

No. 677,648.

Patented July 2, 1901.

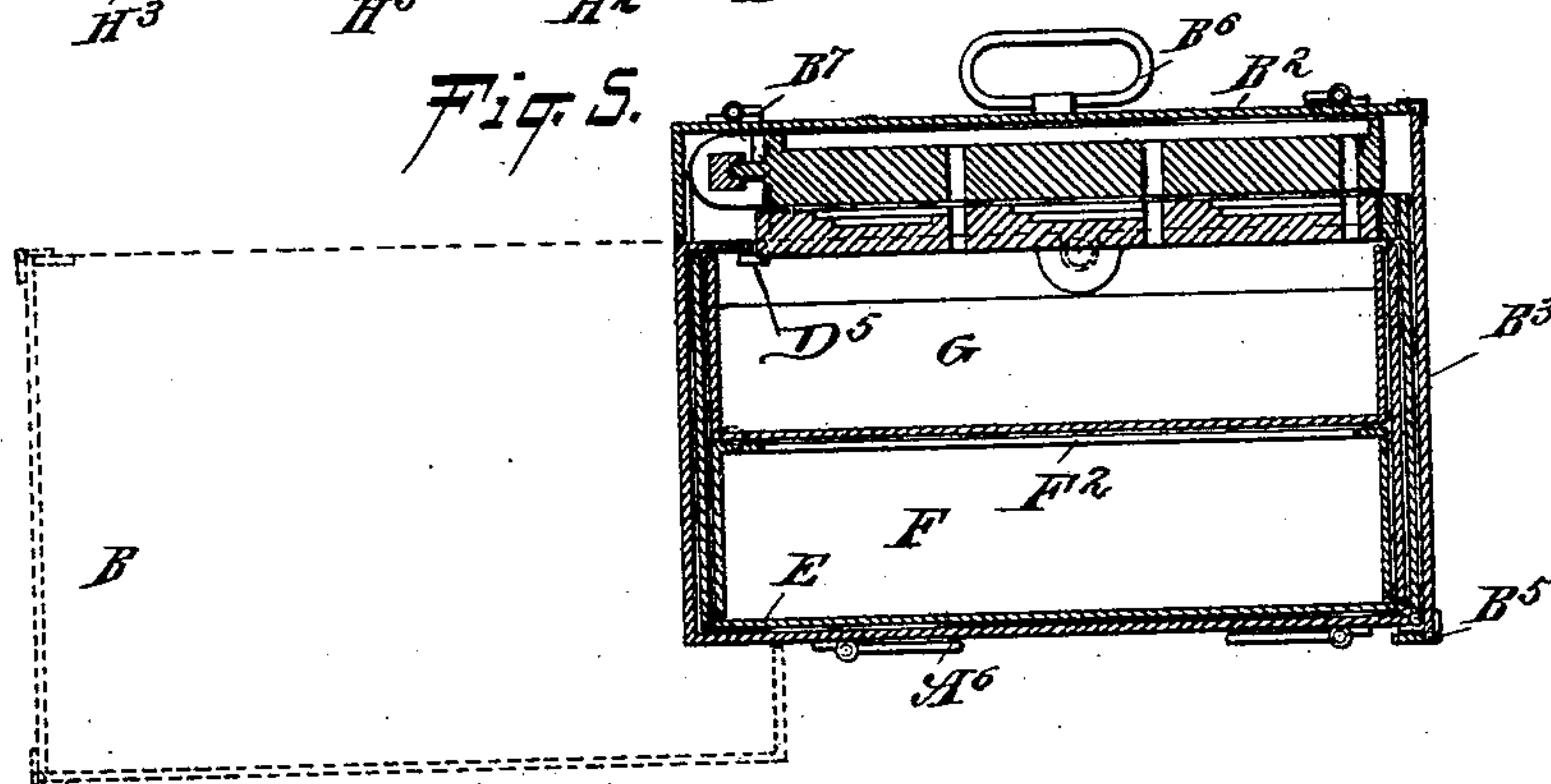
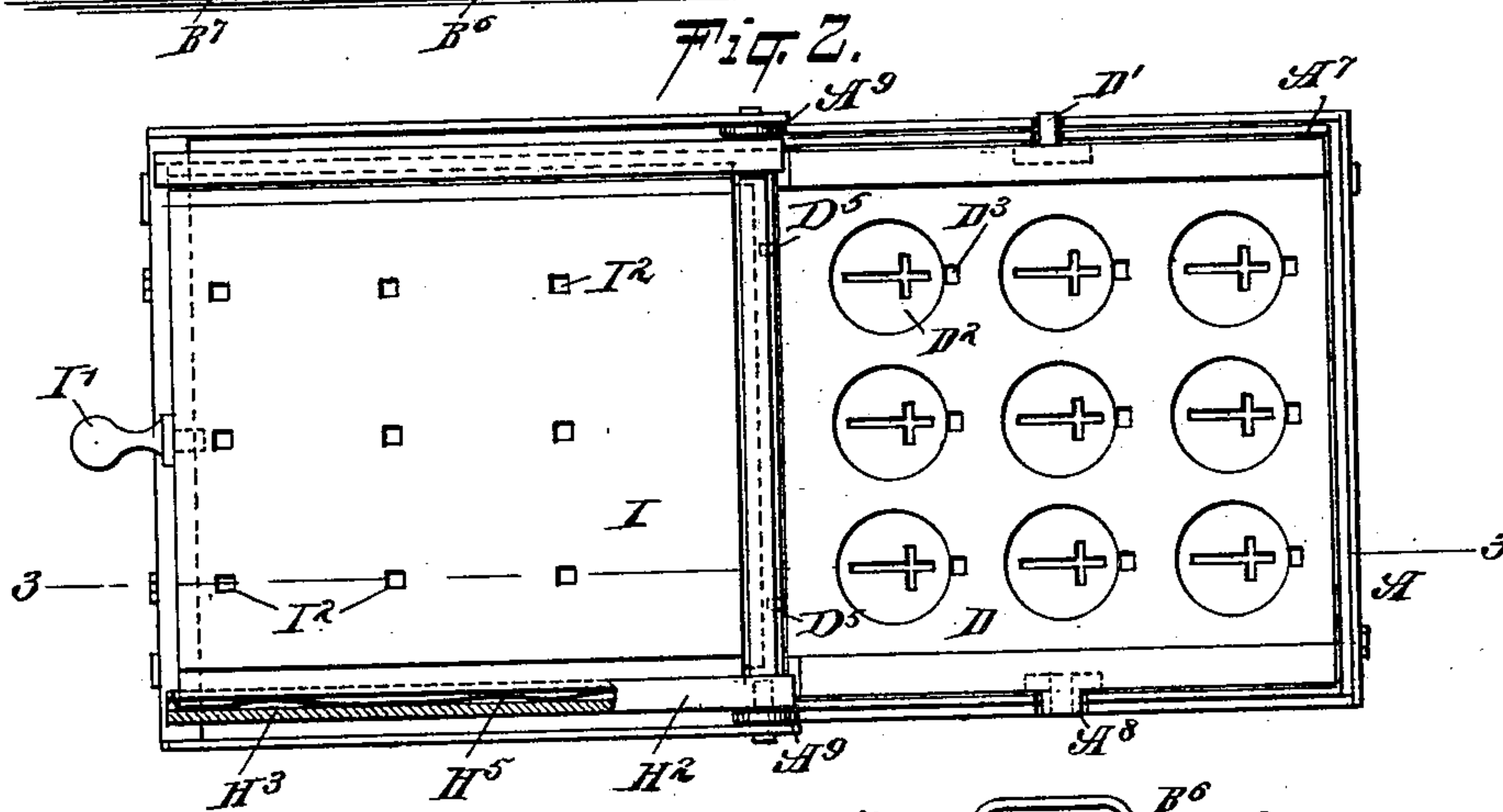
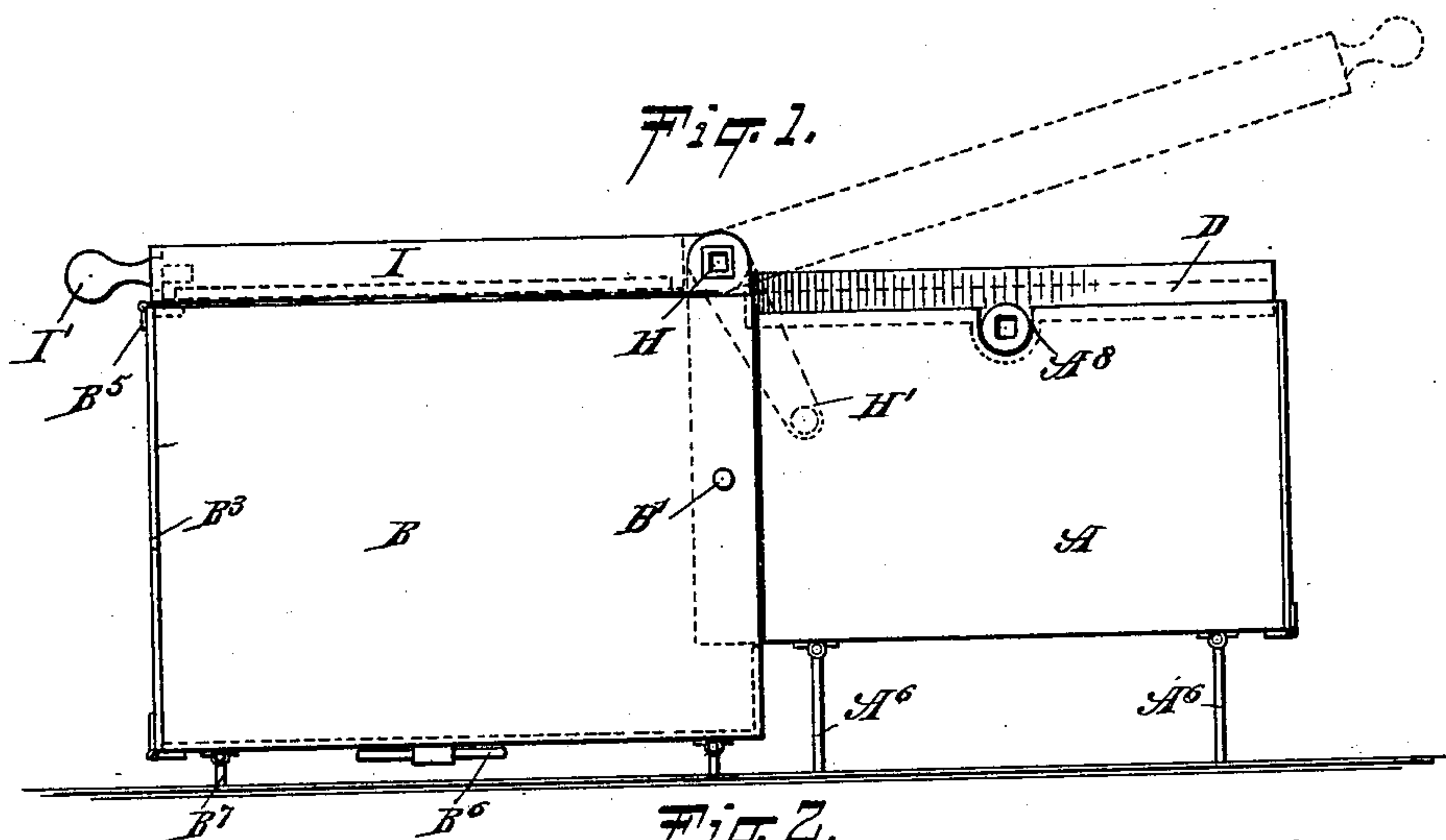
J. J. EUGSTER.

MACHINE FOR MAKING COMMUNION WAFERS.

(Application filed July 5, 1899. Renewed Feb. 1, 1901.)

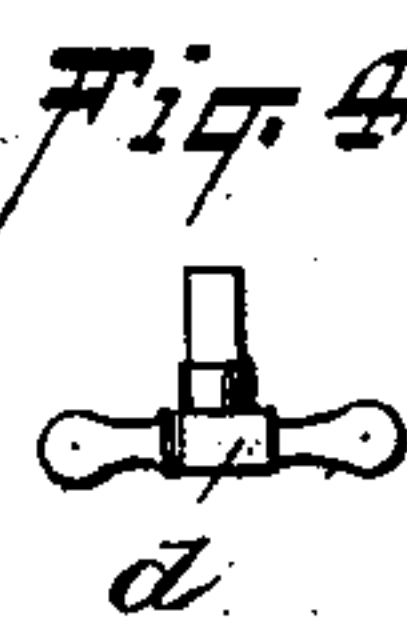
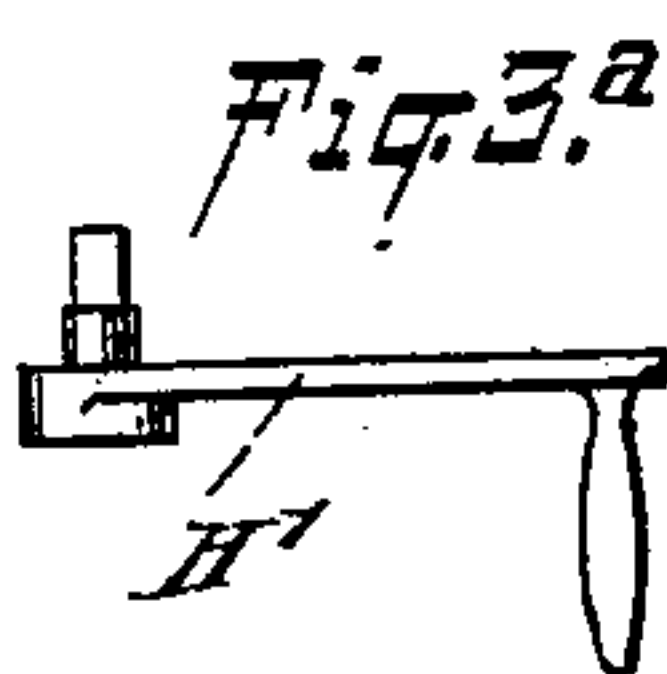
(No Model.)

2 Sheets—Sheet 1.



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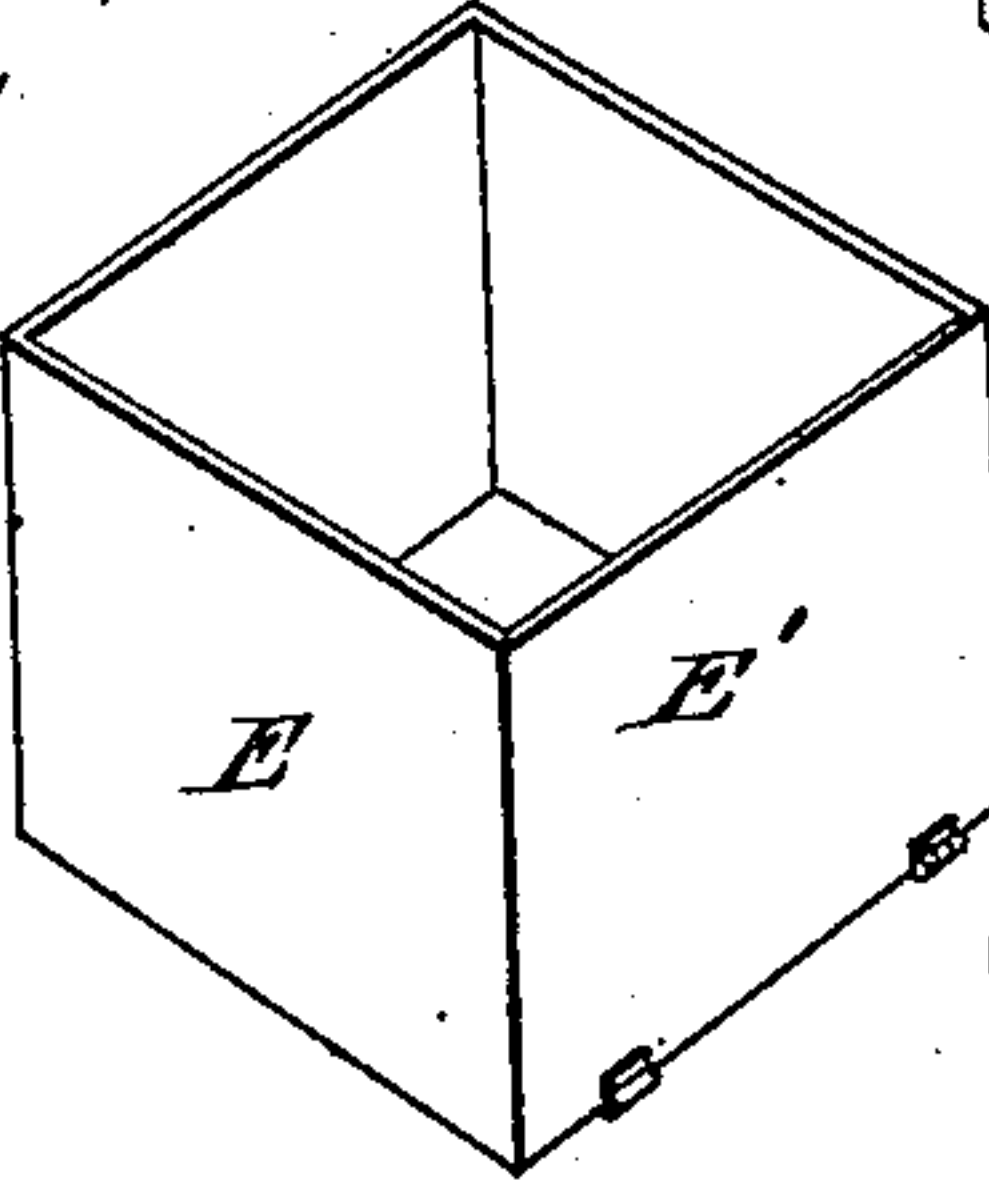
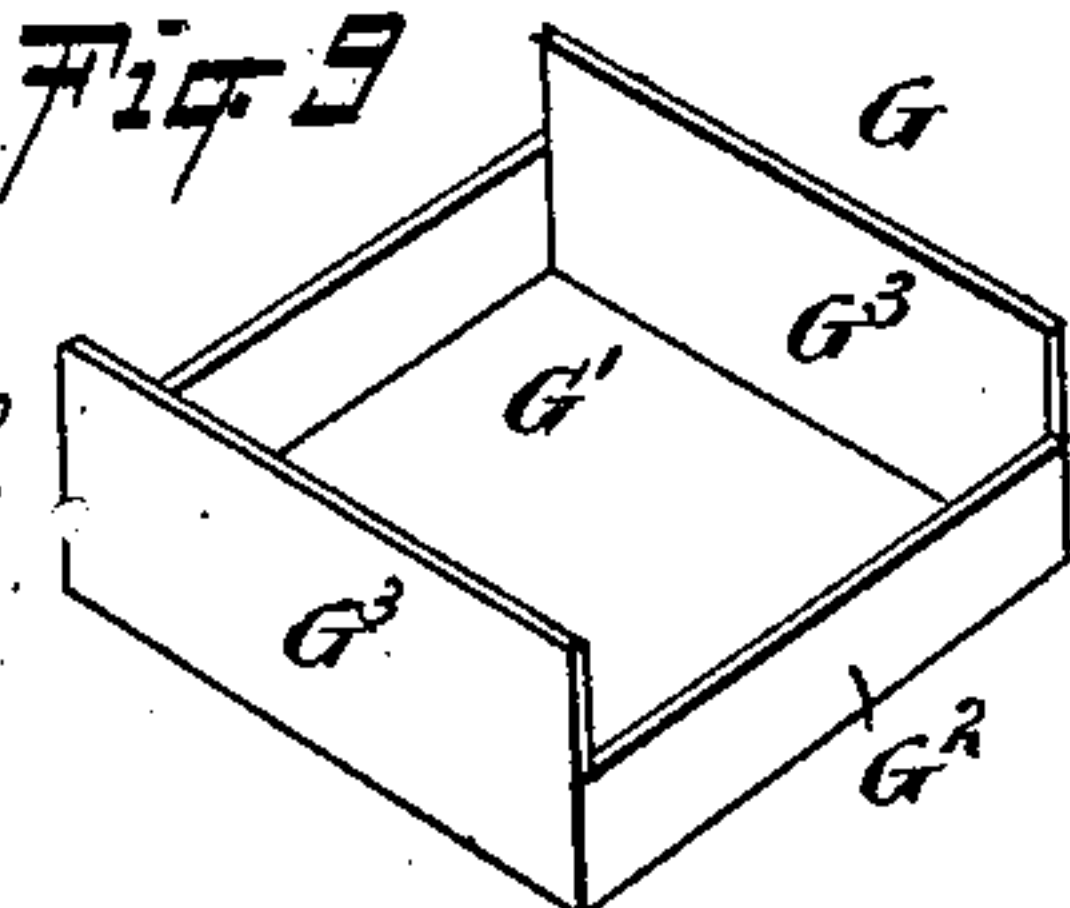
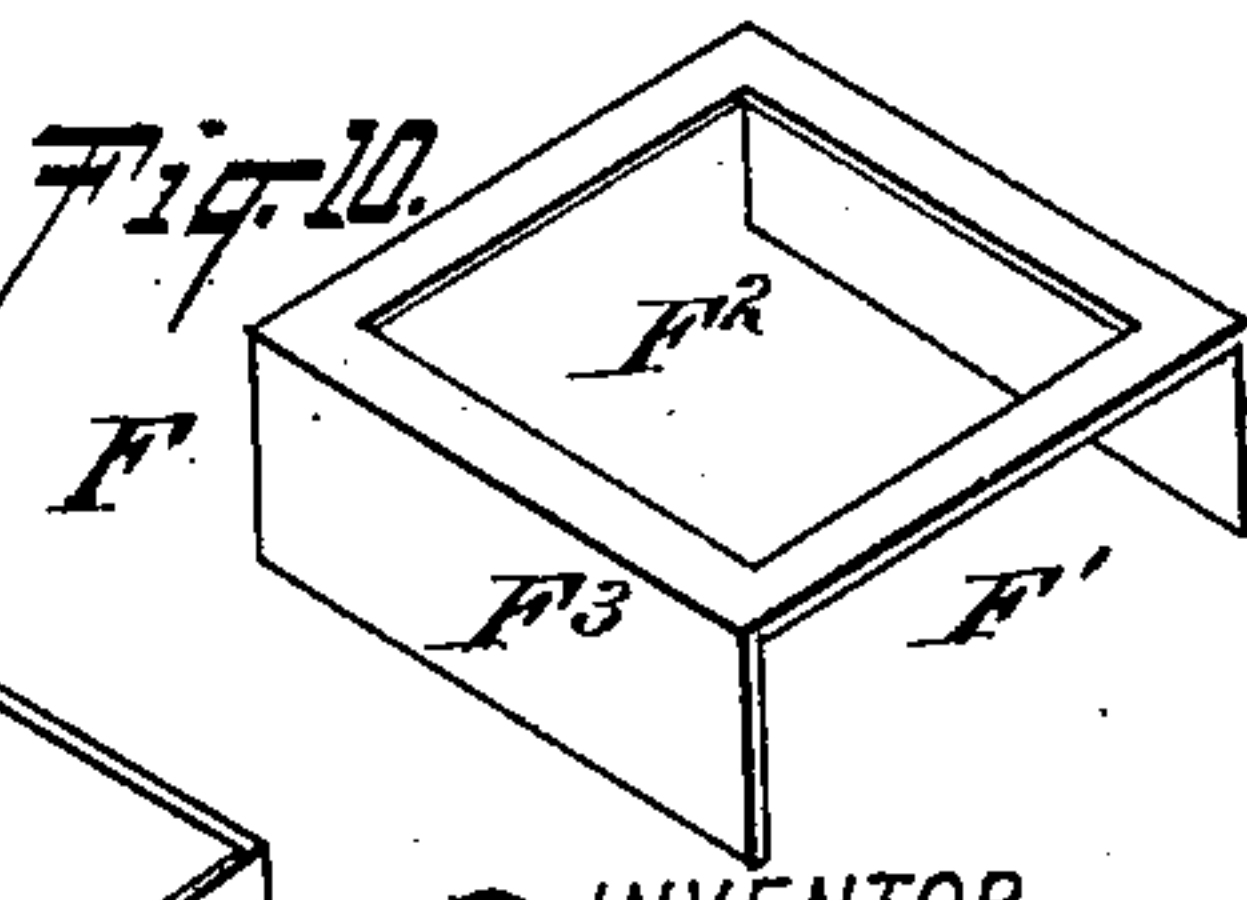
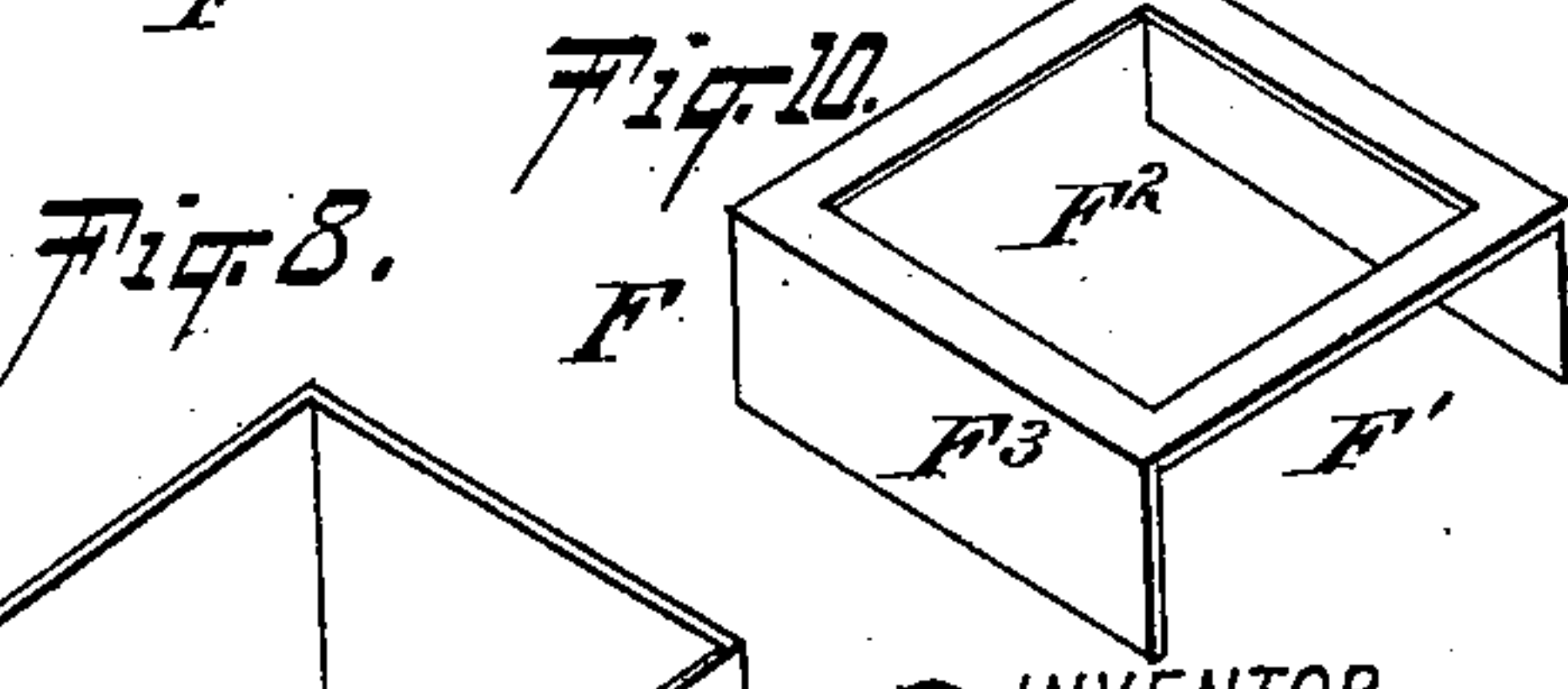
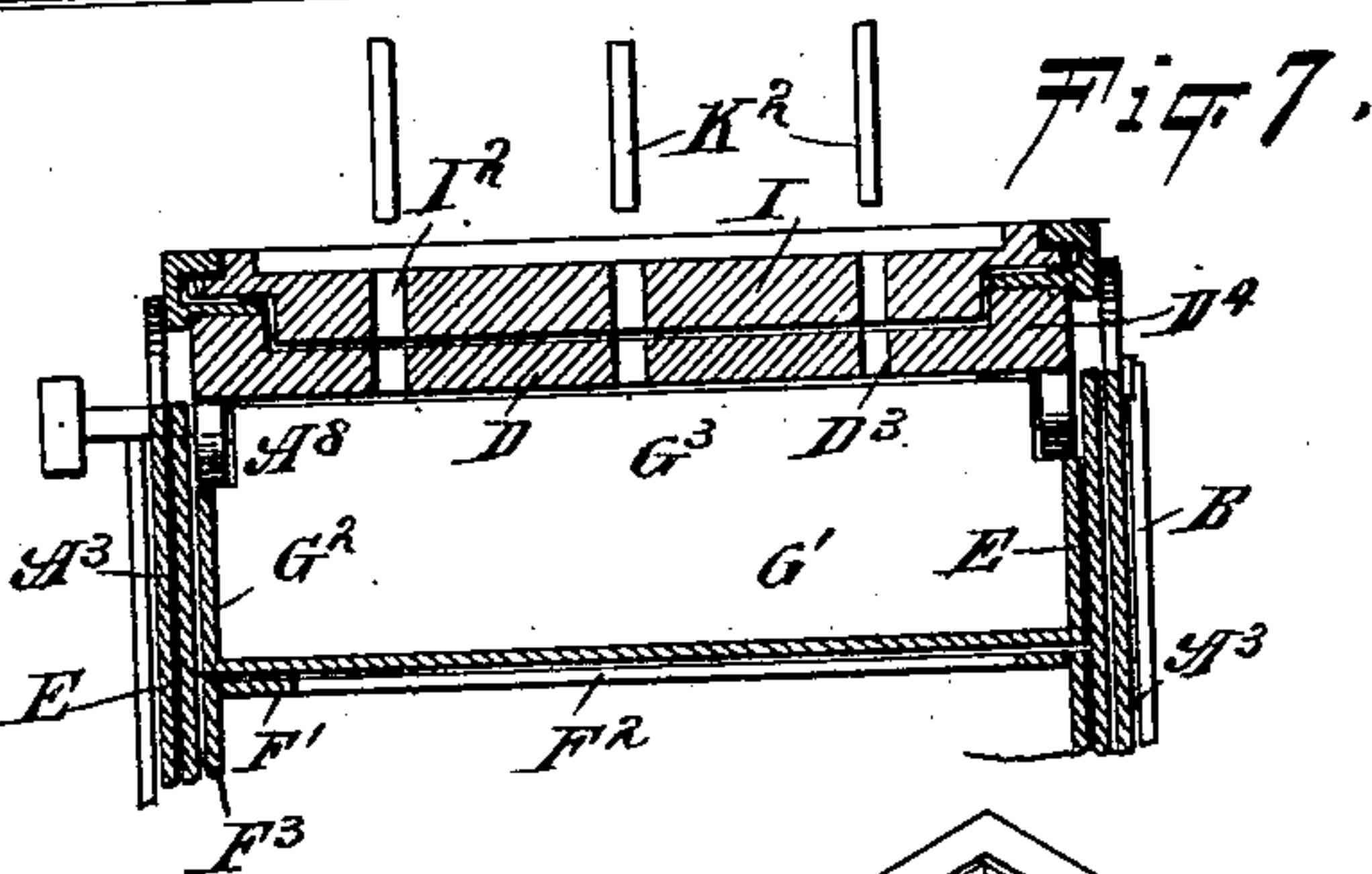
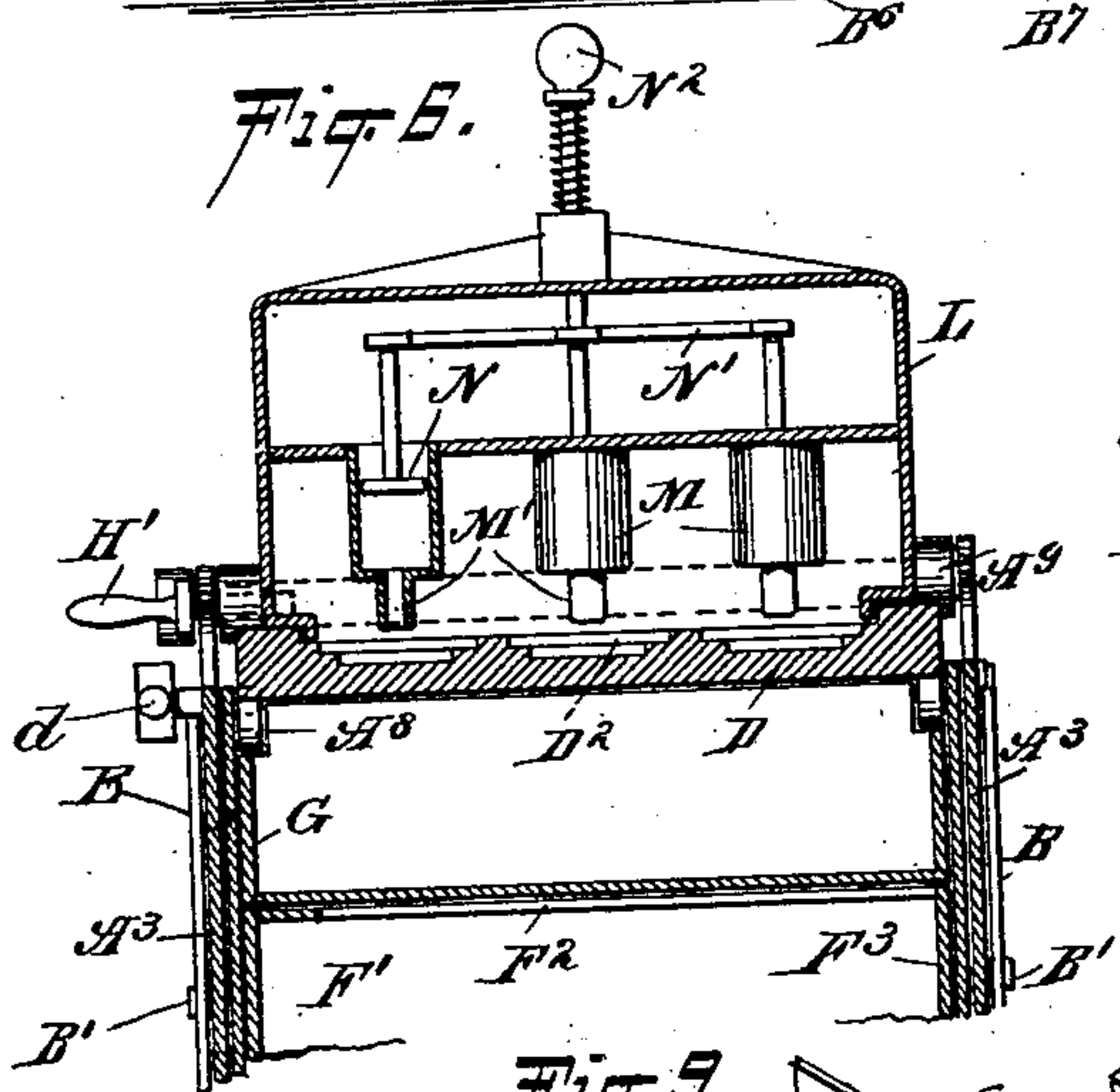
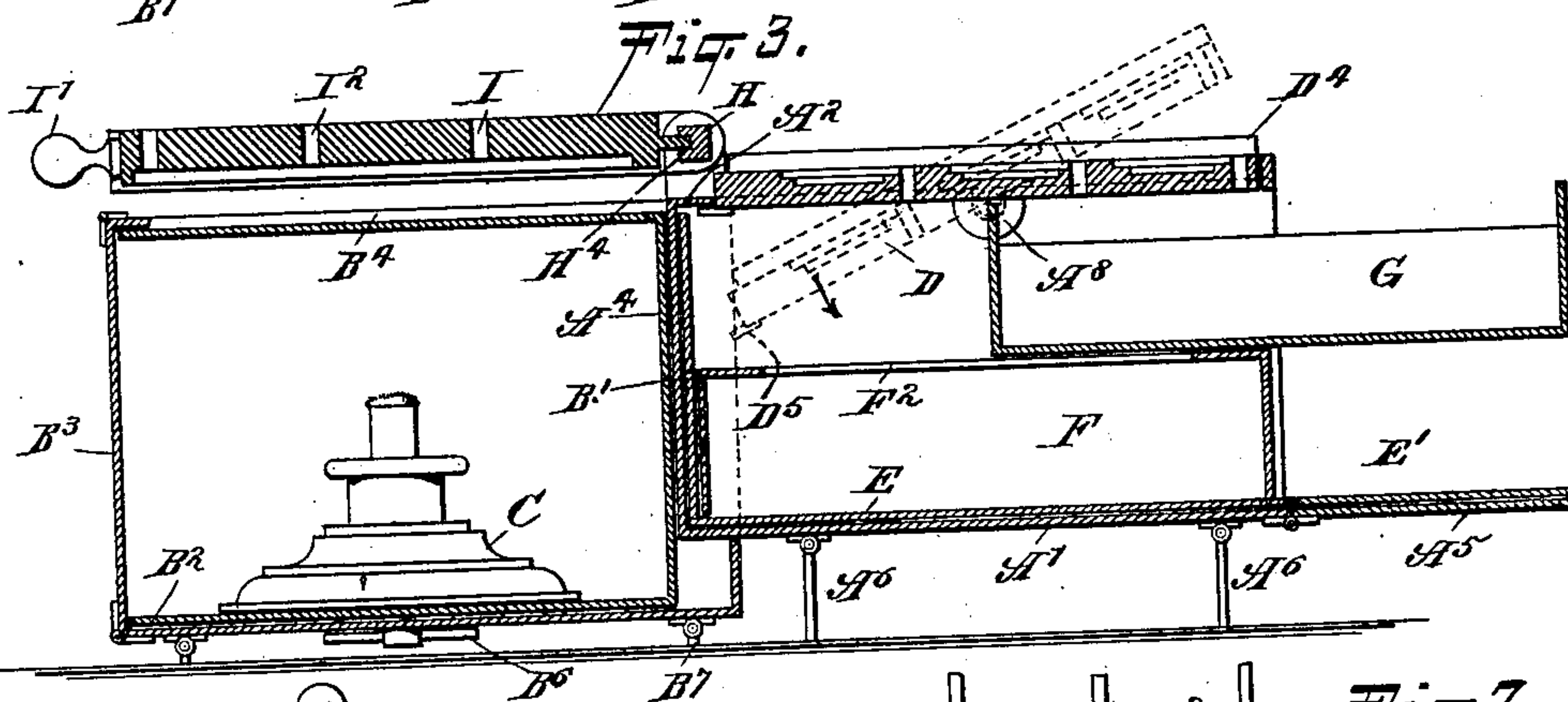
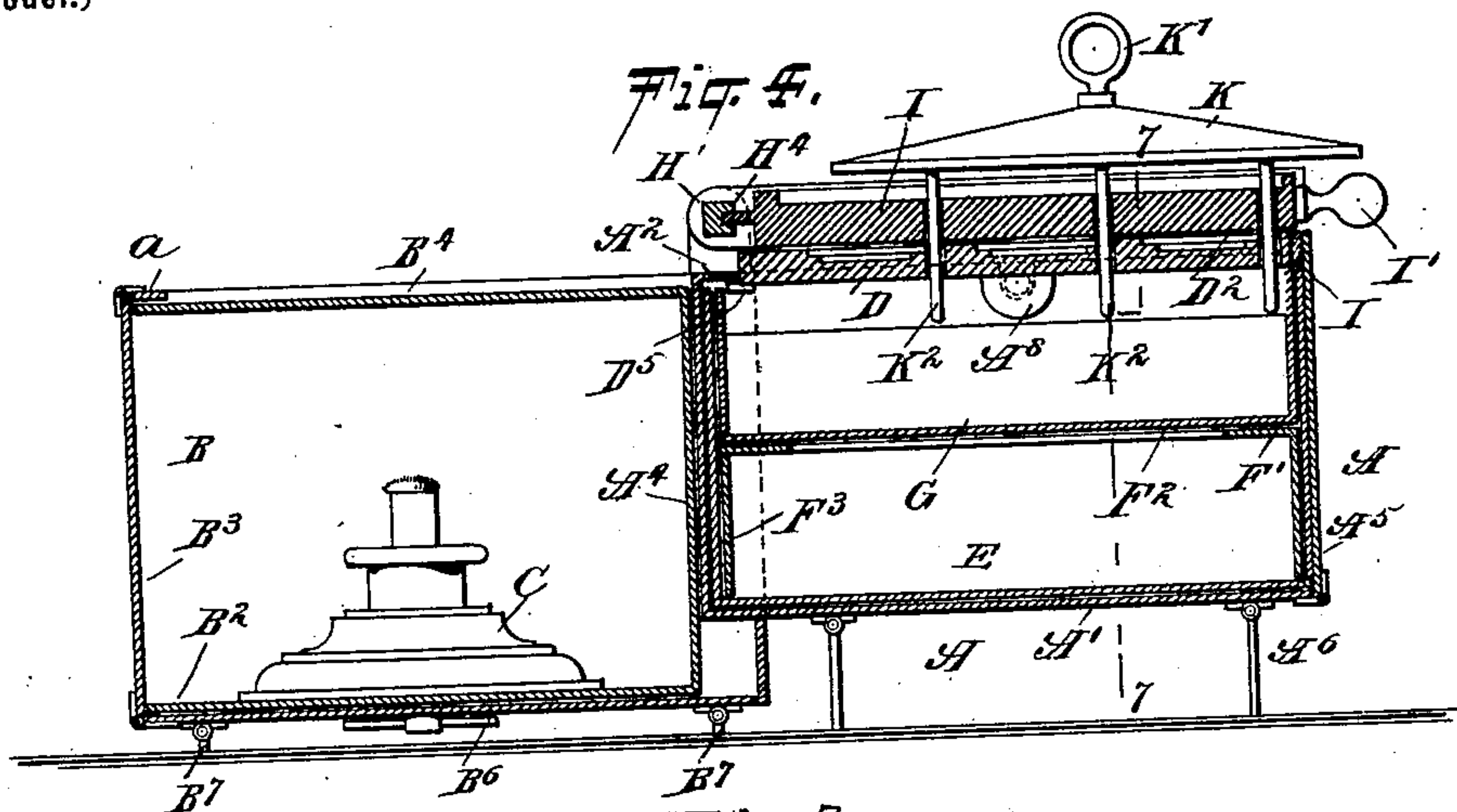
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(Application filed July 5, 1899. Renewed Feb. 1, 1901.)

2 Sheets—Sheet 2.

(No Model.)



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# UNITED STATES PATENT OFFICE.

JOHANN JACOB EUGSTER, OF NEW RIEGEL, OHIO.

## MACHINE FOR MAKING COMMUNION-WAFERS.

SPECIFICATION forming part of Letters Patent No. 677,648, dated July 2, 1901.

Application filed July 5, 1899. Renewed February 1, 1901. Serial No. 45,627. (No model.)

*To all whom it may concern:*

Be it known that I, JOHANN JACOB EUGSTER, of New Riegel, in the county of Seneca and State of Ohio, have invented a new and  
5 Improved Machine for Making Communion-Wafers, of which the following is a full, clear, and exact description.

My invention has for its object to provide a comparatively simple machine for making  
10 communion-wafers, the machine being constructed to be operated very readily and being provided with effective devices for keeping the operating parts clean.

The invention will be fully described hereinafter and the features of novelty pointed out in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is an elevation of the improved machine. Fig. 2 is a plan thereof. Fig. 3 is a longitudinal sectional elevation on the line 3 3 of Fig. 2. Figs. 3<sup>a</sup> and 4<sup>a</sup> show two removable handles forming part of my machine. Fig. 4 is a view similar to Fig. 3, but with the parts in a different position. Fig. 5 is a sectional elevation of the machine in the closed position. Fig. 6 is a detail sectional elevation showing the mechanism for filling the dies with paste. Fig. 7 is a transverse sectional elevation, substantially on the line 7 7 of Fig. 4, with the paste-ejector raised; and Figs. 8, 9, and 10 are detail perspective views of several individual parts of the machine.

The improved machine consists of two frames or boxes each in the shape of a rectangular prism, the smaller box A having a bottom A', top A<sup>2</sup>, sides A<sup>3</sup>, and an end A<sup>4</sup>  
40 rigidly connected with one another, while the other end A<sup>5</sup> is hinged to the bottom A'. Folding legs A<sup>6</sup> support the bottom A' at a suitable distance above the floor, table, or other support. To the box A is hinged, as indicated at B', the other larger box B, adapted to contain a lamp C, preferably in a separate receptacle B<sup>2</sup>, open at that end which is adjacent to a hinged end B<sup>3</sup> of the box B, as will be seen in Fig. 3. It will be observed  
50 that the top of the receptacle B<sup>2</sup> extends over the lamp C, and thus prevents the direct access of the flame and products of combustion

to the opening B<sup>4</sup>, provided in the top of the box B vertically above the point at which the lamp is placed. It will be understood that  
55 after swinging the end B<sup>3</sup> down the box B<sup>2</sup> or the lamp C alone may be readily removed from the main box B and inserted again after cleaning them. The box B has a handle B<sup>6</sup> at its bottom. B<sup>7</sup> represents folding legs for supporting the bottom of the box B. This bottom, for a purpose that will be fully explained hereinafter, is at a lower level than the bottom A' of the box A.

The top A<sup>2</sup> of the box A is provided with  
65 an opening A<sup>7</sup>, in which is located a die-plate D, having upon it a number of dies D<sup>2</sup> with a suitable design, such as a cross. This die-plate is mounted to swing about a transverse horizontal axis, being, for instance, journaled by trunnions D' in suitable bearings A<sup>8</sup>,  
70 formed in the sides A<sup>3</sup> adjacent to the opening A<sup>7</sup>. The die-plate is provided at the edge of each die D<sup>2</sup> with a perforation D<sup>3</sup>, and also has a removable handle d. (See Fig. 4<sup>a</sup>.)  
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In the box or section A, below the opening A<sup>7</sup>, is located a box E of about the same size as said section. The box E is open at the top and has an end E' hinged to its bottom. By opening the end A<sup>5</sup> the box E becomes accessible. Then by swinging the end E' down the contents of the box E become accessible. These consist, first, of a support F, and, second, of a waste-box G. The support F has a top F', apertured, as at F<sup>2</sup>, and sides or legs  
85 F<sup>3</sup>. The waste-box G, which is adapted to rest on said support, is a box having a bottom G', sides G<sup>2</sup>, and ends G<sup>3</sup>, but no top. The upper edges of the ends G<sup>3</sup> of said waste-box are located very near to the lower surface of  
90 the die-plate D when the same is in its horizontal position, so that the said edges will act as scrapers when the box G is slid outwardly. (See Fig. 3.)

On the top A<sup>2</sup> are arranged bearings A<sup>9</sup>, in  
95 which is journaled a transverse shaft H, having a removable handle H', Fig. 3<sup>a</sup>. To this transverse shaft are secured arms H<sup>2</sup>, extending longitudinally of the main box A and provided in their opposing or inner sides with  
100 grooves H<sup>3</sup>, forming slideways for the heating-plate I. The shaft H has a transverse groove H<sup>4</sup>, registering with the longitudinal grooves H<sup>3</sup> and adapted to receive the end of



the heating-plate I. The latter is provided with a removable screw-handle I' and a series of perforations I<sup>2</sup>, adapted to register with the perforations D<sup>3</sup> of the die-plate D, Figs. 4 and 7. In the grooves H<sup>3</sup> the arms H<sup>2</sup> carry springs H<sup>5</sup> to hold the heating-plate I. It will be observed that the die-plate D and heating-plate I can be readily removed, so that the pattern can be changed, if desired.

10 In connection with the parts hereinbefore described I employ a paste-ejector, consisting of a plate K, having a handle K' and pins K<sup>2</sup>, corresponding in their relative location to the apertures D<sup>3</sup> and I<sup>2</sup>. This paste-ejector is

15 separable from the machine. Further, I provide as another separable part a die-filling device comprising a frame L, fitted to slide between flanges D<sup>4</sup> of the die-plate D, which flanges are also adapted to serve as guides for the heating-plate I. (See Fig. 7.) A series of paste-cylinders M are carried by said frame, equal in number to the rows of dies D—that is, three in the example shown. Each of these

20 cylinders has a contracted nozzle M' sufficiently small to prevent the accidental escape of the paste. To expel the paste, I employ plungers N, connected by a cross-head N' to a spring-pressed handle N<sup>2</sup>, which slides in the frame L.

30 In operation, the lamp C being lighted, the parts being in the position illustrated by Figs. 1, 2, and 3 and the cylinders being filled with paste, the frame L is placed upon the die-plate D and slid between the flanges D<sup>4</sup>

35 until the nozzles M' register with one series of dies D<sup>2</sup>. The handle N<sup>2</sup> is then partly depressed until the dies have received their supply of paste. Then the frame L is moved into registry with another row of dies, and

40 the plungers being depressed farther than before the second series of dies is filled, and similarly for the third series. The frame L is then removed, and the heating-plate I, which meanwhile has become heated, is

45 swung over (by turning the handle H') from the position shown in Figs. 1, 2, and 3 to that shown in Figs. 4 and 7. (See dotted lines in Fig. 1.) The apertures D<sup>3</sup> I<sup>2</sup> will come into registry, and the paste will be formed into

50 wafers by the effect of the heat in the usual manner. The superfluous material or excess will pass into the apertures D<sup>3</sup> I<sup>2</sup> to be forced out by the pins K<sup>2</sup> of the paste-ejector, Figs. 7 and 4, into the waste-box G. Any

55 material still adhering to the die-plate D will be readily removed by pulling the waste-box G outward (see Fig. 5) after swinging down the hinged ends A<sup>5</sup> and E'. This waste will of course also drop into the box G. After the

60 paste-ejector has been removed the crank or handle H' is turned in the opposite direction to swing the heating-plate I away from the die-plate D, and then the die-plate D is turned on its trunnions D' in the direction

65 indicated by the arrow in Fig. 3 to allow the pressed wafers to fall through the aperture F<sup>2</sup> of the support F into the box E. The com-

pleted wafers are thus collected in the box E, which may be removed and emptied whenever it becomes full. The upward movement of the die-plate D is limited by stop-pins D<sup>5</sup>. (See Figs. 2, 3, 4, and 5.)

It will be seen that the machine is comparatively simple and comprises means for keeping the parts thereof clean and readily

75 accessible.

As before mentioned, the bottom of the box B is somewhat lower than that of the box A, the distance between the two bottoms being such that when the box B is swung on the

80 pivot B', as shown in Fig. 5, it will extend over and cover the box A, with the die D and the heating-plate I on top of said box A. The handles H', d, and I' are removed to permit of thus folding the section B over the section

85 A and may be put into the box E. The box B<sup>2</sup> and lamp C are removed and carried separately, while the other parts of the machine form a compact box, as shown in Fig. 5, and may be carried by means of the handle B<sup>6</sup>, a

90 catch B<sup>5</sup> connecting the two sections A and B.

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

1. The combination of the two boxes or sections, pivotally connected and one larger than the other to fit over the same, the smaller section having its bottom at a higher level than the larger section, a die-plate at the top of the smaller section, and a heating-plate adapted to be brought on top of said die-plate.

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2. The combination of the two boxes or sections, pivotally connected and one larger than the other to fit over the same, the smaller section having its bottom at a higher level than the larger section, a die-plate at the top of the smaller section, a heating device in the larger section, and a heating-plate pivoted adjacent to the junction of the two sections and adapted to swing from a position above

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the heating device into contact with the die-plate.

3. The combination of the box or frame, the transverse shaft journaled therein, the longitudinal arms carried by said shaft and provided with guideways, the heating-plate arranged to slide in said guideways, and the die-plate arranged upon the frame in the path of the heating-plate.

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4. The combination of the box or frame, the transverse shaft journaled therein, the die-plate journaled upon the frame about a horizontal axis, and the heating-plate carried by said transverse shaft.

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5. The combination of the box or frame, the transverse shaft journaled therein, the die-plate arranged upon the frame, and the heating-plate carried by said transverse shaft, the die-plate having a series of perforations located at the periphery of the die or dies proper, and the heating-plate having a series of correspondingly-located perforations.

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6. The combination of the box or frame, the die-plate journaled upon the frame about a



horizontal axis, and the heating-plate movable toward and from the die-plate.

7. The combination of the frame having a die-plate at one end of its top and an aperture at the other end thereof, a heating device below said aperture, and a transverse shaft carrying a heating-plate arranged to swing from a position above said aperture into registry with the die-plate.

8. The combination of the frame having a die-plate at one end of its top and an aperture at the other end thereof, a heating device below said aperture, a box or plate extending between the heating device and said aperture, and a transverse shaft carrying a heating-plate arranged to swing from a position above said aperture into registry with the die-plate.

9. The combination of the frame, the tilting die-plate journaled therein to turn about a horizontal axis, the heating-plate adapted to register with the die-plate, the sliding waste-box located below the tilting die-plate and arranged to scrape the lower surface thereof, and the apertured support on which rests said waste-box.

10. The combination of the frame, the tilting die-plate journaled therein to turn about a horizontal axis, the heating-plate adapted to

register with the die-plate, the sliding waste-box located below the tilting die-plate and arranged to scrape the lower surface thereof, the apertured support on which rests said waste-box, and another box containing both the waste-box and the support.

11. The combination of the frame having a hinged end, a tilting die-plate adjacent to said hinged end, a box located below said die-plate and having a hinged end adjacent to the hinged end of the frame, an open-top support located at the bottom of said box, a waste-box located in the upper part of the box and adapted to slide on said support, said waste-box being arranged to scrape the lower edge of the die-plate, and a heating-plate adapted to register with the tilting die-plate.

12. The combination of the die-plate having dies and through-perforations adjacent thereto, the heating-plate movable to and from the die-plate and having through-perforations adapted to register with those of the die-plate, and the paste-ejector having pins located correspondingly to said perforations.

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Witnesses:

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