substantially as described. 20

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