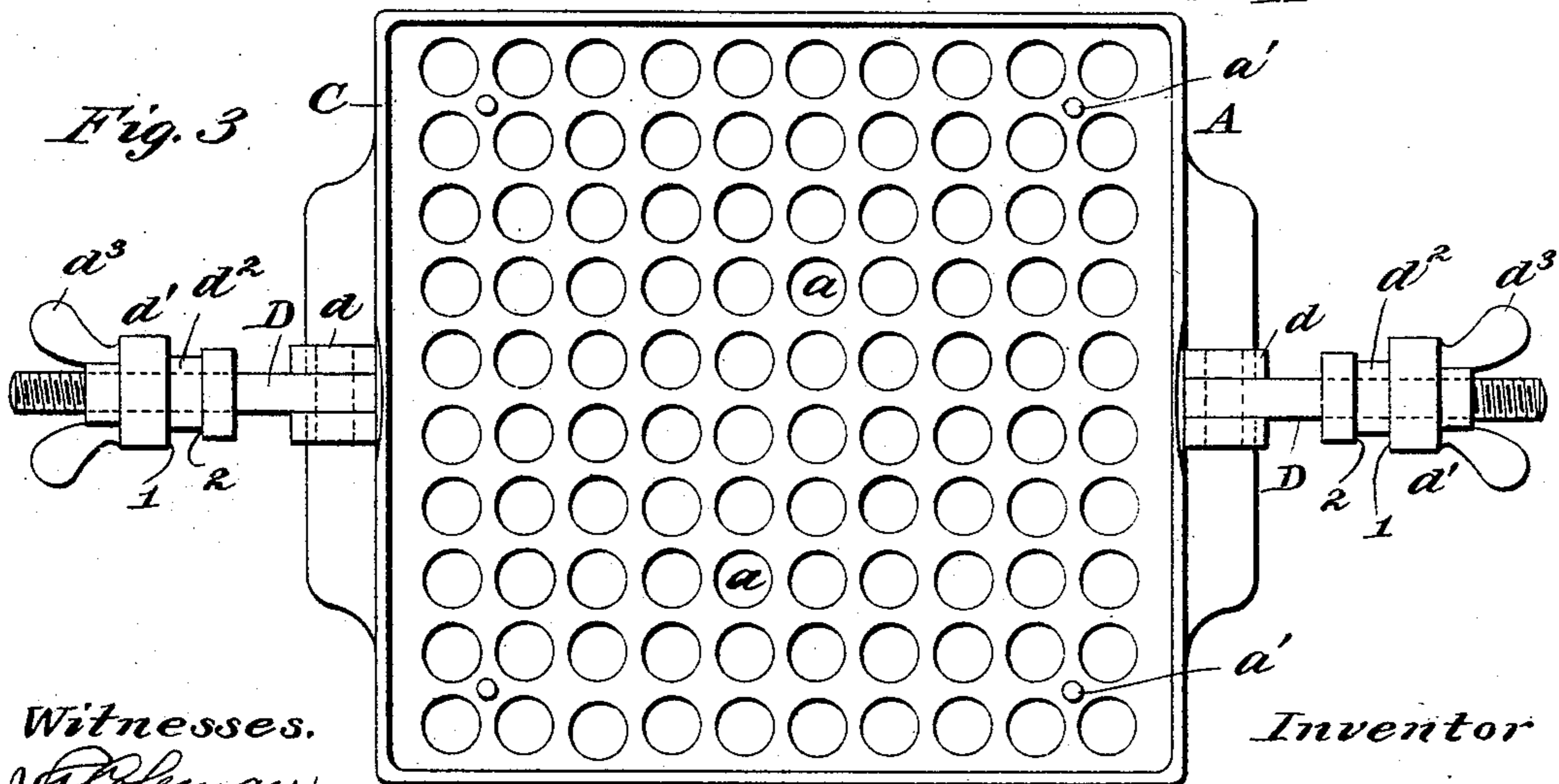
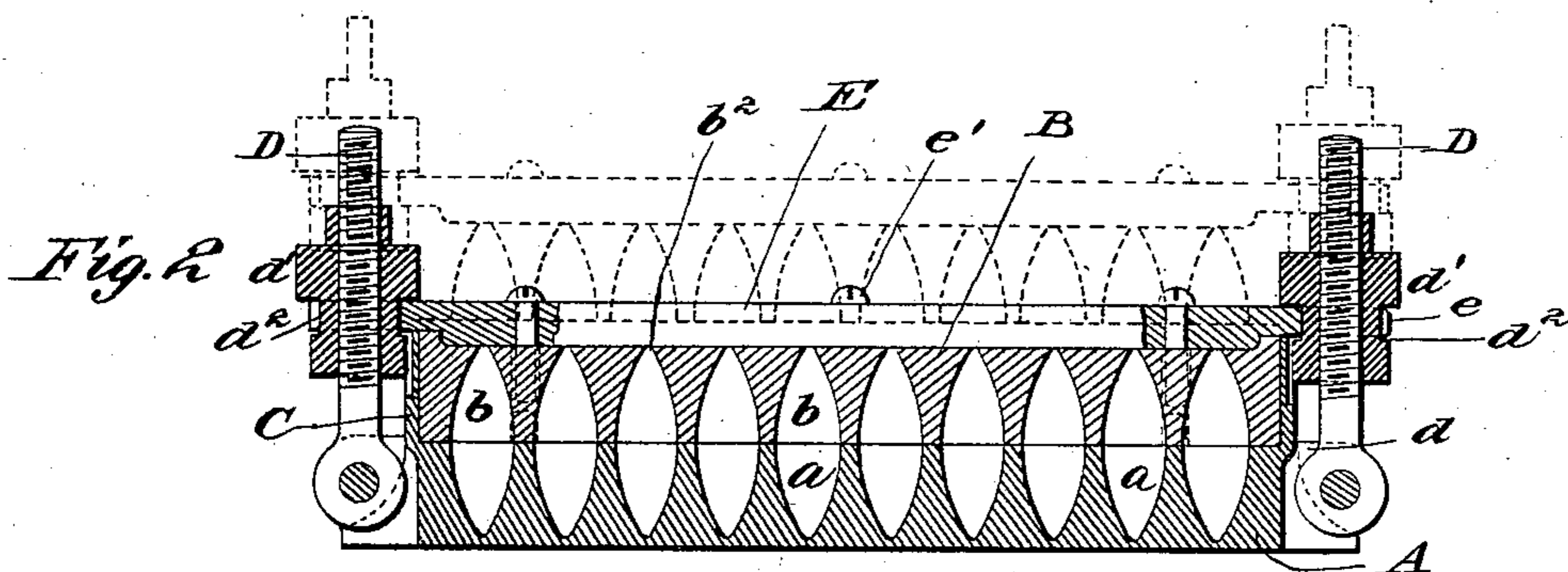
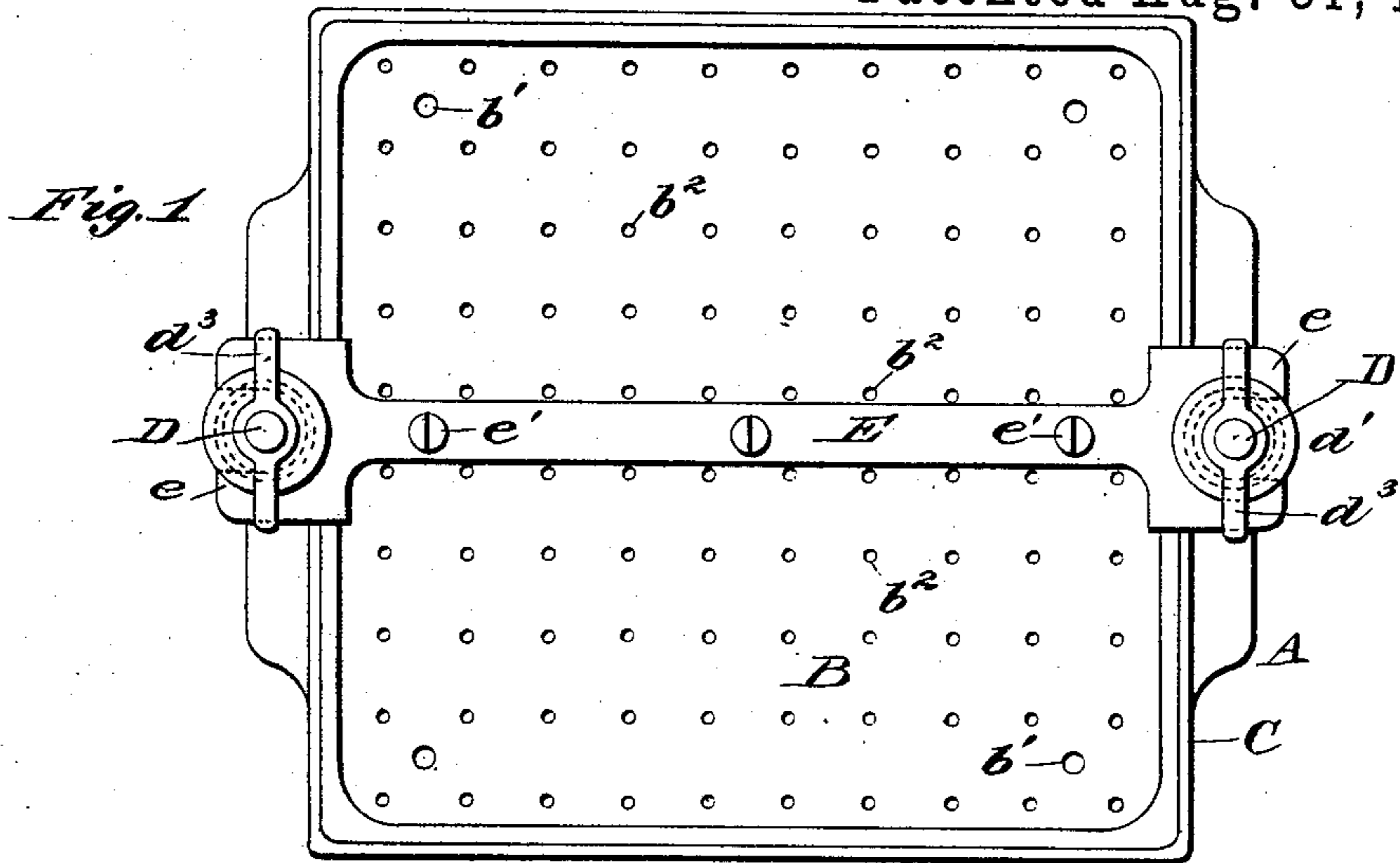


(No Model.)

L. J. HARVEY.
SUPPOSITORY MOLD.

No. 588,990.

Patented Aug. 31, 1897.



Witnesses.
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UNITED STATES PATENT OFFICE.

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SUPPOSITORY-MOLD.

SPECIFICATION forming part of Letters Patent No. 588,990, dated August 31, 1897.

Application filed December 7, 1896. Serial No. 614,726. (No model.)

To all whom it may concern:

Be it known that I, LEON J. HARVEY, of Saratoga Springs, in the county of Saratoga and State of New York, have invented new and
5 useful Improvements in Suppository-Molds; and I do hereby declare the following to be a full, clear, and exact description of said invention, reference being had to the accompanying drawings, and to the letters and numerals of reference marked thereon, which form
10 a part of this specification.

This invention relates to the manufacture of glycerin suppositories, and has for its object to provide a mold, preferably of metal,
15 which is capable of forming a large number of oval or elliptical suppositories without leaving more than a very slight quantity of material to be worked over, and which mold is simple in construction, easy to handle and
20 clean, rigid in use, and is provided with means for closing and opening which insures the formation of suppositories in accurate shape and the preservation of that shape while separating the mold-plates.

25 To these ends the invention consists in the construction and combination of parts substantially as hereinafter described and claimed.

In the drawings, Figure 1 represents a plan
30 view of the device complete. Fig. 2 represents a cross-section on a line drawn through the center of Fig. 1. Fig. 3 represents a plan view of the lower mold and its flange or pan.

Similar reference-characters indicate the
35 same parts throughout the several figures of the drawings.

The lower mold is indicated at A and consists, preferably, of a metal plate having the cone-shaped recesses *a* drilled therein and
40 having guide pins or dowels, as indicated at *a'*.

B indicates the upper mold-plate, similar to plate A and having cone-shaped recesses or
45 cavities *b* and holes *b'*, said holes *b'* being adapted to receive the pins *a'* and to insure the accuracy of the registering of the molding recesses or cavities *a* and *b* when the two plates are placed together.

C indicates a flange forming a vertical wall
50 rising from the edge of the lower mold, said

flange with the lower mold forming a pan, the purpose of which will be presently explained.

The two molds are clamped together by means of winged nuts fitting the two threaded rods D on opposite sides of the device. Each
55 rod D is pivoted to ears *d*, projecting from the side of the lower mold-plate, so as to be turned either to an upright or a horizontal position. A nut *d'*, having an annular groove
60 *d²* and wings *d³*, is fitted to said threaded rod.

The upper mold-plate is provided with two bifurcated lugs *e*, adapted to enter the annular grooves *d²* of the nuts *d'*. These lugs *e* may be formed integral with the plate B or they may be, as shown in the drawings, the
65 projecting ends of a bar E, secured to and across the top of the plate B by means of screws *e'*.

Each of the recesses *b* in the upper plate is provided with a small vent-passage *b²*, connecting it with the upper surface of the plate.
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In operation the upper plate B is removed, the rods D being turned outward, as shown in Fig. 3. The material of which the suppositories are to be formed is poured into the
75 pan formed by the flange C, said material being sufficiently heated to enable it to flow over the floor of the pan and fill the cavities *a'*. Sufficient surplus material is poured in to equal or slightly exceed the capacity of the
80 recesses in the upper plate B, said surplus being retained by the flange C. The upper plate is then placed inside the flange and the rods D are turned up so as to cause the shoulders 1 and 2 of the nuts *d'* to pass above and
85 below the bifurcated lugs *e*. The nuts are now turned, by means of the wings *d³*, so as to cause the shoulders 1 to press on the lugs *e* and force the upper plate B down until the two plates are brought firmly together. This
90 causes the surplus material above mentioned to be forced up into the cavities of the upper plate, the vents *b²* first permitting the air to escape and then permitting any slight excess of material to emerge to the top of the plate B,
95 from whence it may be removed. The parts are now allowed to cool to a degree at which the suppositories will retain their form, and then, in order to insure the even lifting of the upper plate, so as to prevent splitting of
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the suppositories, the nuts d' are turned with equal rapidity, causing the shoulders 2 to engage the under side of the lugs e and lift the plate B directly and evenly away from the plate A.

If desired, the plate B can be lifted in this manner sufficiently high to permit the access of air to the suppositories to further cool them and can be left supported by the rods and nuts.

When the plate B is to be entirely removed, the fingers of the operator may be placed under the lugs e to lift the said plate, the rods and nuts being then allowed to fall out to their horizontal positions. Some of the suppositories will adhere to the upper plate, and these, as well as those in the lower cavities, may be removed with the fingers, using a soft cloth, and suitably packaged.

Having now described my invention, what I claim is—

1. A suppository-mold comprising in its construction a lower horizontal plate having a series of cone-shaped cavities, and an upper horizontal plate movable toward and from the lower plate and having a corresponding number of cone-shaped cavities equal in depth and shape to those of the lower plate, the cavities of the upper plate being provided with small vent-openings.

2. A suppository-mold comprising in its construction two horizontal plates each having a series of molding-cavities, the lower of said plates having a flange or wall adapted to closely surround the margin of the upper

plate, the cavities of said upper plate having vent-openings, and means for clamping said plates together.

3. A suppository-mold comprising in its construction two horizontal plates each having a series of molding-cavities, the lower of said plates having a flange or wall adapted to closely surround the margin of the upper plate, the cavities of said upper plate having vent-openings, and means which, when moved in one direction are adapted to clamp said plates together, and when reversed, to separate them and hold one plate removed from the other.

4. A suppository-mold comprising in its construction two plates having molding-cavities, one of said plates having suitable lugs, and the other plate having threaded rods pivoted thereto and provided with nuts having annular grooves to receive said lugs.

5. The combination with the mold-plate A having flange C and ears d , of the threaded rods D pivoted to said ears, the nuts d' each having an annular groove forming shoulders 1 and 2, and the mold-plate B provided with lugs e adapted to enter the annular grooves of the nuts, substantially as and for the purpose set forth.

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

LEON J. HARVEY.

Witnesses:

WALDO L. RICH,
L. D. HUMPHREY.