

(No Model.)

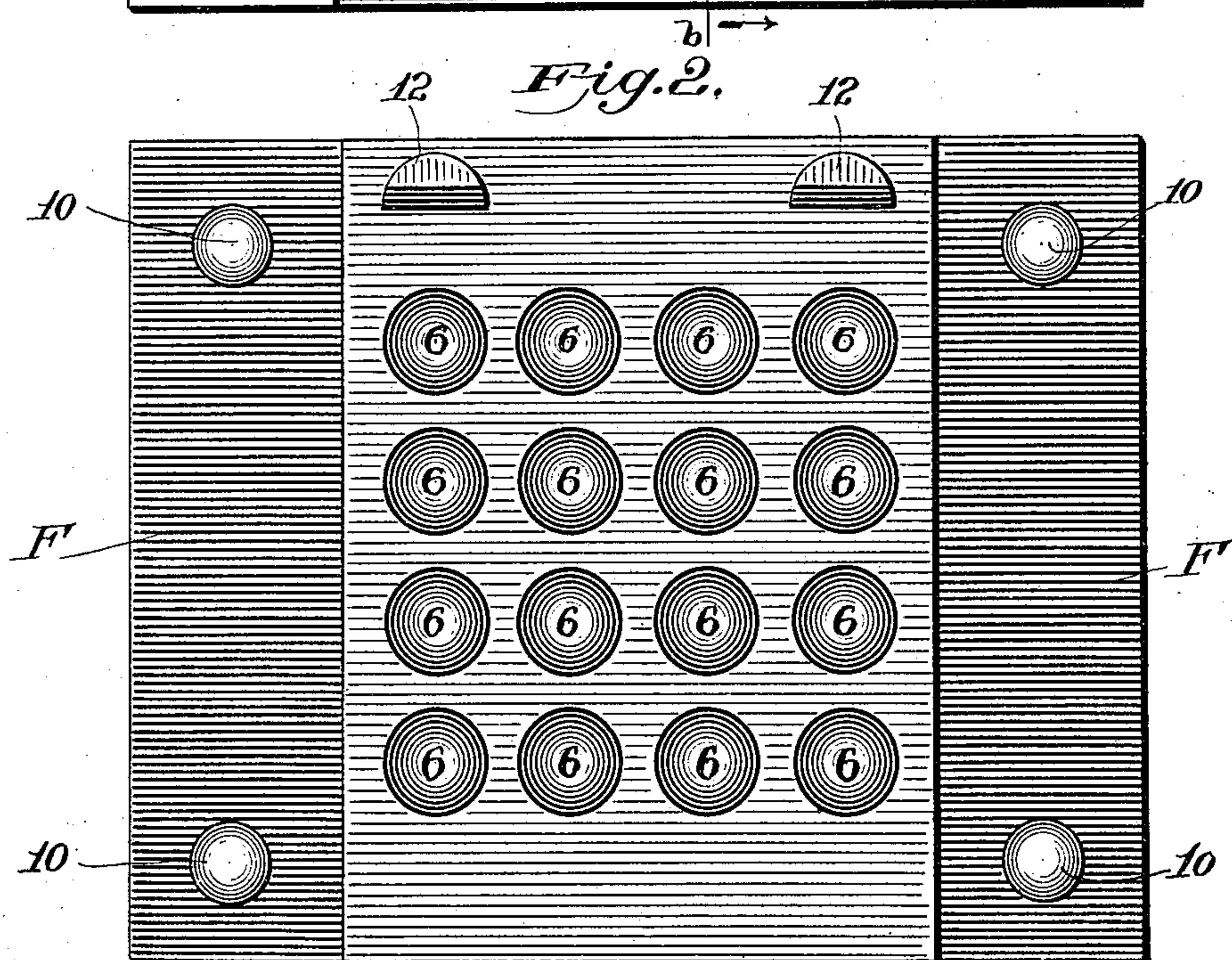
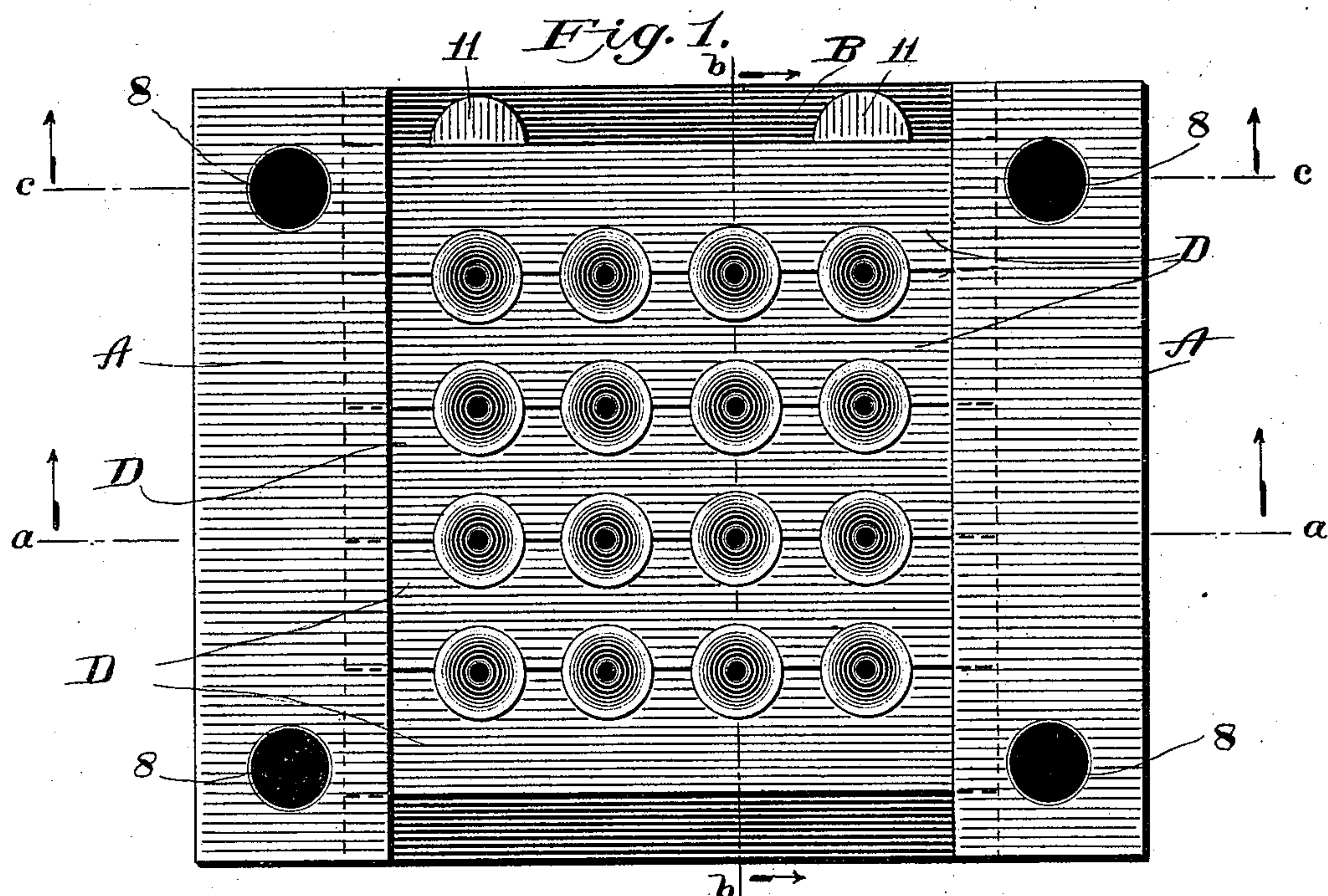
4 Sheets—Sheet 1.

F. EGGE.

MOLD FOR COVERING THE HEADS OF LACING STUDS.

No. 456,303.

Patented July 21, 1891.



WITNESSES:

J. H. French.
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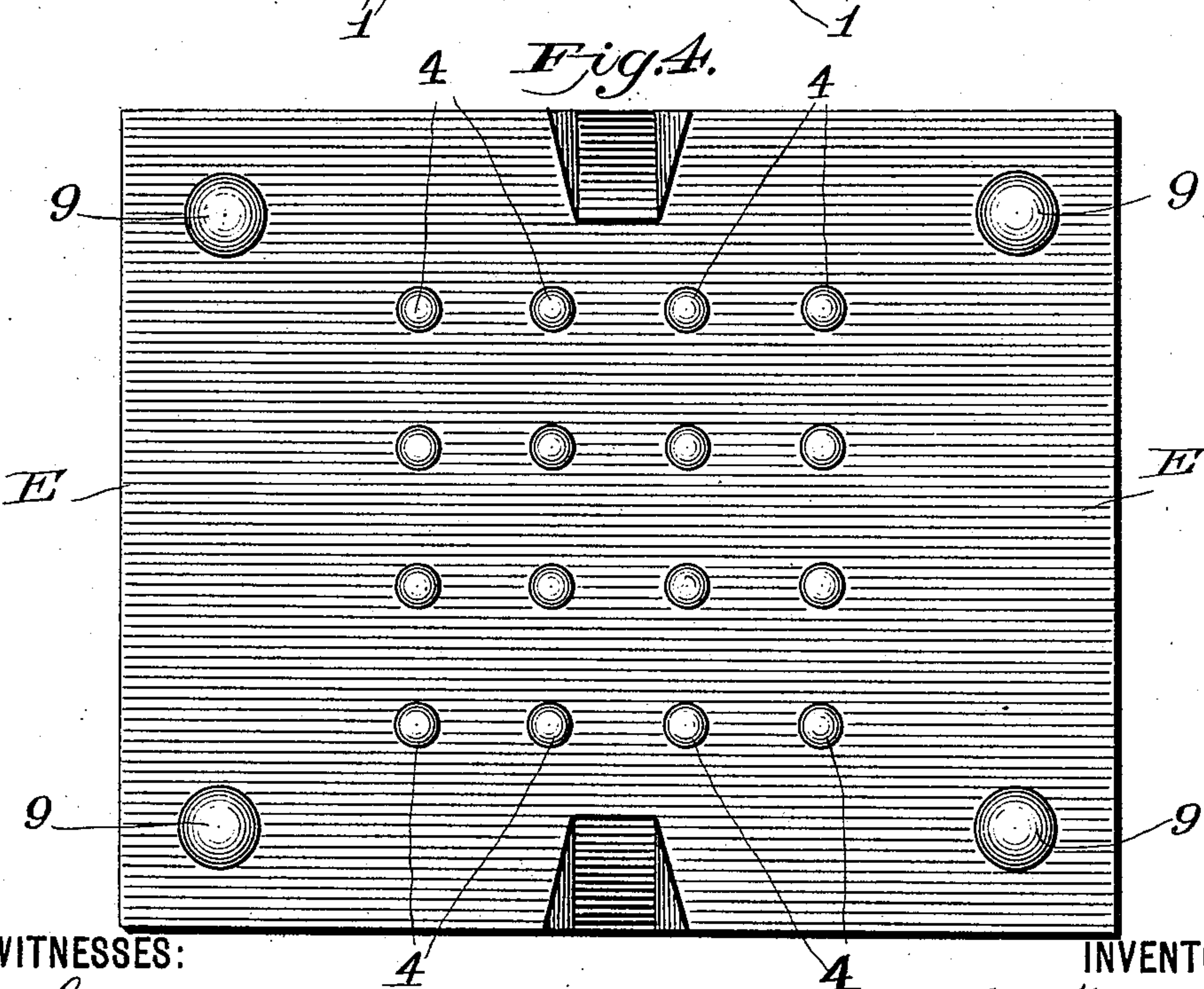
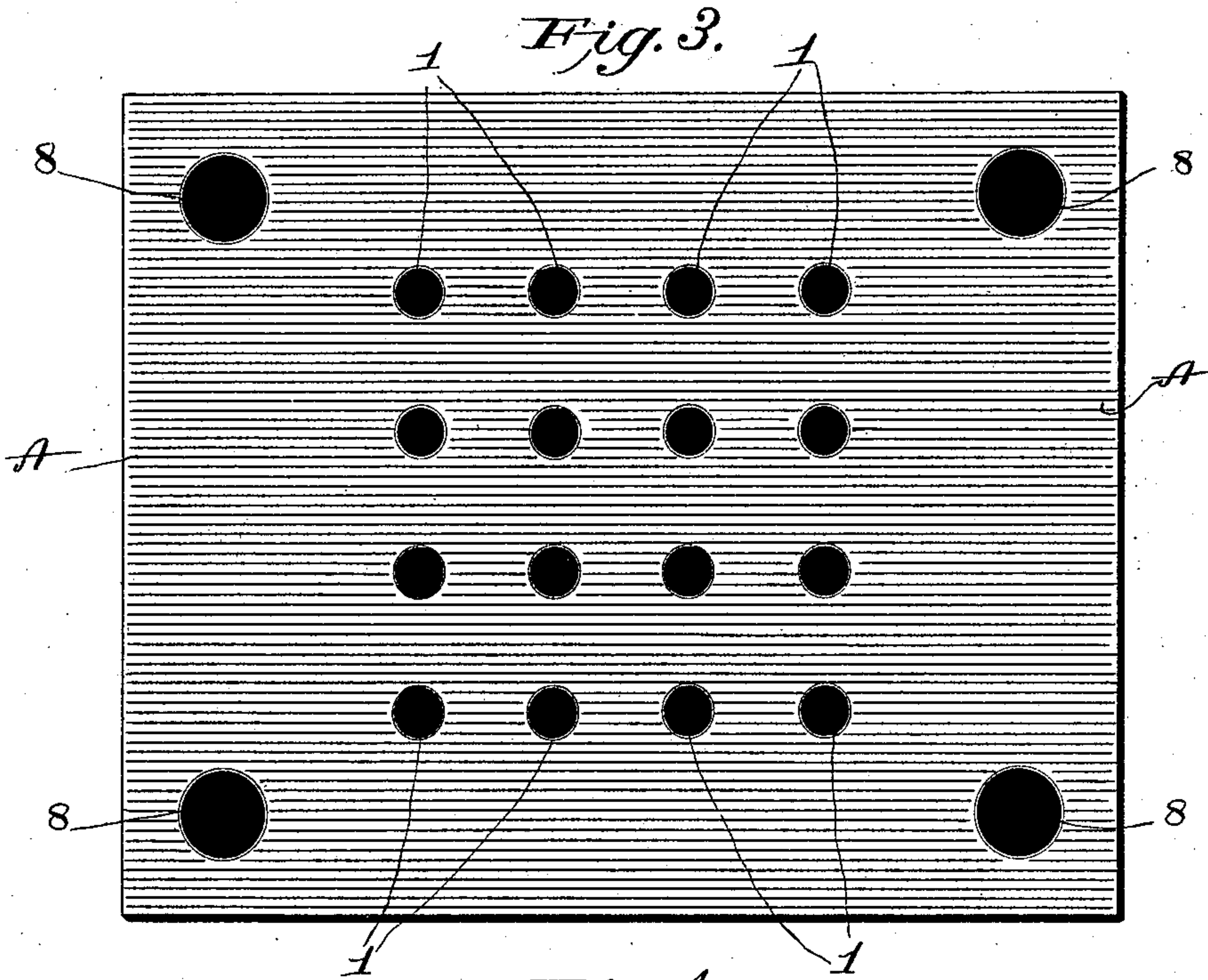
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Fig. 5.

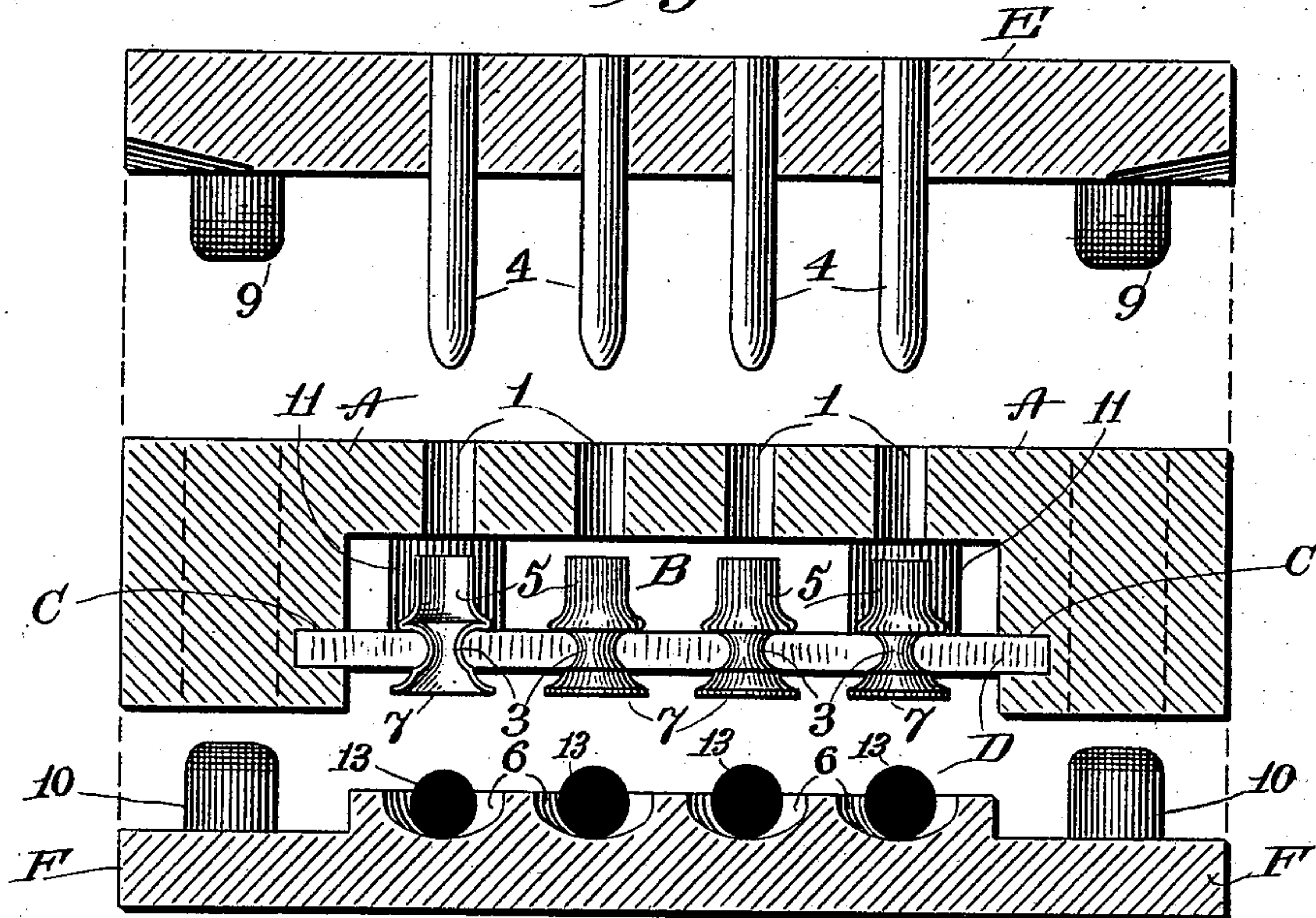
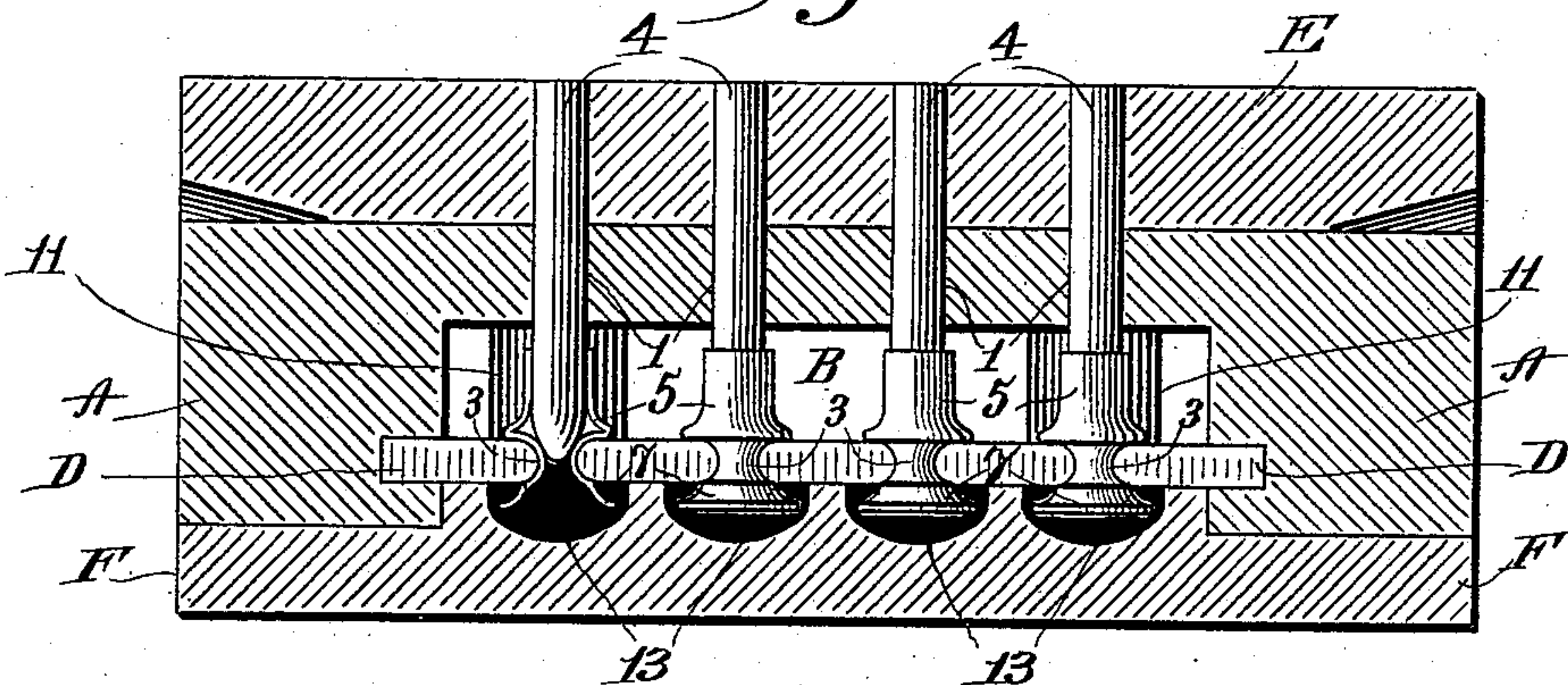


Fig. 6.



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(No Model.)

4 Sheets—Sheet 4.

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Fig. 7.

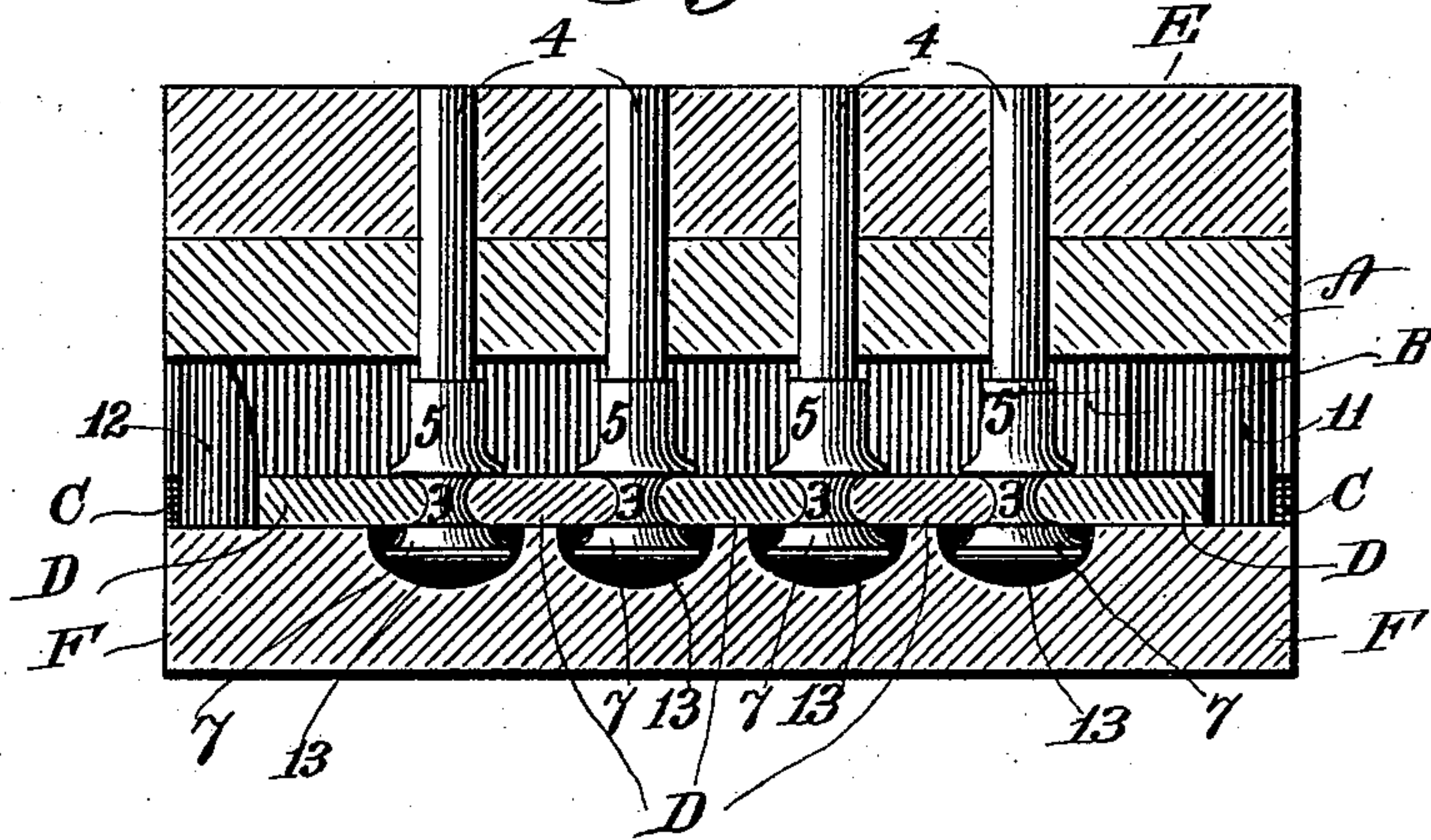


Fig. 8.

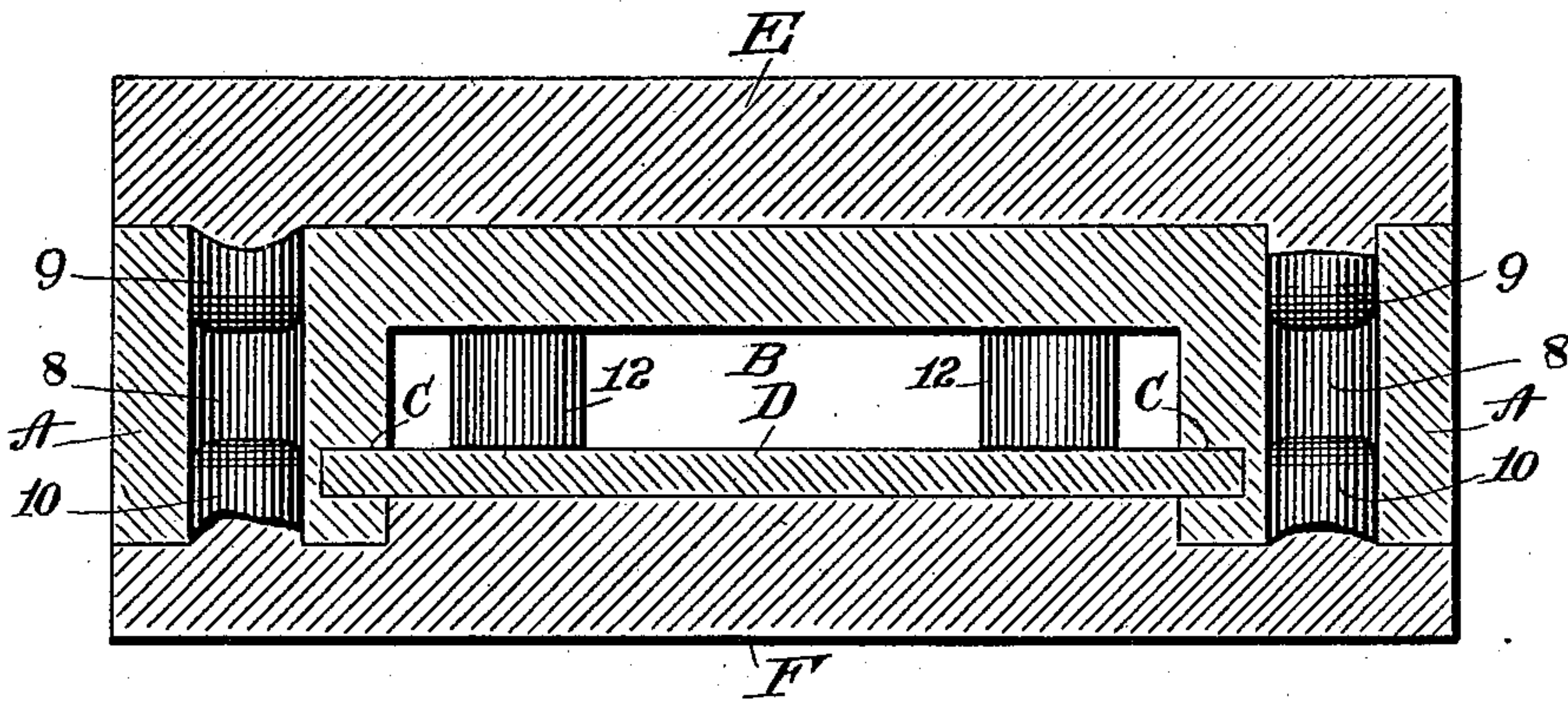
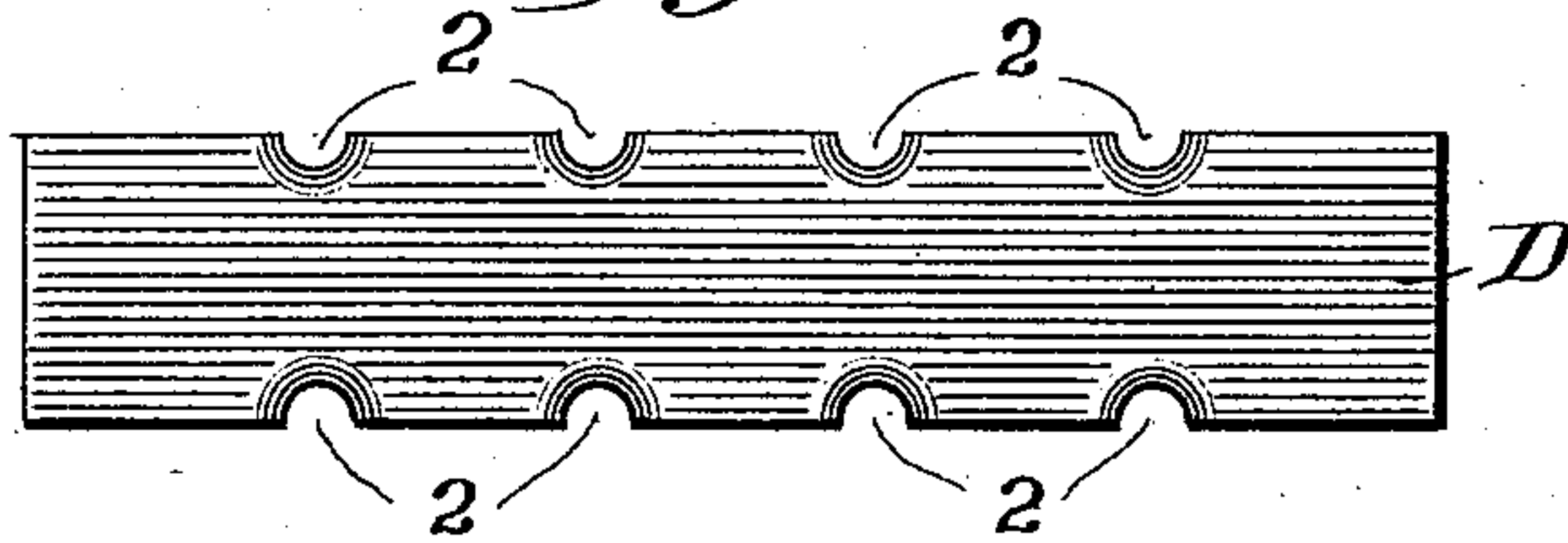


Fig. 9.



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UNITED STATES PATENT OFFICE.

FREDERICK EGGE, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO WILLIAM H. SMIDT AND EBERHARD L. PUPKE, BOTH OF NEW YORK, N. Y.

MOLD FOR COVERING THE HEADS OF LACING-STUDS.

SPECIFICATION forming part of Letters Patent No. 456,303, dated July 21, 1891.

Application filed November 20, 1890. Serial No. 372,086. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK EGGE, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Molds for Covering the Heads of Lacing-Studs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has reference to certain new and useful improvements in the construction of molds for covering shoe-lacing studs, and has for its object to provide a mold which by its general structure and combination of parts shall permit of the rapid assembly of the studs therein, and also will enable the latter to be removed almost instantly.

In the accompanying drawings, Figure 1 is a bottom view of my improved mold with the base-plate removed; Fig. 2, a plan of the base-plate; Fig. 3, a plan of the middle section; Fig. 4, a bottom view of the cap-plate; Fig. 5, a sectional elevation of my mold with the base, middle section, and cap in detached condition; Figs. 6, 7, and 8, sections at the lines *a*, *b*, and *c*, respectively, of Fig. 1; and Fig. 9, a detail plan of one of the sectional dies.

Similar letters and numerals denote like parts in the several figures.

My invention is especially applicable for the purpose of molding a substantial jacket over the heads of metallic shoe-lacing studs, so that the latter will not appear brassy by constant wear. The material which I prefer to use to form this jacket is a pyroxyline stuff; but any other suitable material may be used without affecting the operation of my invention.

In molds for covering small objects like lacing-studs it is desirable that the studs should be quickly assembled within and quickly discharged from the mold, and my invention is especially intended to meet these requirements.

A is the middle section, having a gate *B* extending therethrough and provided with perforations 1, leading from the top of said section into the gate.

C are ways cut within opposite side walls of the gate for the accommodation of the sectional dies *D*, which are adapted to slide within said ways. These dies are separable metallic strips adapted to fit closely together and having along their meeting edges complementary recesses 2, which, when in assembled position, embrace the necks 3 of the studs.

E is the cap, having plugs 4 depending therefrom, which enter through the perforations 1 in the middle section and extend within the eyelets 5 of the studs, as shown at Fig. 6, and for the purpose presently explained.

F is the base, having depressions 6, which are conformed to the shape of the finished stud-head, and into which the metal heads 7 of the studs extend when the parts of my improvement are in the position necessary to finally mold the plastic heads, as shown in Figs. 6 and 7. The section *A* has dowel-holes 8, while the cap and base, respectively, are provided with dowel-pins 9 10, adapted to enter said holes, whereby said section, cap, and base are secured together. At one end of the gate *B* are stops 11, and extending upward from the base, at the other end of the gate, are stops 12, whereby the sectional dies, with the studs therein assembled, are held against any play within the ways *C*, so that when the pins 9 enter within the holes 8 the plugs 4 will register with the eyelets 5.

In practicing my invention the cap and middle section are assembled together with the studs held by the dies, pellets 13, of plastic material, are placed within the depression 6 within the base, as shown at Fig. 5, and the parts of the mold are then compressed by hydraulic or other pressure into the position and with the result shown at Figs. 6 and 7. The plastic material enters the heads of the studs and is forced around the edge thereof, but is prevented from entering and clogging the eyelets 5 by the plugs 4. The base *F* is heated by suitable means, so that the plastic material will preserve the proper degree of softness, so as to readily be forced around the heads of the studs. In removing the studs from the mold the cap and base are detached

and the sectional dies pushed out of the ways C, whereupon the dies will fall apart and thereby release the studs.

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

1. In a mold for covering the heads of lacing-studs with plastic material, the combination of the middle section and sectional dies assembled therein, which embrace and confine the necks of the studs, a cap having plugs which enter the eyelets of the studs, and a base having depressions conformed to the shape of the head of the finished stud, substantially as set forth.

2. The combination of the middle section having a gate and perforations leading into said gate, guideways within opposite walls of said gate, sectional dies adapted to slide within said ways and having along their meeting edges complementary recesses which embrace the necks of the studs, cap E, having plugs extending through said perforations within the eyelets of the studs, and a base provided with depressions conformed to the shape of the finished head of the stud, substantially as shown and set forth.

3. The combination of the section A, having gate B and provided with perforations 1, leading from the top of said section into the gate, the stops 11, depending from said section at one end of the gate, the ways C in the opposite side walls of said gate, the sectional dies within said way and having along their meeting edges complementary recesses 2, adapted to embrace the necks of the studs, the cap E, having plugs 4 depending therefrom, which enter through said perforations within the eyelets of the studs, the base F, having depressions 6 adapted to contain the material to be molded around the heads of the studs and conformed to the finished heads of the latter, and the stops 12, projecting upward from the base across the gate opposite to the stops 11, substantially as hereinbefore shown and set forth.

In testimony whereof I affix my signature in presence of two witnesses.

FREDERICK EGGE.

Witnesses:

J. S. FINCH,

F. W. SMITH, Jr.