

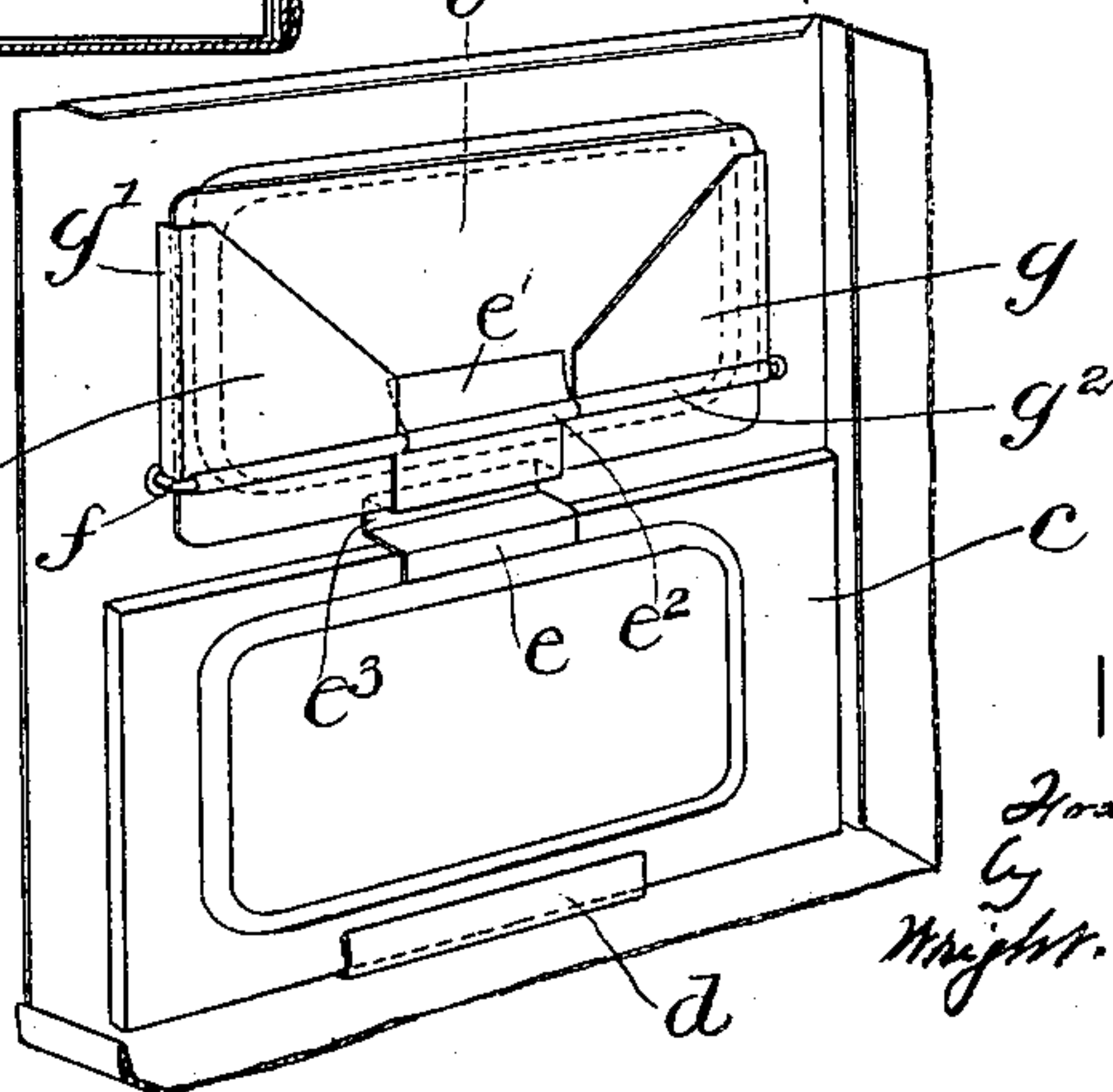
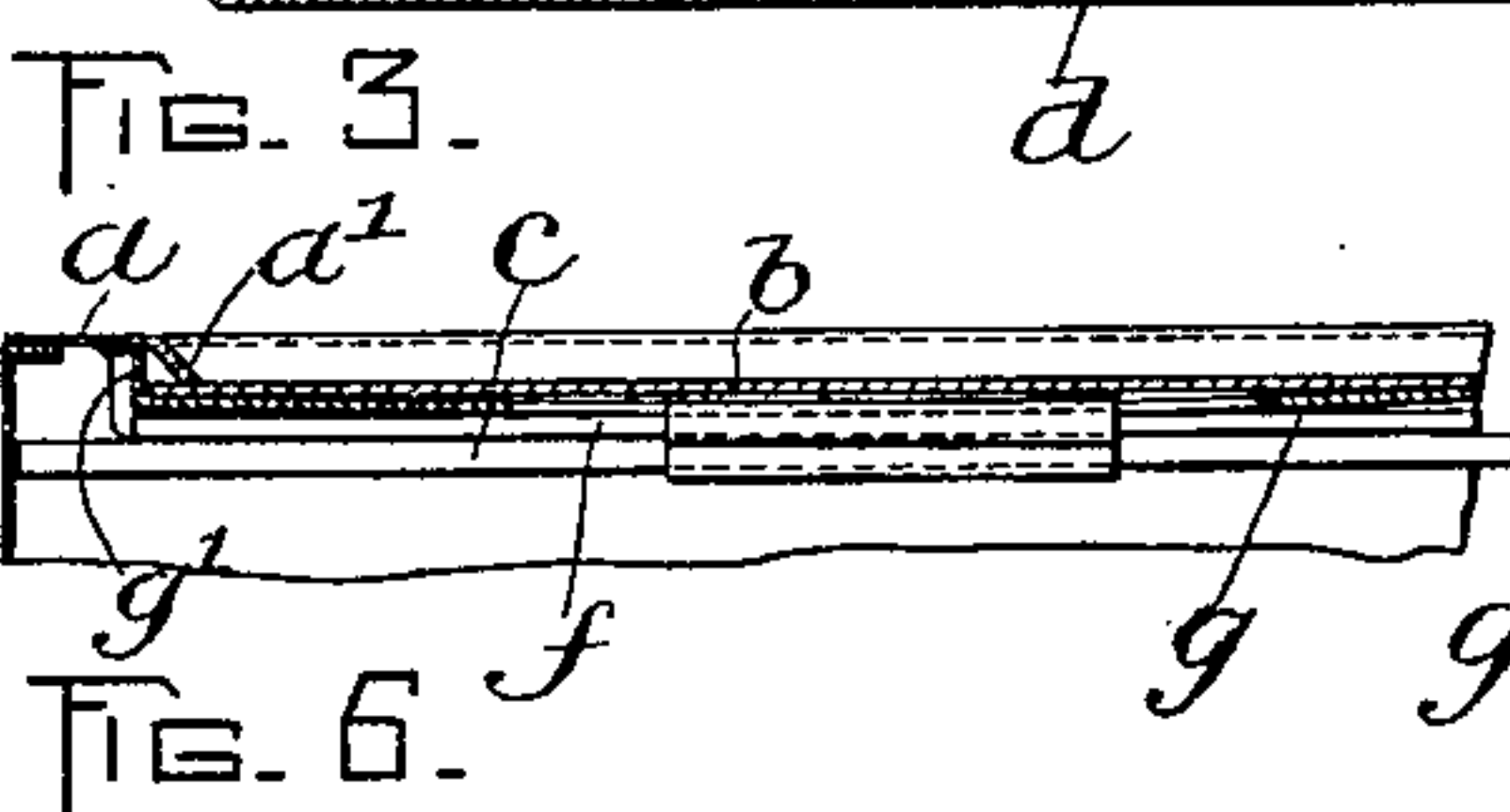
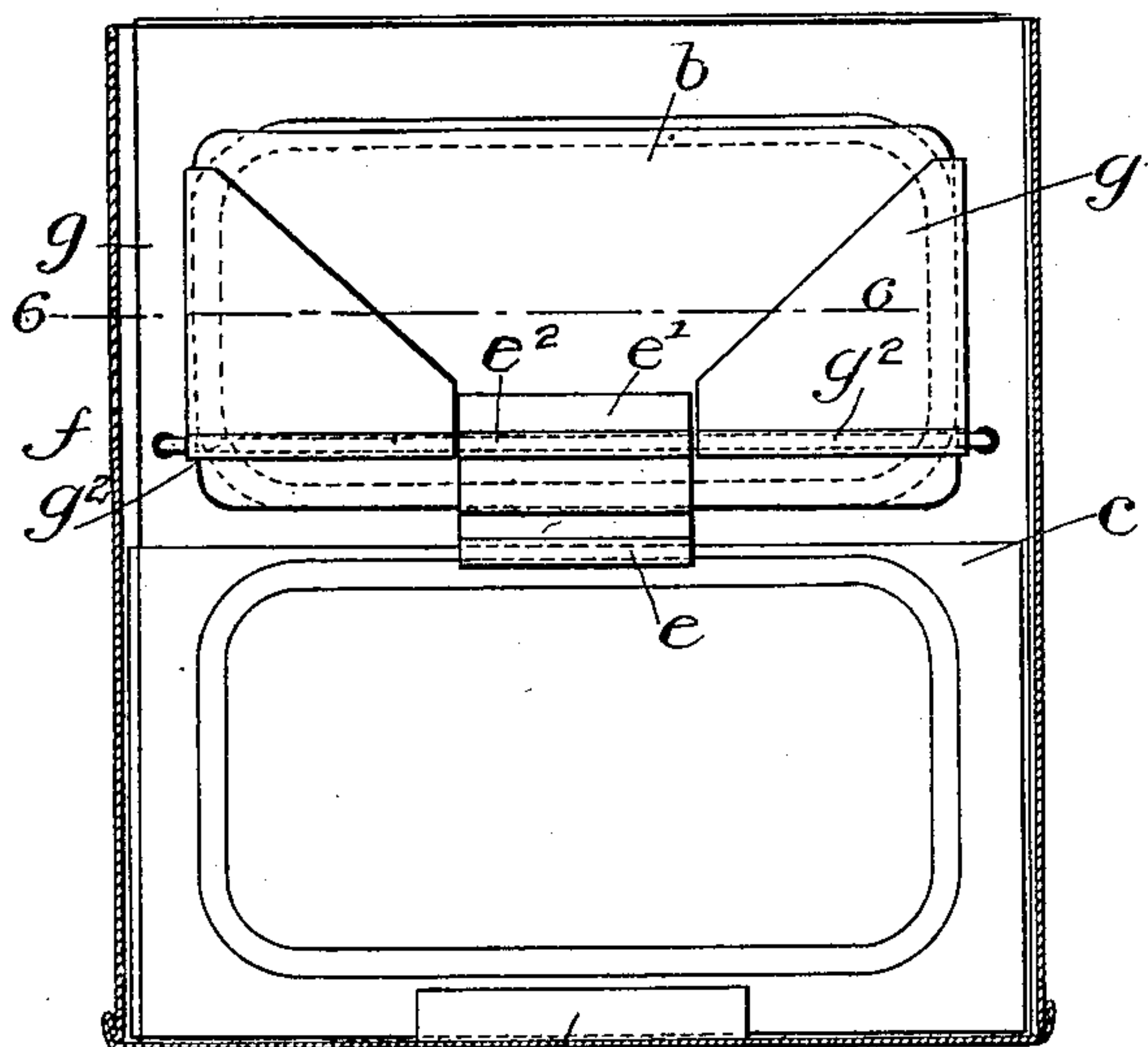
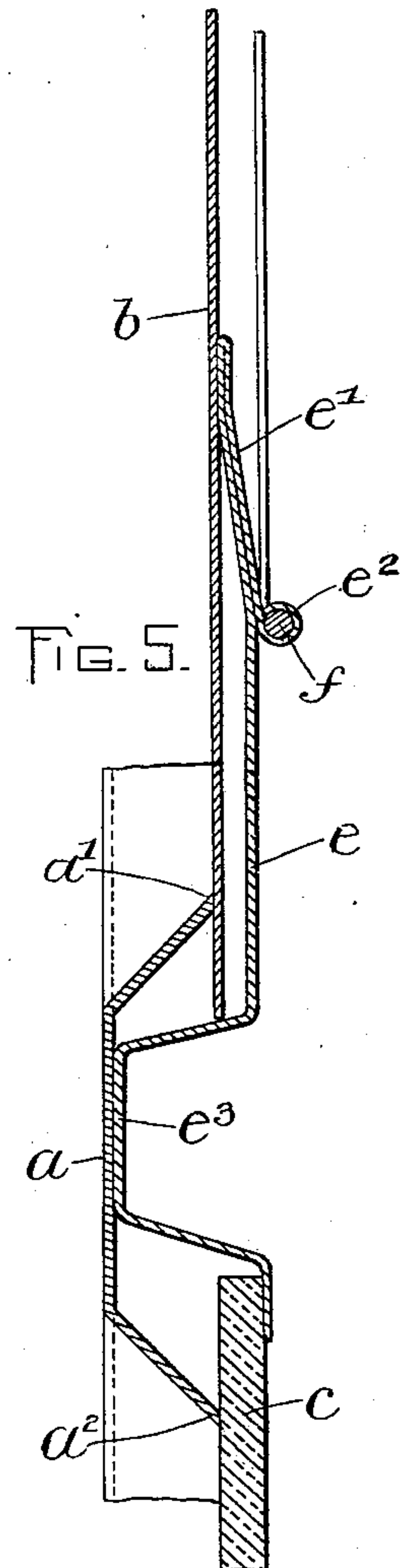
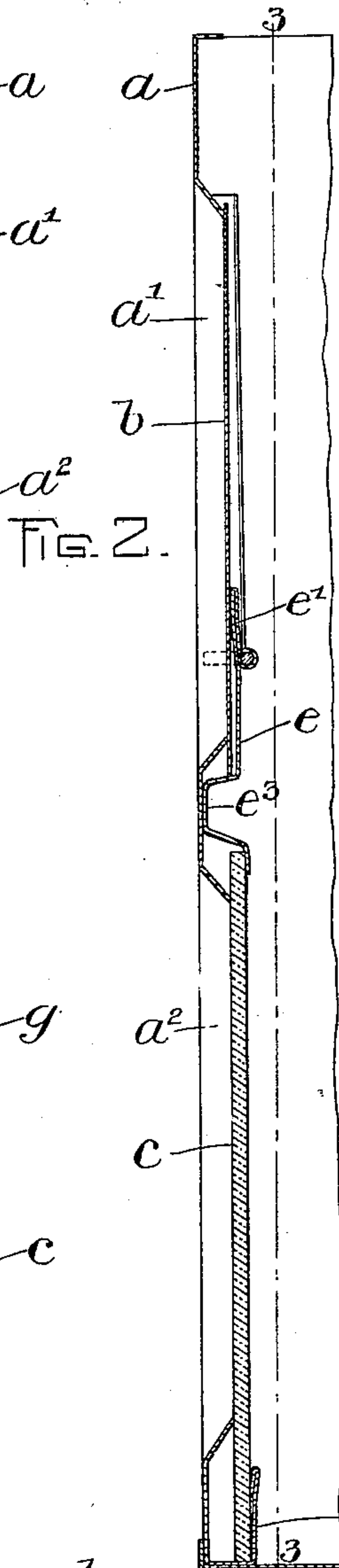
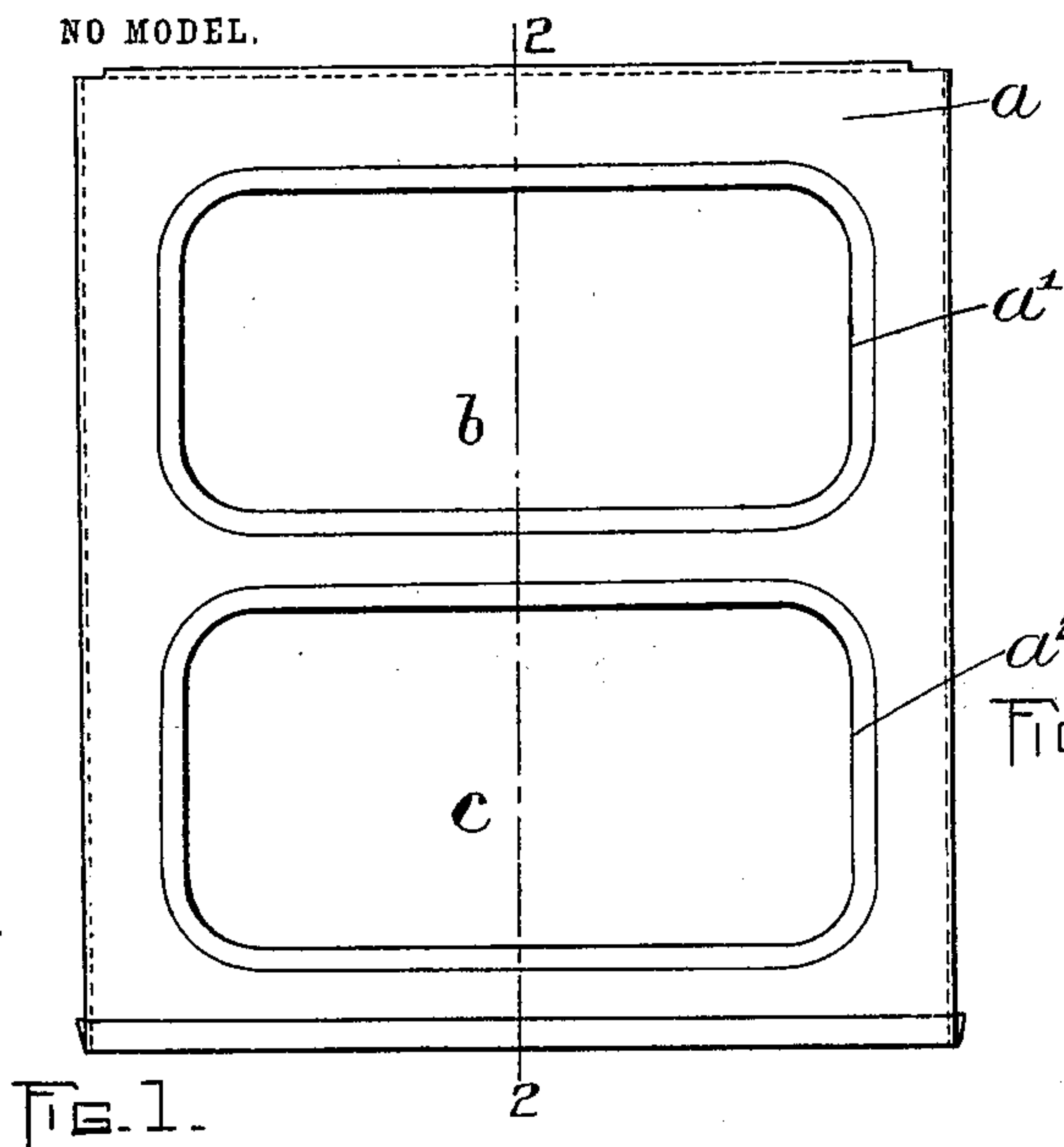
No. 731,237.

PATENTED JUNE 16, 1903.

F. W. SMITH.
DISPLAY BOX.

APPLICATION FILED JAN. 2, 1903.

NO MODEL.



WITNESSES:

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UNITED STATES PATENT OFFICE.

FRANCIS W. SMITH, OF CAMBRIDGE, MASSACHUSETTS, ASSIGNOR, BY
MESNE ASSIGNMENTS, TO NATIONAL BISCUIT COMPANY, OF JERSEY
CITY, NEW JERSEY, AND CHICAGO, ILLINOIS, A CORPORATION OF
NEW JERSEY.

DISPLAY-BOX.

SPECIFICATION forming part of Letters Patent No. 731,237, dated June 16, 1903.

Application filed January 2, 1903. Serial No. 137,414. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS W. SMITH, of Cambridge, in the county of Middlesex and State of Massachusetts, have invented certain
5 new and useful Improvements in Display-Boxes, of which the following is a specification.

This invention relates to rectangular boxes usually made of sheet metal and adapted to
10 contain articles of merchandise, such as crackers or cakes, and to display a portion of the merchandise through an opening in one side of the box, said opening being covered by a plate of glass or other transparent material. In this class of boxes it is common to
15 provide a second opening in the same side of the box with the display or glass-covered opening, said second opening being covered by a removable plate bearing on its outer side the
20 name or trade-mark of the goods or other information, said plate being hereinafter referred to as the "sign-plate."

My invention has for its object to provide an improved construction of a box of this character, including means for detachably holding
25 the sign-plate and the transparent plate in place in position to cover the respective openings, the improved construction being of such nature as to permit ready removal of the said
30 plates for the purpose of cleaning the same and free access to all parts of the interior of the box without providing pockets for the lodgment of crumbs, &c.

The invention consists in the improvements
35 which I shall now proceed to describe and claim.

Of the accompanying drawings, Figure 1 represents a front elevation of a box embodying my invention. Fig. 2 represents an enlarged section on line 2 2 of Fig. 1, said view
40 showing one side of the box and portions of the adjacent sides, the remainder of the box being broken away. Fig. 3 represents a section on line 3 3 of Fig. 2 looking toward the
45 left. Fig. 4 represents a perspective view of the portion of the box shown in Fig. 2. Fig. 5 represents an enlargement of a portion of Fig. 2. Fig. 6 represents a section on line 6 6 of Fig. 3.

The same reference characters indicate the 50 same parts in all the figures.

In the drawings, *a* represents the front of a box adapted to contain crackers, small cakes, &c., said front being preferably made of sheet metal and provided with an upper
55 opening *a'* and a lower opening *a''*, the material of the front forming the margins of said openings being bent inwardly to form beveled flanges surrounding said openings.

b represents a sign-plate, preferably a piece 60 of sheet metal, formed to cover the opening *a'*, and *c* represents a transparent plate, preferably of glass, formed to cover the opening *a''*. Means are provided for detachably holding said plates within the box in position to cover
65 the respective openings, said means comprising guides *g g*, affixed to the front piece *a* at the ends of the upper opening *a'*, said guides being formed to engage the ends of the sign-plate *b*, a stop *d*, affixed to the bottom of the box and
70 adapted to engage the lower portion of the glass plate *c*, and a locking-dog *e*, hinged to the interior of the box and having an arm *e'*, adapted to bear on the inner side of the sign-plate *b*, the said dog being adapted to engage
75 the upper portion of the glass plate *c*. The guides *g g* are pieces of sheet metal bent at their ends to form flanges *g'*, which are soldered or otherwise secured to the front piece
80 *a*, the lower edges of the guides *g* being preferably rolled to form sockets *g''*, which inclose a fixed horizontal rod *f*, affixed at its end to the front piece *a* and extending across the
lower portion of the upper opening *a'*. The dog *e* is preferably composed of a strip of 85 sheet metal, having a tubular socket *e''*, which incloses the central portion of the fixed rod *f* and is adapted to turn thereon, the rod *f* and socket *e''* constituting a hinge which permits the dog to swing. The arm *e'* and the lower
90 portion of the dog *e* are formed to bear simultaneously upon the inner sides of the sign-plate *b* and the glass plate *c*, respectively, as shown in Figs. 2 and 5, the arrangement being such that the bearing of the arm *e'* against
95 the sign-plate *b* holds the dog in engagement with the glass plate *c*. When the sign-plate *b* is removed, the dog *e* is free to swing in-

wardly, and thus release the glass plate *c*. The dog *e* is provided with an offset portion *e*³, forming a stop which limits the downward movement of the sign-plate *b*.

5 In applying the plates *c* and *b* to the box the plate *c* is first engaged at its lower portion with the stop *d*, the dog *e* being swung out of place to permit the glass plate *c* to come to a bearing on the margin of the opening *a*². The dog is then swung inwardly to
10 a bearing on the plate *c* and the sign-plate *b* is inserted at its ends between the front piece *a* and the guides *g g* and moved downwardly outside the arm *e'* until it reaches the stop
15 *e*³. The arm *e'* is sufficiently springy to be put under tension by the plate *b*, and thus caused to exert pressure on the dog *e* in a direction required to hold the dog against the glass plate *c*. The removal of the sign-plate
20 *b*, which may be accomplished by sliding it upwardly, releases the dog *e'*, the latter releasing the glass plate *c*. Hence the two plates may be quickly applied and removed.

It will be noticed that the guides *g* form
25 spaces for the reception of the end portions of the sign-plate *b*, which spaces are open below as well as above, so that there is no opportunity for the lodgment of crumbs in said spaces.

30 I claim—

1. A box of the character stated having two display-openings in one of its sides, removable plates located within the box and adapted to cover said openings, and a movable locking-dog for one of said plates adapted
35 to be held in its operative position by the other plate, said dog being released by the removal of the last-mentioned plate.

2. A box of the character specified having
40 two openings in one of its sides, removable plates located within the box and formed to cover said openings, and a hinged locking-dog for one of the plates, having an arm adapted to bear on the back of the other plate to hold
45 the dog in its operative position, said arm and locking-dog being released by the removal of the last-mentioned plate.

3. A box of the character specified having
50 two openings in one of its sides, end guides located behind the upper opening, a stop lo-

cated below the lower opening, a removable transparent plate formed to cover the lower opening, its lower edge engaging said stop, a removable sign-plate formed to cover the upper opening, its ends engaging said guides, 55 and a locking-dog formed to engage the upper portion of the transparent plate and provided with an arm arranged to bear on the sign-plate to hold the dog in its operative position, the locking-dog being released by the
60 removal of the sign-plate.

4. A box of the character specified having two openings in one of its sides, end guides located behind the upper opening, a stop located below the lower opening, a removable
65 transparent plate formed to cover the lower opening, its lower edge engaging said stop, a removable sign-plate formed to cover the upper opening, its ends engaging said guides, and a locking-dog formed to engage the upper
70 portion of the transparent plate and provided with an arm arranged to bear on the sign-plate to hold the dog in its operative position, the locking-dog having a stop to limit the downward movement of the sign-plate. 75

5. A box of the character specified having two openings in one of its sides, fixed guides within the box at the ends of the upper opening, a fixed horizontal rod within the box extending across the lower portion of the
80 upper opening, a locking-dog hinged to said rod and extending downwardly therefrom, a removable sign-plate formed to cover the upper opening and adapted to slide in said guides, and a removable transparent
85 plate formed to cover the lower opening, the locking-dog being formed to engage the upper portion of the transparent plate to lock the same, and having a resilient arm formed
90 to bear on the back of the sign-plate to maintain the dog in its operative position, the said dog having a stop which limits the downward movement of the sign-plate.

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

FRANCIS W. SMITH.

Witnesses:

C. F. BROWN,

ADELINE C. RATIGAN.