

Sept. 4, 1928.

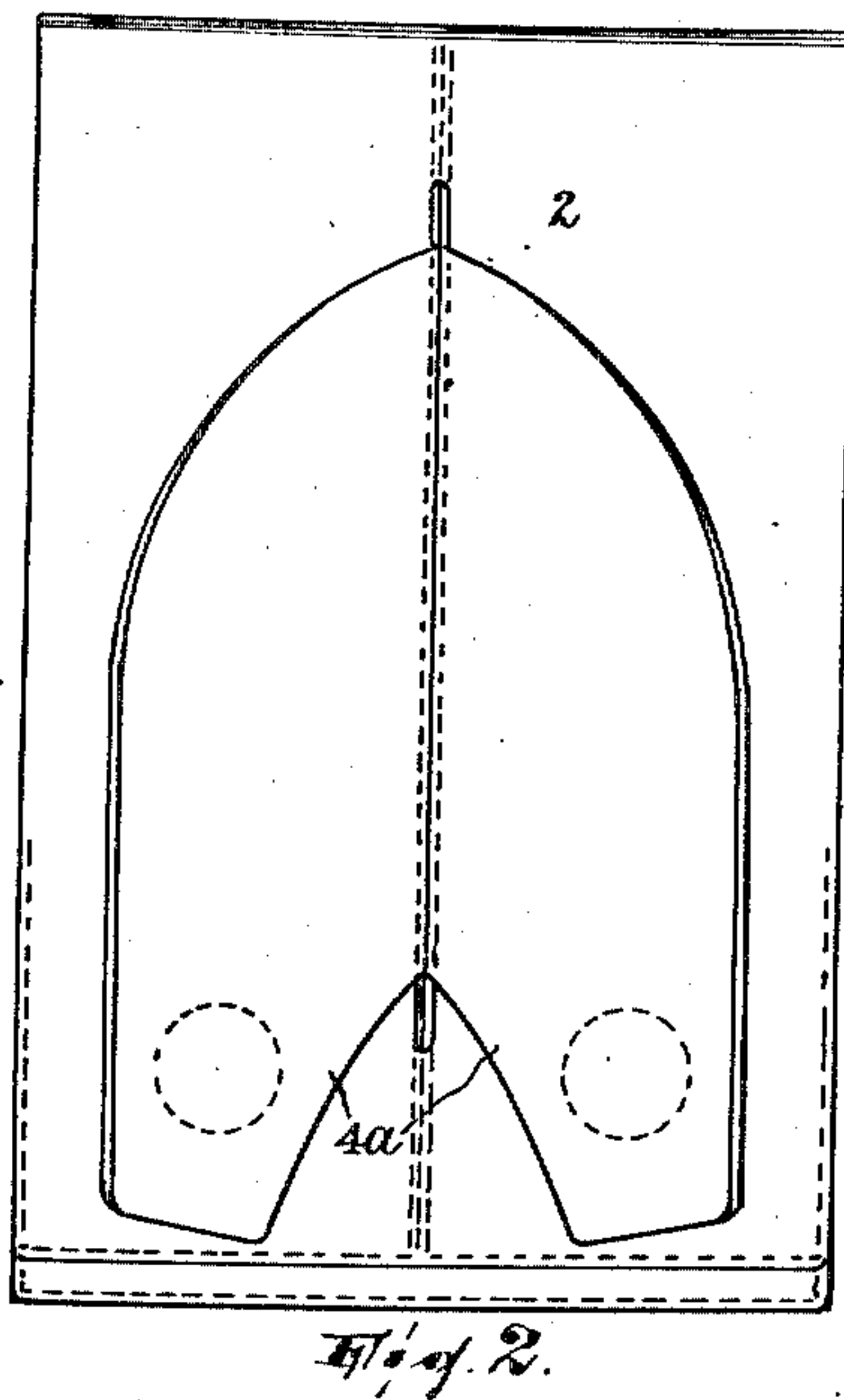
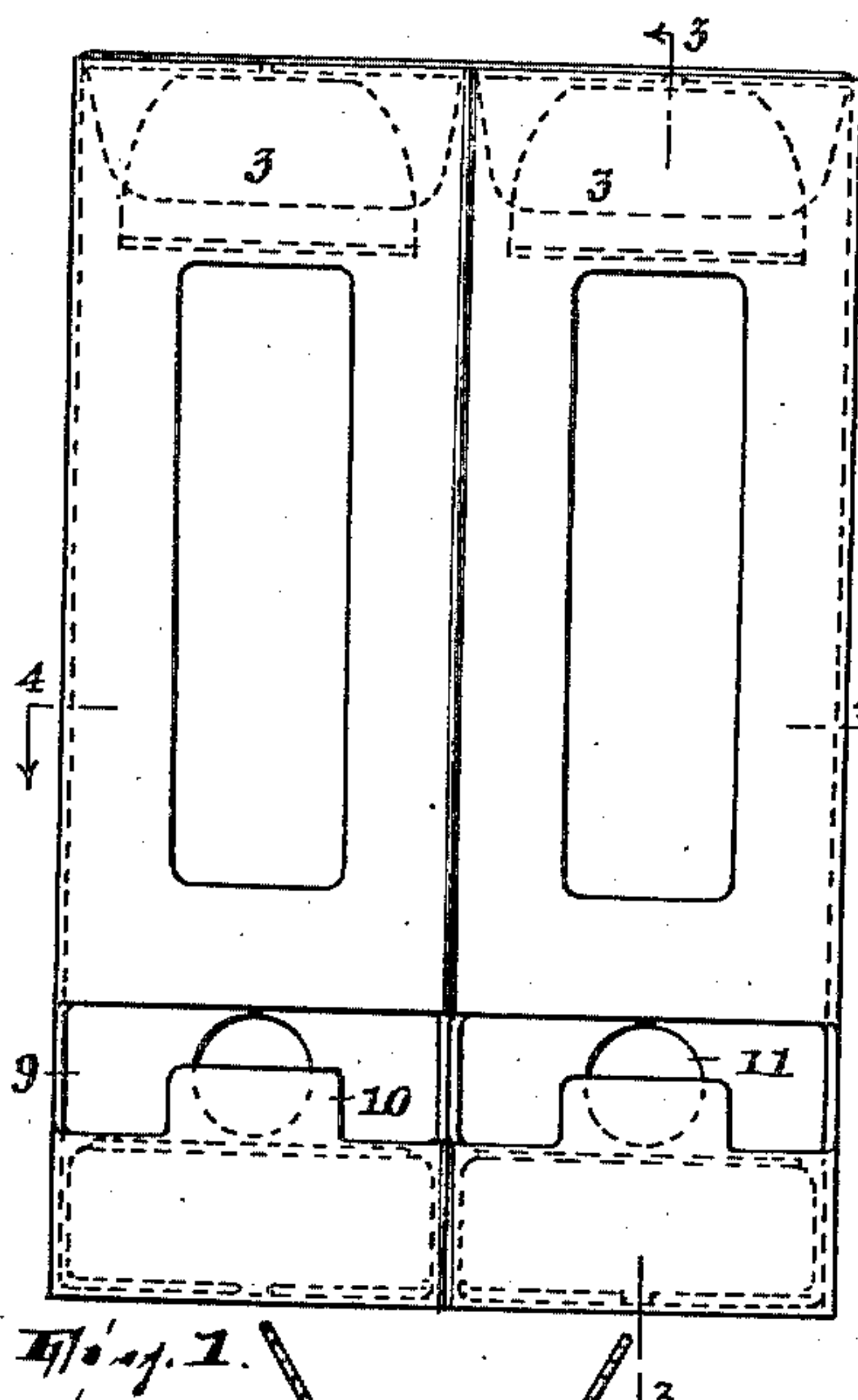
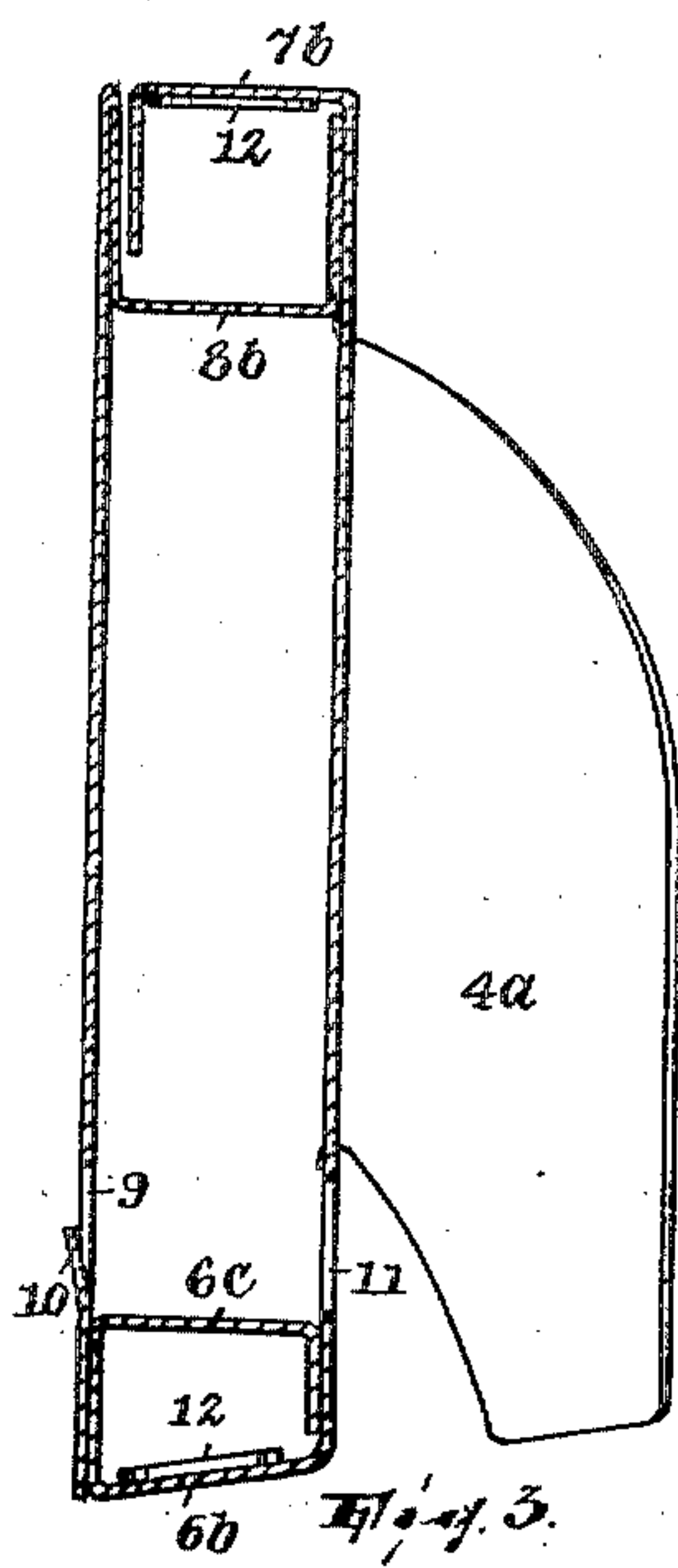
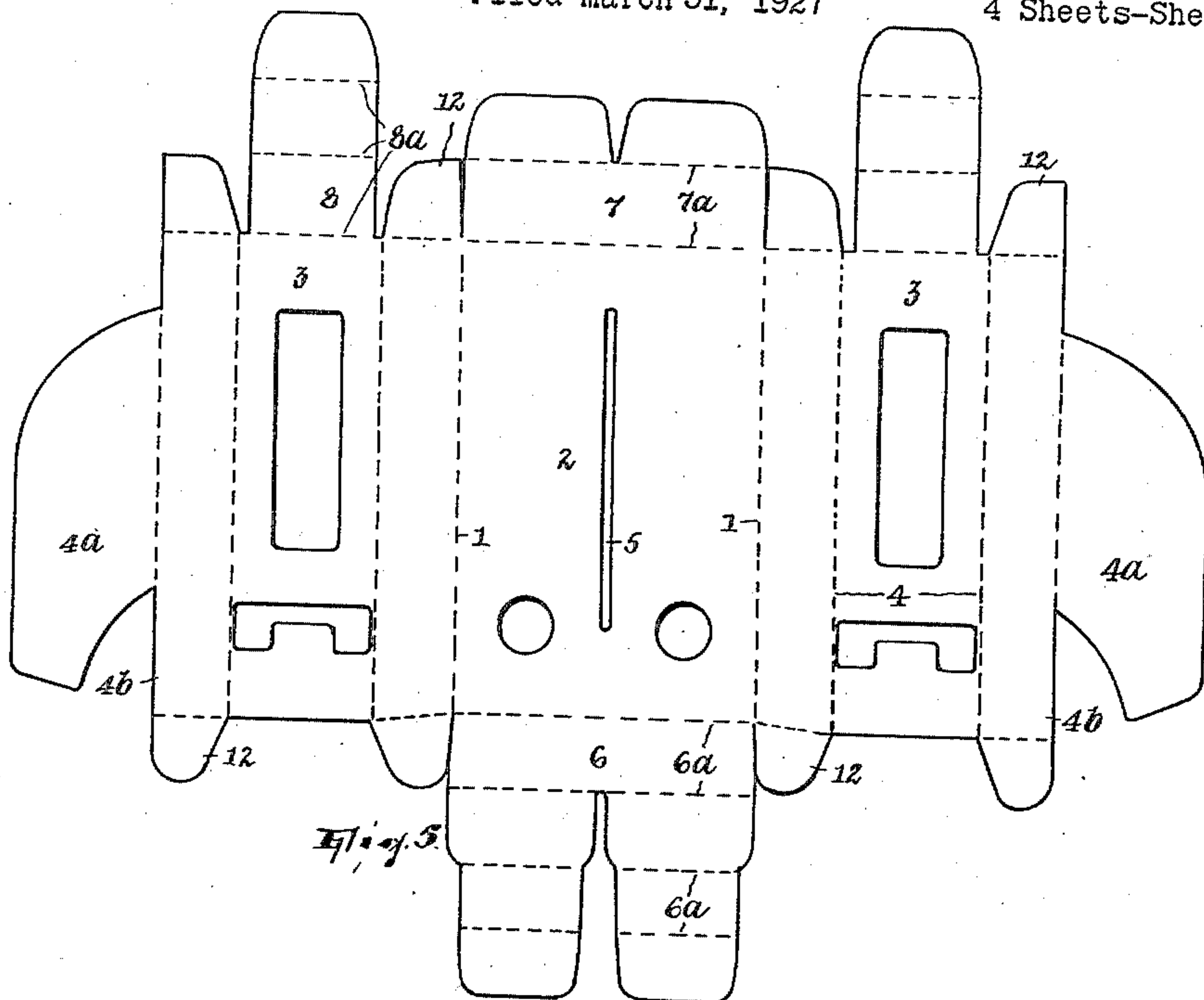
1,682,838

H. A. FEIGELMAN

PLURICELLED CONTAINER

Filed March 31, 1927

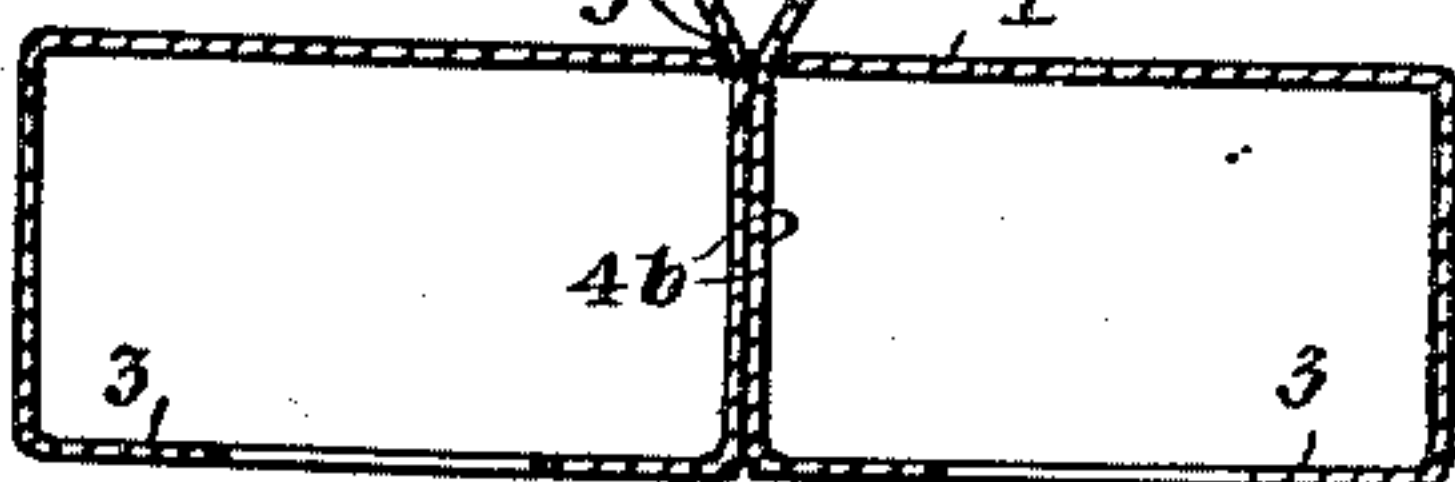
4 Sheets-Sheet 1



WITNESS

Wm. Hall

H/2 of 4



INVENTOR,  
Herman A. Feigelman,

BY  
John H. Feigelman  
ATTORNEY

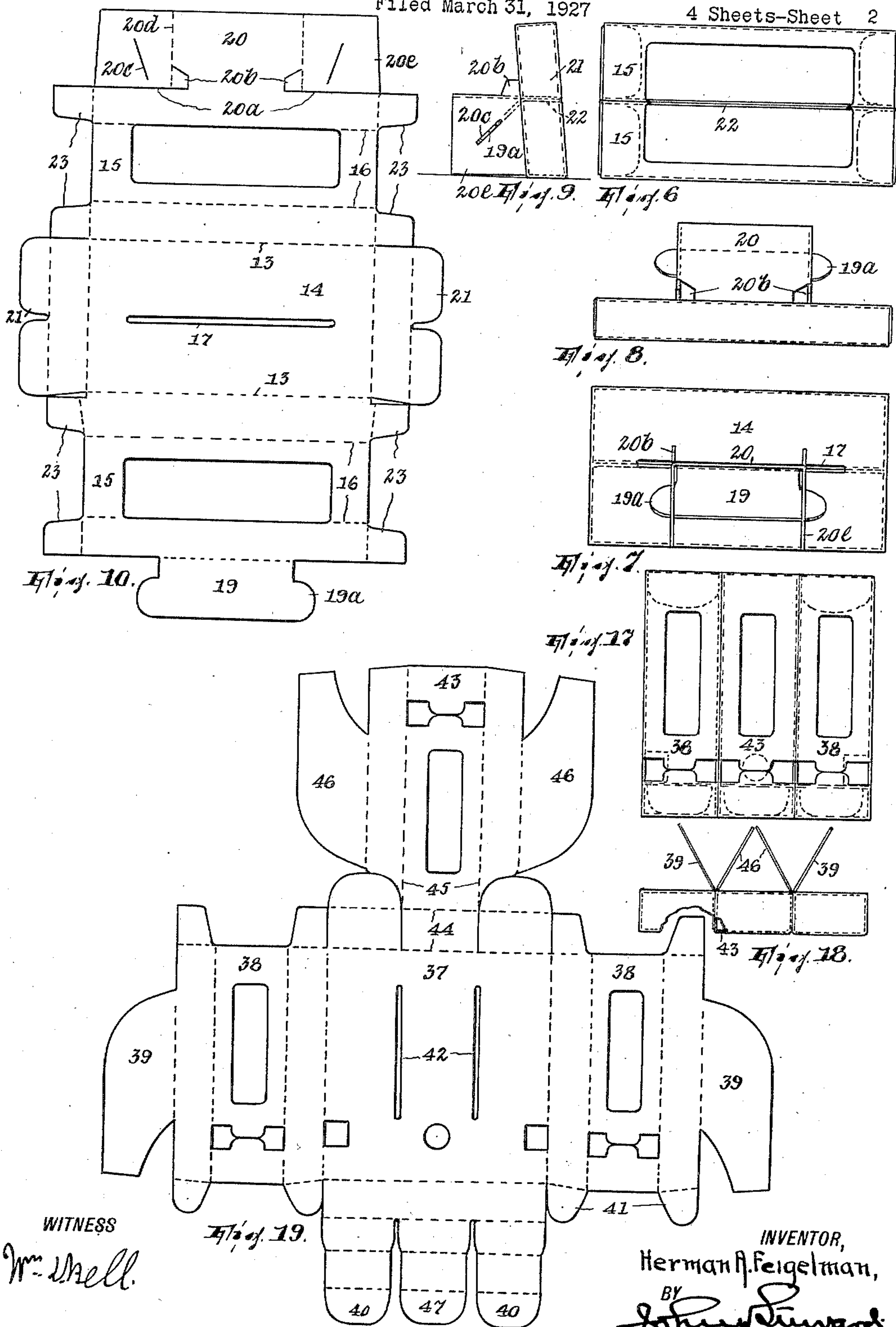
Sept. 4, 1928.

1,682,838

H. A. FEIGELMAN  
PLURICELLED CONTAINER

Filed March 31, 1927

4 Sheets-Sheet 2



WITNESS  
*W. M. Hall*

INVENTOR,  
Herman A. Feigelman,  
BY  
*John S. Stewart*  
ATTORNEY.

Sept. 4, 1928.

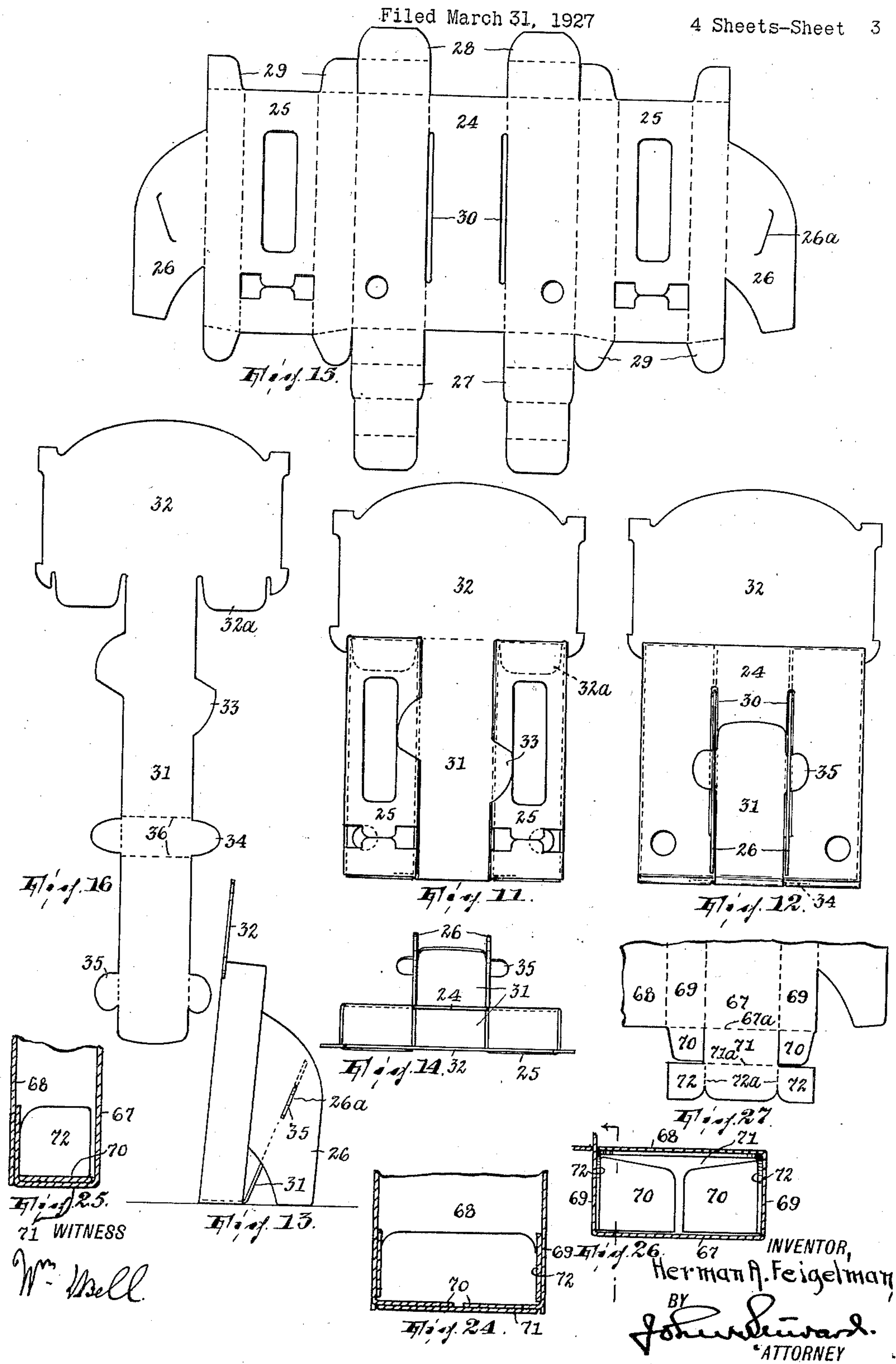
H. A. FEIGELMAN

1,682,838

PLURICELLED CONTAINER

Filed March 31, 1927

4 Sheets-Sheet 3





Sept. 4, 1928.

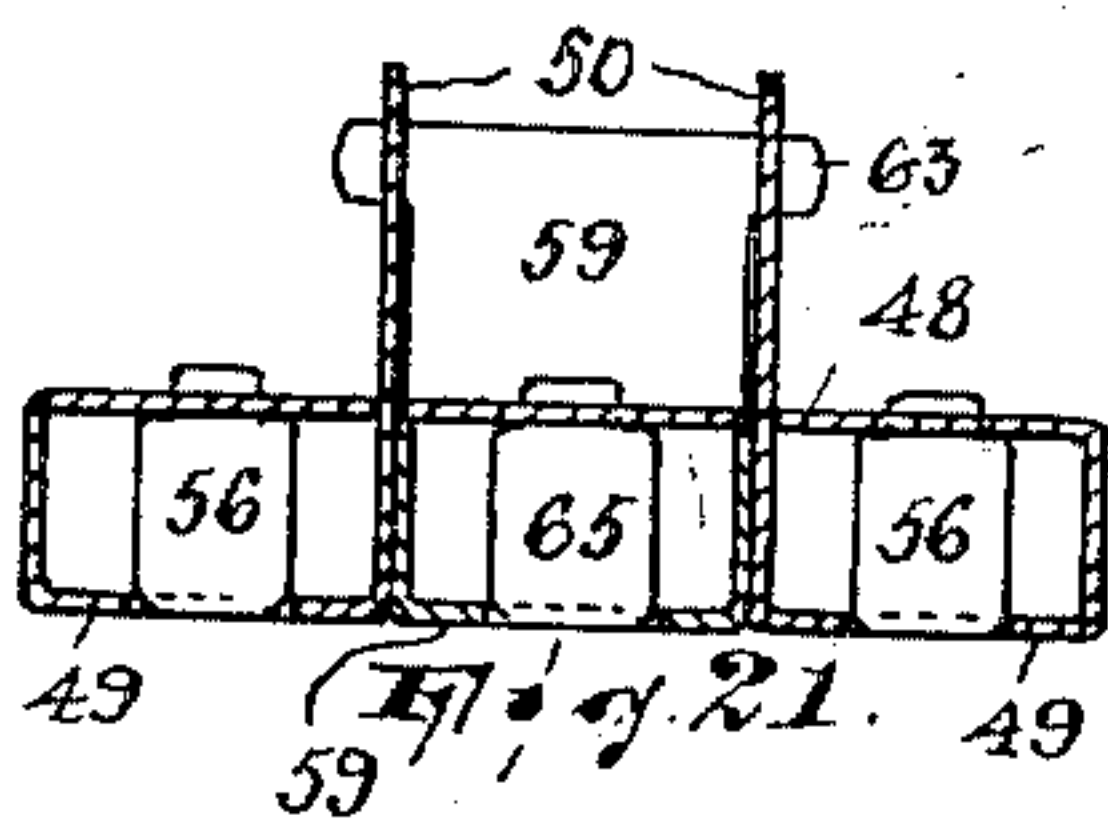
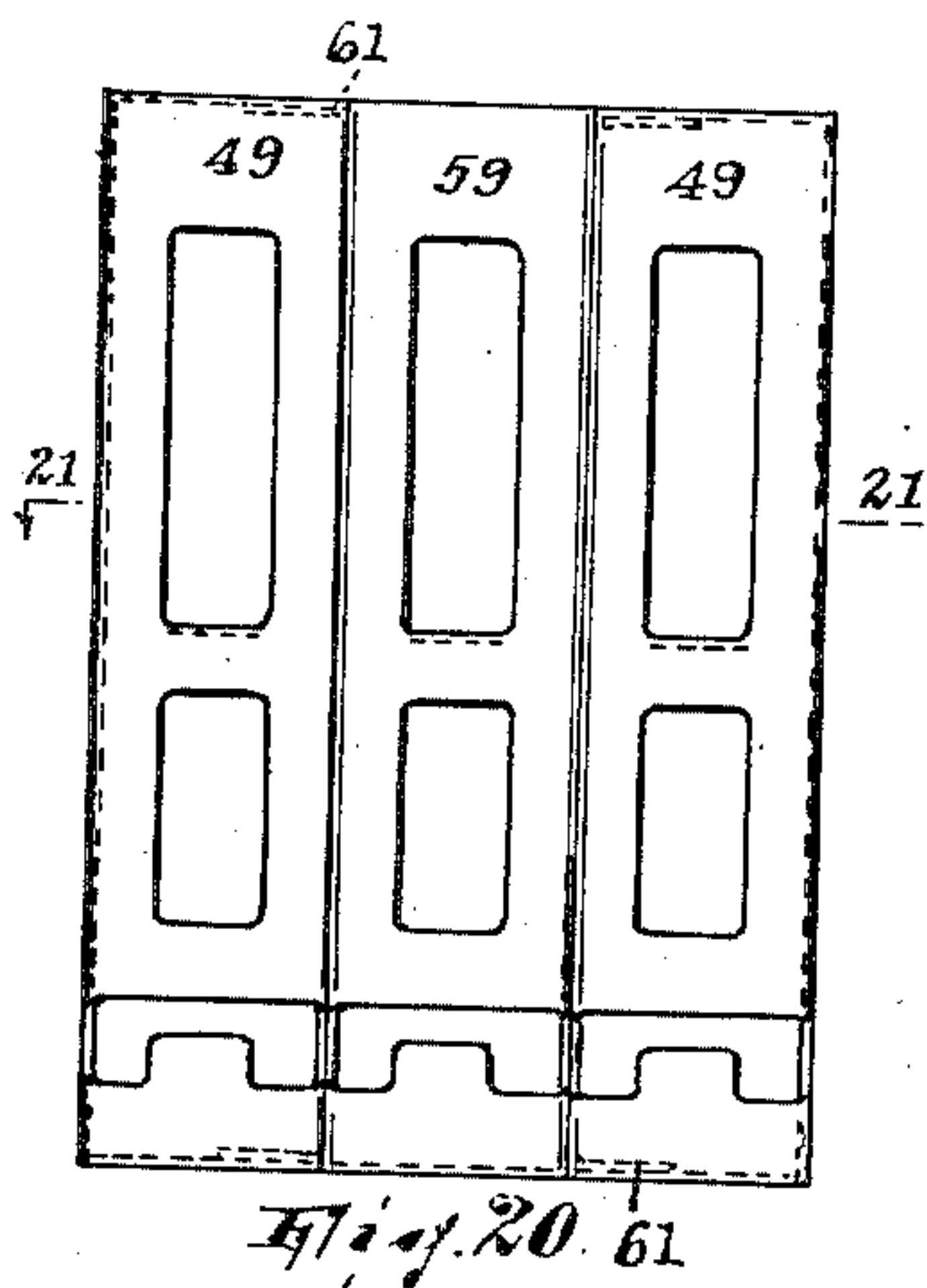
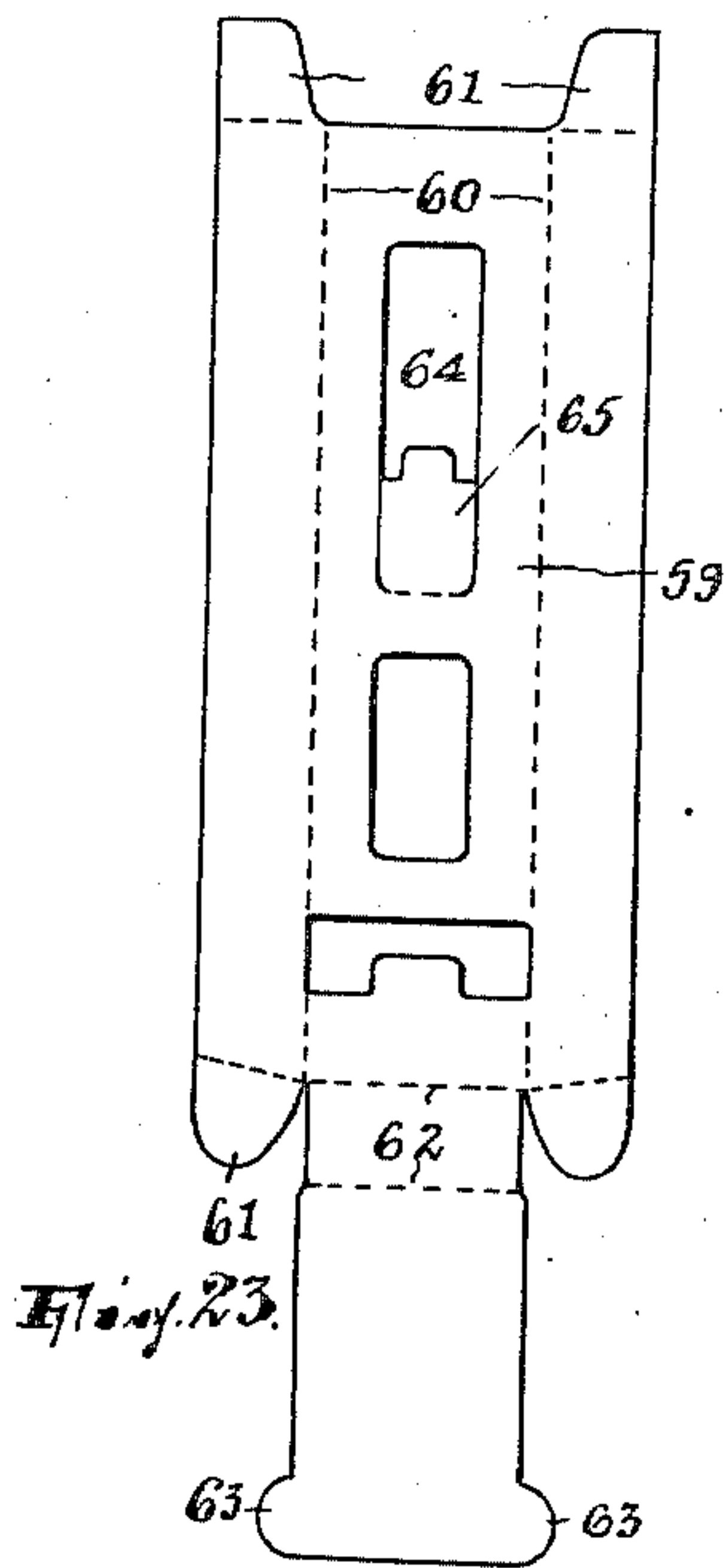
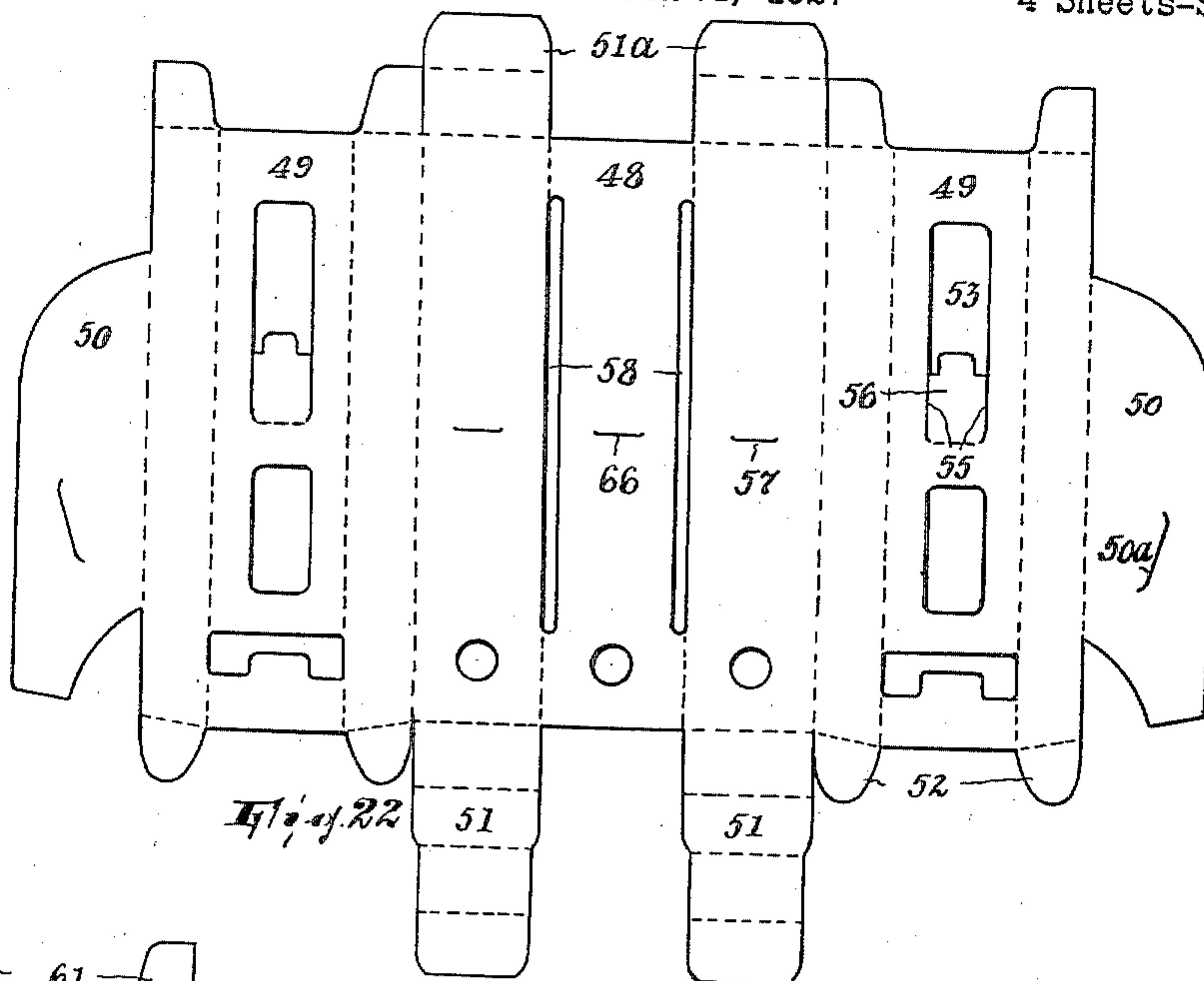
1,682,838

H. A. FEIGELMAN

PLURICELLED CONTAINER

Filed March 31, 1927

4 Sheets-Sheet 4



WITNESS

Wm. Bell

INVENTOR,  
Herman A. Feigelman,  
BY  
John H. Howard,  
ATTORNEY.



# UNITED STATES PATENT OFFICE.

HERMAN A. FEIGELMAN, OF PATERSON, NEW JERSEY.

## PLURICELLED CONTAINER.

Application filed March 31, 1927. Serial No. 179,914.

This invention relates to containers and particularly containers of the pluri-celled type formed of one piece of stiff sheet material, as pasteboard. The underlying object is to provide a pluri-celled container which can be formed from a proper blank by simple manipulations, and in addition to provide for a support for such a container whereby it may be sustained in upstanding position, easel-fashion, as in the display of its contents or advertising matter thereon. Other objects will appear hereinafter.

Hereinafter I describe five forms which the invention may take in carrying out the named underlying object, and in connection therewith I may briefly remark that in the simplest or first two forms to be explained the blank used has opposite tongues each, when the corresponding edge portions are bent toward each other, to enter and be caught in a common slit in the intermediate part of the blank, so that two cells are formed thereby, the blank having provision for the closing of one or both ends of each cell where such is required, and the tongues being shaped to afford as to their protruding portions an easel-support if the container is to be arranged for display in upstanding position; and that in the other three forms, without otherwise altering the blank so far as the formation of the said two cells is concerned, the tongues enter individual slits, so that provision is thus made for spacing the cells, the intervening space being adapted to be put to some useful purpose, as in the display of advertising matter or the forming of a third cell. Preferably the bending to form the mentioned two cells is in angular bends.

30 Figs. 1, 2, 3, 4 and 5 illustrate one form of the invention, respectively being a front elevation, a rear elevation and sectional views on lines 3—3 and 4—4 of the completed container and a plan of the blank;

Figs. 6, 7, 8, 9 and 10 illustrate another form, respectively being a front, rear, top and side elevation of the completed container and a plan of the blank;

Figs. 11, 12, 13, 14, 15 and 16 illustrate another form, respectively being a front, rear, side and top elevation of the completed container and plans of the main and auxiliary blanks forming it;

Figs. 17, 18, and 19 illustrate another form, respectively being a front elevation and top plan of the completed container and a plan 55 of the blank;

Figs. 20, 21, 22 and 23 illustrate another form, respectively being a front elevation and a section on line 21 of Fig. 20 of the completed container and plans of the main and auxiliary blanks forming it; and

Figs. 24, 25, 26 and 27 are respectively two vertical sectional views in planes at right angles to each other and a horizontal sectional view of a container-end construction and a plan of the blank used therein.

In each form a pluri-celled container is produced by bending a blank of stiff sheet material on parallel lines, between which is what I term the panel, and bending each wing lateral of the panel on lines parallel with the first lines, and finally locking the wings to the panel by engaging each of them in a slit therein. The bends formed are in the examples shown of angular type (90°). Parts of the blank may be used to close the ends of the cells.

Figs. 1 to 5: In Fig. 5 the first two lines of bending are indicated at 1, the panel between them at 2, the wings at 3, and the lines of 80 bending the wings at 4, while 5 indicates a slit in the panel and 4<sup>a</sup> a tongue or projection of each wing to engage in such slit. For closing one (here the bottom) end of the container there may be a flap 6 projecting from 85 one end of the panel and, upon bending it on the lines 6<sup>a</sup>, this may be introduced into the container in the manner shown in Fig. 3 so as to form a (bottom) end wall 6<sup>b</sup> and a false (bottom) end wall 6<sup>c</sup>, it being split as 90 shown to form twin flaps or so as to straddle the portions 4<sup>b</sup> of the wings, which form a laminated-wall partition (Fig. 4). For closing the other (here the top) end of the container there may be a flap 7 projecting from 95 the panel and, upon bending it on the line 7<sup>a</sup>, this may be introduced into the container as shown in Fig. 3 so as to form a (top) end wall 7<sup>b</sup>; it being split to straddle the portions 4<sup>b</sup> of the wings; and if a false top is 100 desired each wing may have a flap 8 to be bent on lines 8<sup>a</sup> and introduced into each cell in the manner shown in Fig. 3, thus forming a false (top) end wall 8<sup>b</sup>. The false (top



and bottom) end walls reinforce the end portions of the container, especially against the pressure of the contents. In use this form of the container stands upright, wherefore the tongues 4<sup>a</sup> may be developed to form an easel support (Fig. 3). The articles forming the contents, being stacked in each cell, may be removed from the bottom thereof through a front opening 9, having a flexible retainer 10, 11 being a back finger opening for ejecting the contents at opening 9. There may be ears 12 on the wings to serve in the closing of the ends of each cell.

Figs. 6 to 10: In this form the container is intended to rest on its side. The first two lines of bending, the panel, the wings, the lines of bending the wings and the slit are respectively indicated at 13, 14, 15, 16 and 17. In order that the tongues which enter the slit 17 may in this form be adapted to form an easel support they are formed as follows: One tongue, 19, is plain, with two lateral ears 19<sup>a</sup>; the other, 20, is about the width of the wing from which it projects, has opposite slits 20<sup>a</sup> separating it from the wing except at the middle and each formed with a rebend producing an ear 20<sup>b</sup>, and has the oblique slits 20<sup>c</sup>, and is further adapted to be folded on lines 20<sup>d</sup> at right angles to the lines 13 and 16 at the bases of said ears. When each cell is formed, by bending on the lines 13 and 16, the locking of the wings 15 to the panel 14 is accomplished by passing each tongue through the slit 17 (first folding extremities 20<sup>e</sup> back flat upon the tongue and on lines 20<sup>d</sup>), and an easel support is then formed by shifting the extremities of tongue 20 into perpendicular relation to the panel (Figs. 8 and 9) and then entering the ears 19<sup>a</sup> of tongue 19 in the slits 20<sup>c</sup> of such extremities. The container ends may be closed by the twin flaps 21, slitted to accommodate a partition 22 formed in the same way as in Figs. 1 to 5, and by ears 23 like the described ears 12.

Figs. 11 to 16: If two slits for engagement by the tongues are employed the cells will be separated, and the intervening space may be utilized to form a third cell or for advertising display. Thus in Fig. 15 the panel 24, wings 25, tongues 26, flaps 27 and 28 and ears 29 being all substantially the same as the corresponding parts in Figs. 1 to 5, the panel has two slits 30 for the tongues so that the cells formed will be spaced (Figs. 11 and 14). For forming a cell between these two cells the auxiliary blank shown in Fig. 16 may be used. This is a strip 31 formed with an enlargement 32 having depending ears 32<sup>a</sup> and also formed with a pair of fins 33, and upper and lower pairs of ears 34 and 35. The upper or body part of the strip is arranged to cover the space between the two cells, its fins overlapping them, thus to form a third cell and having its ears 32<sup>a</sup> fitted into the upper ends

of the two cells. It is further secured as follows: Having bent the strip on the transverse lines 36 its ears 34 are tucked into the lower ends of the two lateral cells so as to be covered and held in place by the main flaps 27 (Fig. 12) and then the ears 35 thereon are engaged in slits 26<sup>a</sup> in the tongues. The member formed by this blank is thus held in place at 32<sup>a</sup>, 33, 34 and 35, and the resulting structure is provided with an easel support as shown in Figs. 13 and 14. In this case the intermediate cell is open at the top and strip 31 including the enlargement 32 affords a placard for advertising matter.

Figs. 17, 18 and 19: Here again a three celled container is formed, though all in one piece. The main part of the blank includes the panel 37, wings 38, tongues 39, flaps 40 and ears 41, all substantially the same as corresponding parts in Figs. 1 to 5, the panel having two slits 42 for the tongues so that the cells formed will be spaced as in Figs. 11 to 16. The middle cell is in this case produced from wing 43 of the blank projecting from one of the two sides of the panel not occupied by the opposite wings 38. When the two side cells have been formed as in Figs. 11 to 16, the wing 43 is bent on the transverse lines 44 so as to form a top and a front wall for the intermediate cell and it is also bent on the lines 45 so as to form side walls for such cell, and the tongues 46 which project laterally from wing 43 are extended through the slits 42, and they and the tongues 39 are then made to diverge (Fig. 18) so that they will form an easel support. To close the bottom of the intermediate cell there may be another flap 47 corresponding to the flaps 40 to be bent and tucked in to form such bottom the same as they are.

Figs. 20, 21, 22 and 23: This construction presents a modification by which each cell may be divided into upper and lower compartments. Panel 48, wings 49, tongues 50, flaps 51 and 51<sup>a</sup> and ears 52 are all the same as before but each opening 53 (for displaying the contents of each cell, such appearing also in all the other forms) is by slitting at 55 left with the tongue 56 which after the cell has been formed can be bent off horizontally and have its free end engaged in a slit 57 in the panel, so that 56 divides the cell into upper and lower compartments. By providing two slits 58 to receive the tongues 50, the container in this case has the two cells formed by the main blank of Fig. 22 spaced from each other and an intermediate cell may be produced by fitting in place the part formed from the blank shown in Fig. 23. This is a strip 59 adapted to be bent on the longitudinal parallel lines 60 and having ears 61 at the ends of this (its widened) portion and also adapted to be bent on transverse lines 62. On bending the strip on the lines 60, it may be fitted between the two lat-



eral cells formed by the main blank with its ears 61 bent laterally at right angles and tucked under the flaps 51 and 51<sup>a</sup> when the latter are positioned to close the ends of these cells, and it may further be bent on the lines 62 and have lateral ears 63 at the end of its narrower portion engaged in slits 50<sup>a</sup> in the tongues 50, thus to close the bottom of the intermediate cell thus formed and form an easel support. The opening 64 in the strip may also have a tongue 65 to engage a slit 66 in the panel to divide the middle cell into two compartments.

Figs. 24 to 27 show a cell end construction specially designed to resist outward pressure of the contents. Let 67, 68 be the front and back walls and 69 the two side walls of a container (such as each cell in Figs. 1 to 5 forms for example). Walls 69 have end ears 70 which in forming the end construction are bent inward as best seen in Fig. 26. Wall 67 has a T-shaped extension 71 adapted to be bent on a transverse line 67<sup>a</sup> to cover the thus-positioned ears 70 (Fig. 25), the ears of which extension are marked 72. The extension is also adapted to be bent on another transverse line 71<sup>a</sup> and again on lines 72<sup>a</sup> to bring its said ears within the container end and so as to lie in face to face relation to walls 69 and hooked over ears 70. This is accomplished at the time 68, 69 and 70 are bent into position to form walls of the container. Since the ears 72 are hooked over the ears 70 (Fig. 25) that portion of 71 which now forms the outer end wall of the container is locked by them against outward displacement.

In all the forms there is a pluri-celled container including a blank of stiff sheet material having its intermediate portion a flat panel and its extremities (4<sup>a</sup>, for example) on opposite sides of the panel bent first toward each other and then toward the panel to form cells and each having a penetrating interlocking engagement (by 4<sup>a</sup> penetrating 5, for example) with the panel, the extremities projecting to form an easel support when the container is arranged with the panel in upstanding position, and flaps extend from the blank so as to be arranged to be tucked into, and close ends of the cells; in the third, fourth and fifth forms the cells have a space between them three sides of which are formed by said cells and the panel and the container includes a portion of stiff sheet material interlocked with said blank and arranged in bridging relation to and forming a fourth side (43 for example), such portion in two of these three forms being bent around a third side of the panel into opposition to its other face and being interlocked with the blank at both faces of the panel.

Having thus fully described my invention, what I claim is:

1. A pluri-celled container including a blank of stiff sheet material having its intermediate portion a flat panel and portions directly opposite each other and forming its extremities and arranged on opposite sides of the panel bent first toward each other and then toward the panel to form cells and each having a penetrating interlocking engagement with the panel.

2. A pluri-celled container including a blank of stiff sheet material having its intermediate portion a flat panel and edge portions on opposite sides of the panel bent first toward each other at the same face of the panel and then toward the panel to form the cells and each having a penetrating interlocking engagement with the panel, said container being adapted to rest with the panel in upstanding position and said extremities projecting from the other face of the panel and forming an easel support.

3. A pluri-celled container including a blank of stiff sheet material having its intermediate portion a flat panel and its extremities on opposite sides of the panel bent first toward each other and then toward the panel to form cells and each having a penetrating interlocking engagement with the panel, said blank including flaps extending therefrom and respectively arranged to be tucked into and close ends of the cells.

4. A pluri-celled container including a blank of stiff sheet material having its intermediate portion a flat panel and edge portions on opposite sides of the panel bent first toward each other at the same face of the panel and then toward the panel to form the cells and each having a penetrating interlocking engagement with the panel, the portions of said extremities which are bent toward the panel having a space between them as to which said portions and the intervening part of the panel together form three sides thereof and said container including a portion of stiff sheet material interlocked with said blank and arranged in bridging relation to and forming a fourth side of said space.

5. A pluri-celled container including a blank of stiff sheet material having its intermediate portion a flat panel and edge portions on opposite sides of the panel bent first toward each other at the same face of the panel and then toward the panel to form the cells and each having a penetrating interlocking engagement with the panel, the portions of said extremities which are bent toward the panel having a space between them as to which said portions and the intervening part of the panel together form three sides thereof and said container including a portion of stiff sheet material arranged in bridging relation to and forming a fourth side of said space and bent around a third side of the panel into opposition to its other face and



thus forming a fifth side to said space and being interlocked with said blank at both faces of the panel.

5 6. A four-walled container formed of bent stiff sheet material, one wall having a tongue formed therein by slitting the material and such tongue bent off into a position in angular relation to said wall to partition the space of the container into two compartments  
10 and the opposite wall having a slit receiving the free end of the tongue and thereby holding the tongue in said position.

7. An end construction for a rectangular container formed of bent stiff sheet material  
15 including, with four walls encompassing the space of the container, ears projecting toward each other from two of said walls which are opposite each other and an extension extending from a third one of said walls and  
20 reaching around said ears and tucked into

said space, said extension having lateral ears at its tucked-in extremity projecting toward the third wall and hooked over the first ears.

8. A container formed of a blank of stiff sheet material and having a flat panel and the  
25 extremity of the blank at one margin of such panel bent first toward its extremity at the opposite margin of the panel and then toward the panel to form with the adjoining face thereof a cell and having in the panel  
30 a slit substantially parallel with the line of the latter bend and also having the former extremity penetrating the slit, said container being adapted to rest with the panel upright and said former extremity project-  
35 ing from the other face of the panel and forming an easel support.

In testimony whereof I affix my signature.

HERMAN A. FEIGELMAN.