

June 7, 1955

H. L. METZGER

2,710,132

COVER OR CONTAINER MEMBER FOR A SEMICIRCULAR TELESCOPIC BOX

Filed Dec. 29, 1949

3 Sheets-Sheet 1

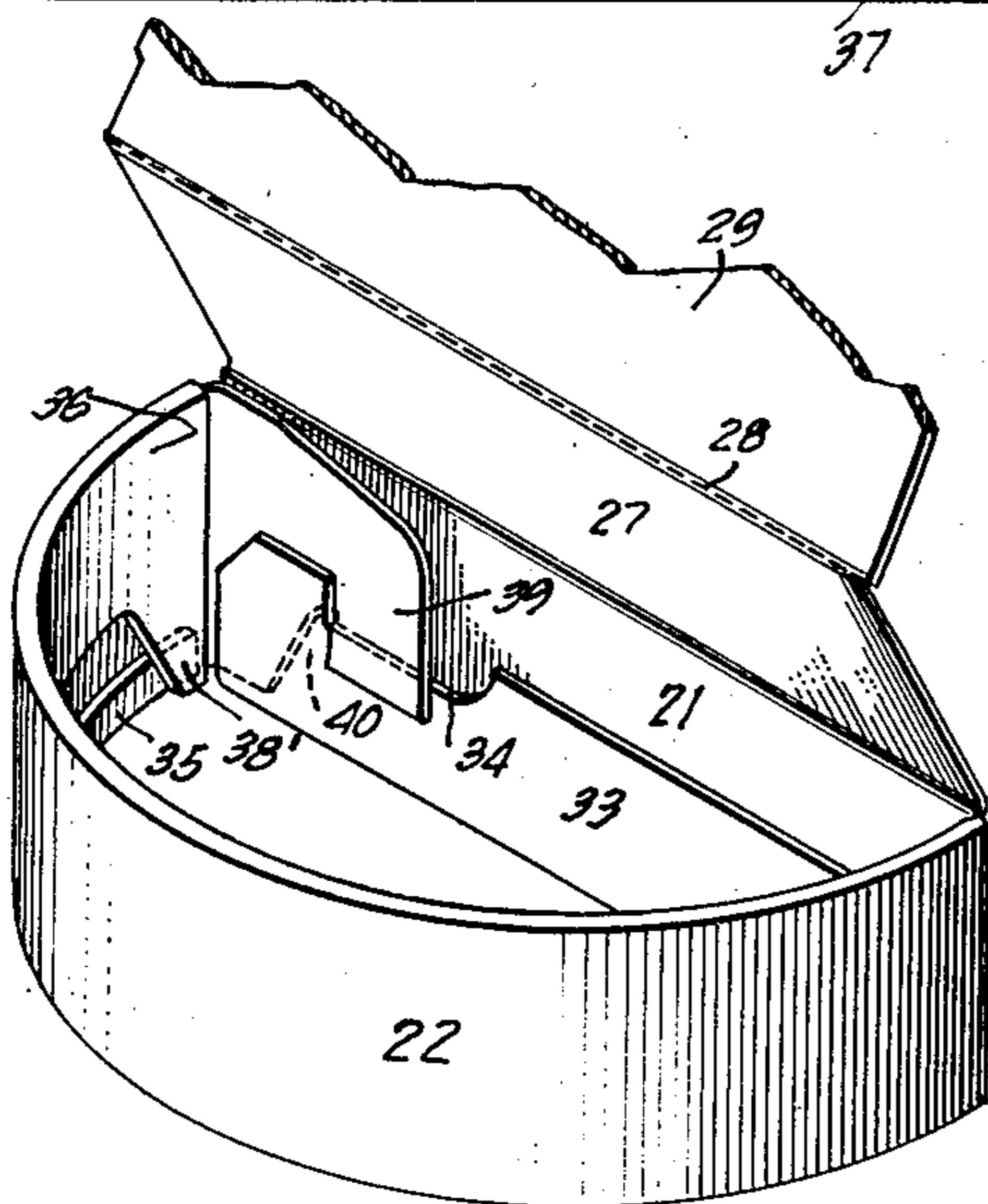
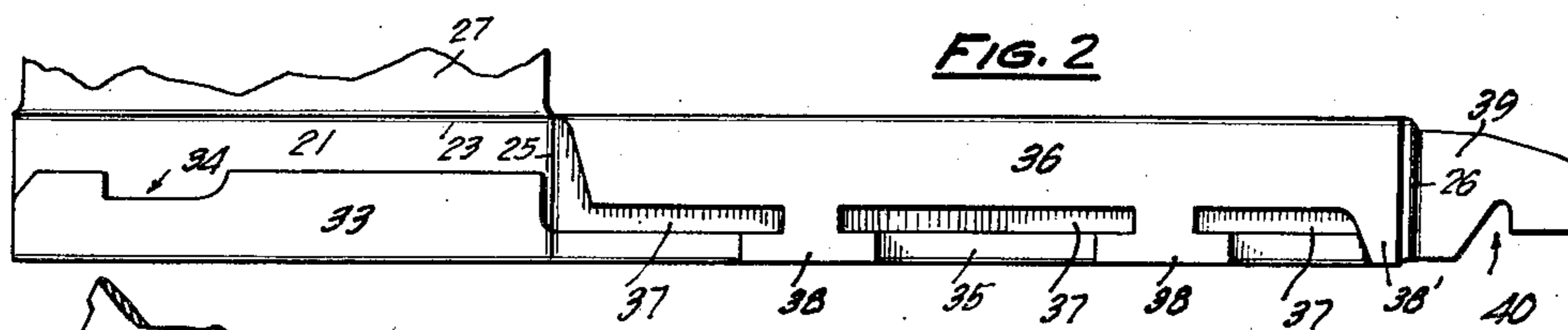
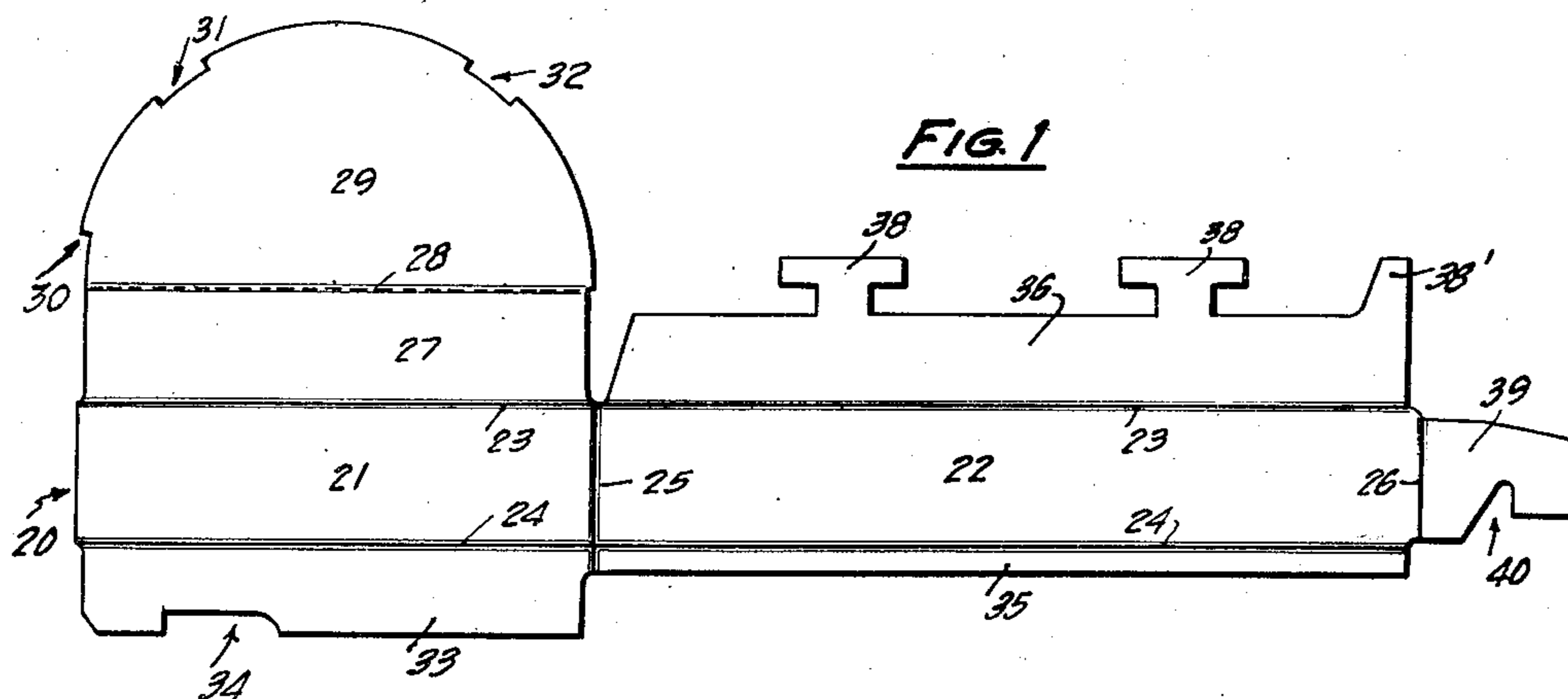


FIG. 3

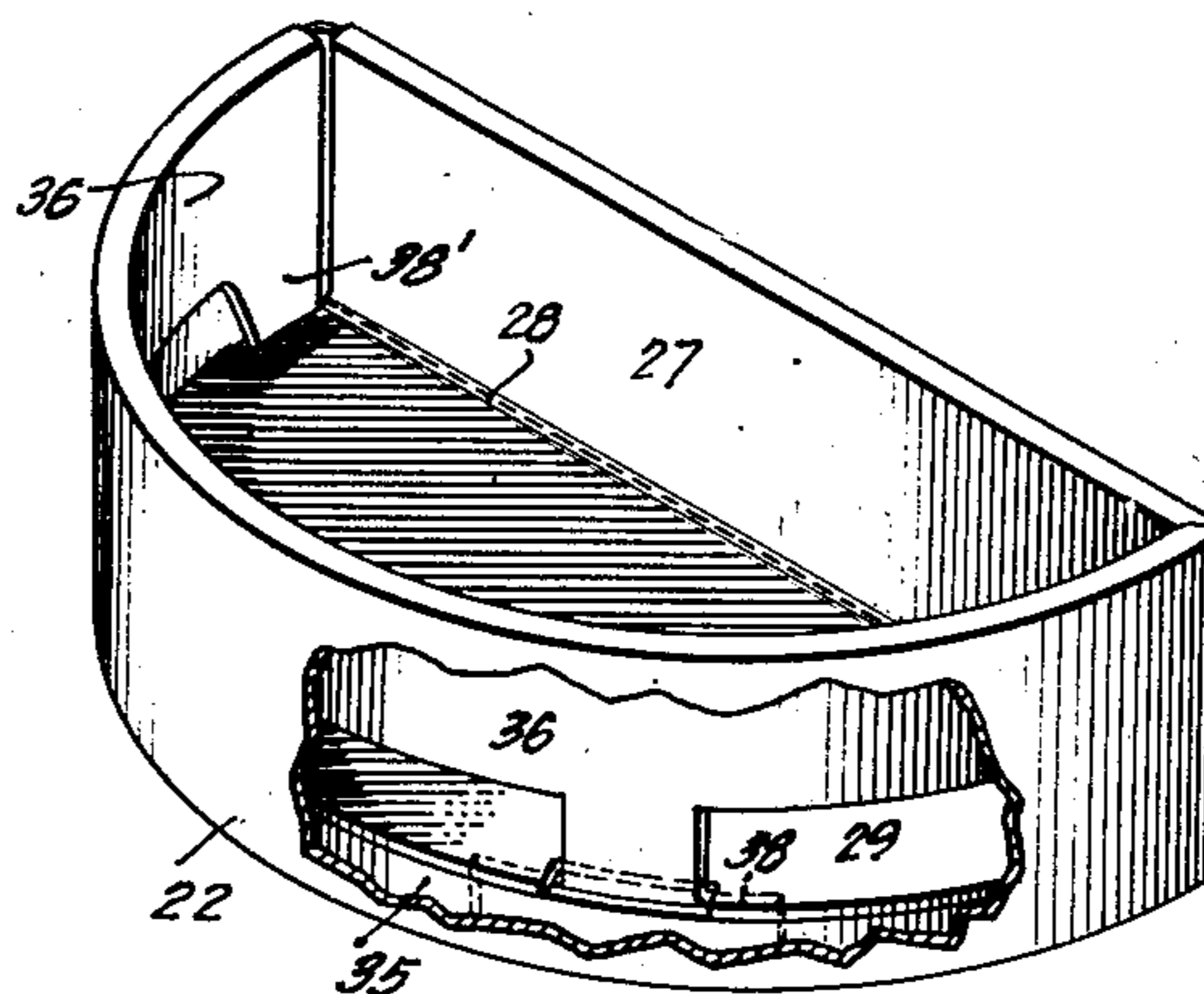


FIG. 4

Inventor
Henry L. Metzger
by *Charles W. Smith*
His Attorneys

June 7, 1955

H. L. METZGER

2,710,132

COVER OR CONTAINER MEMBER FOR A SEMICIRCULAR TELESCOPIC BOX

Filed Dec. 29, 1949

3 Sheets-Sheet 2

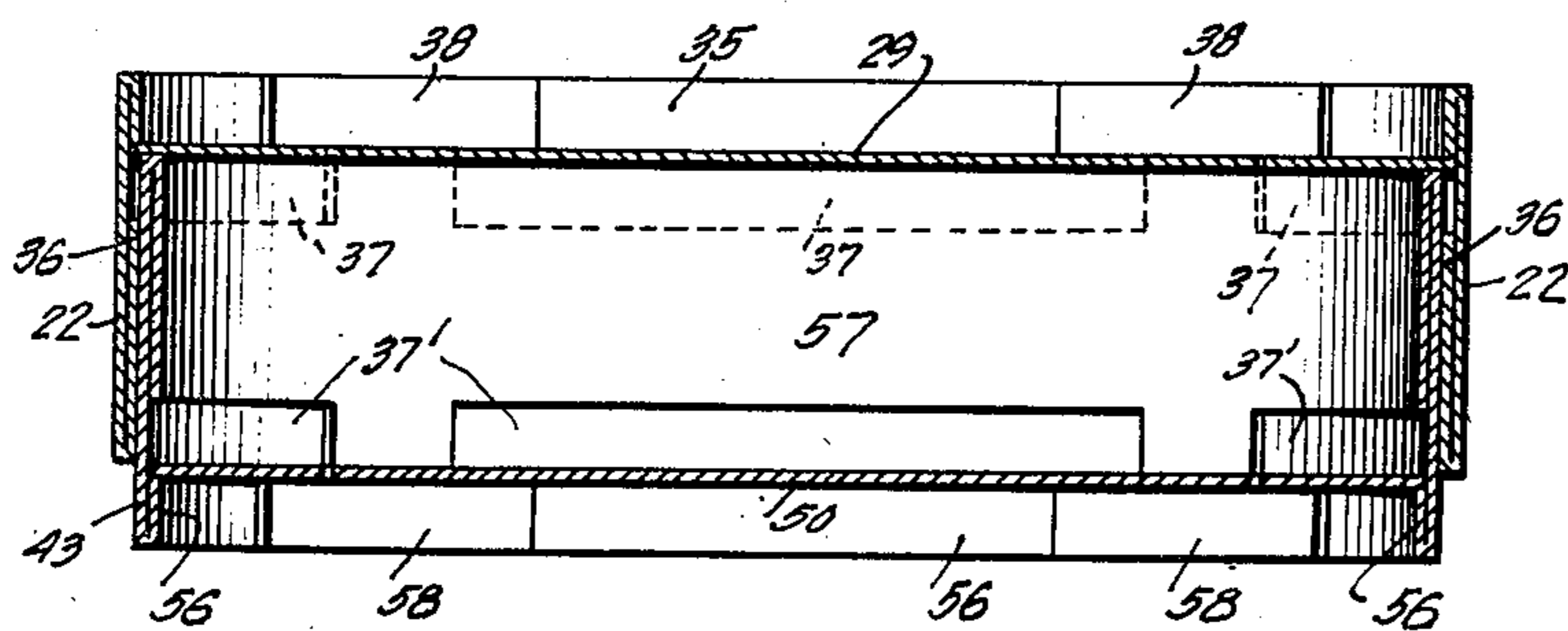
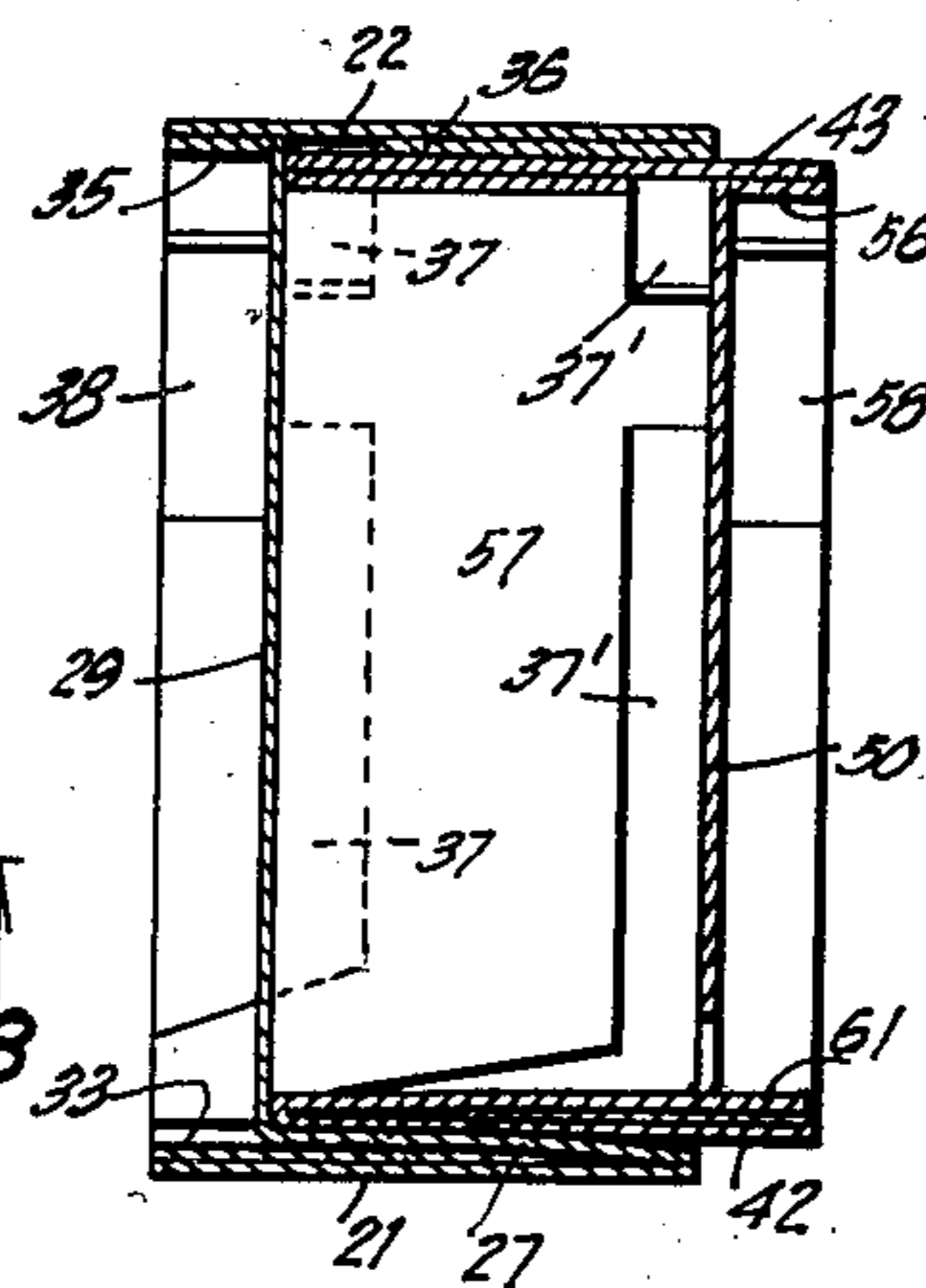
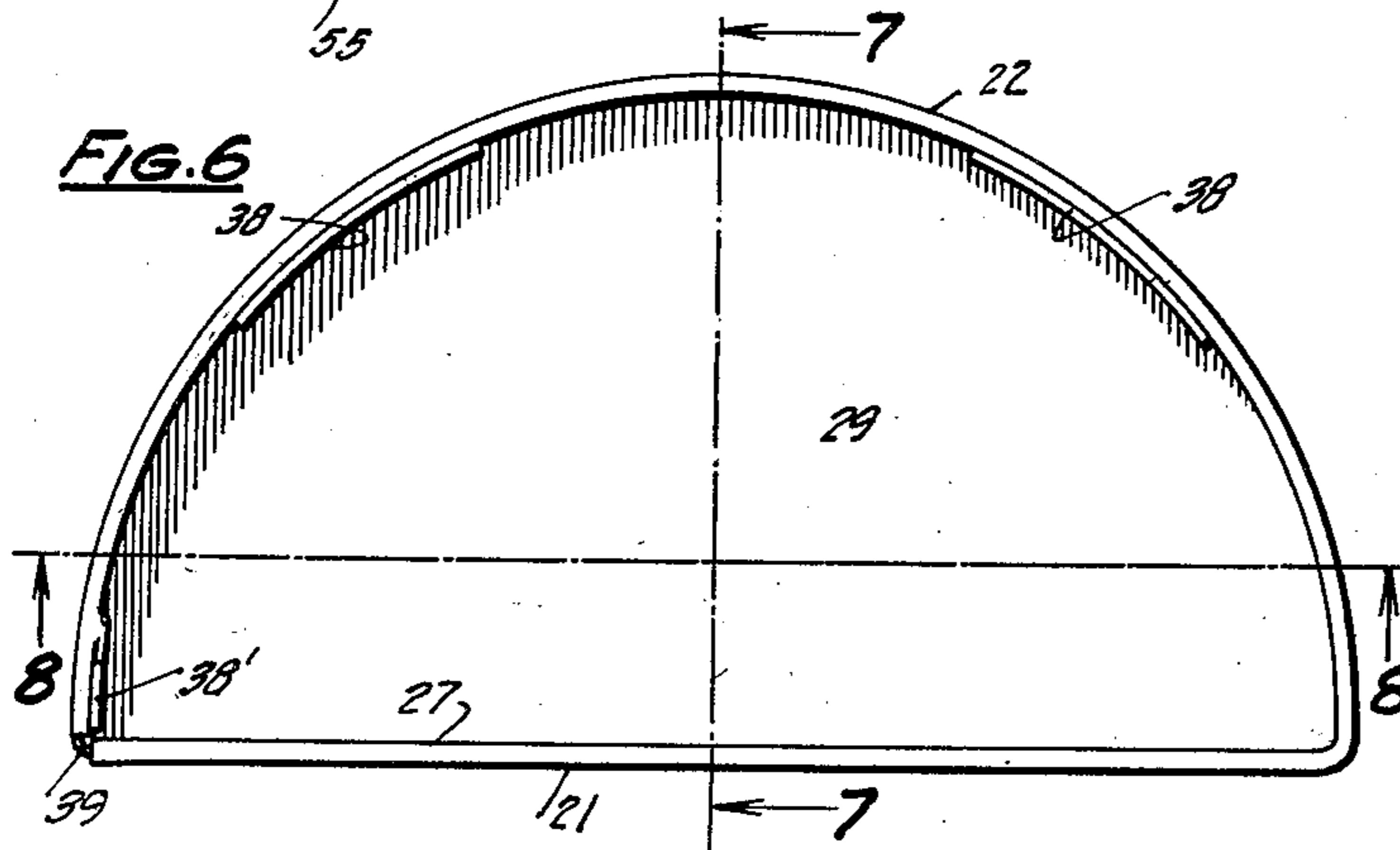
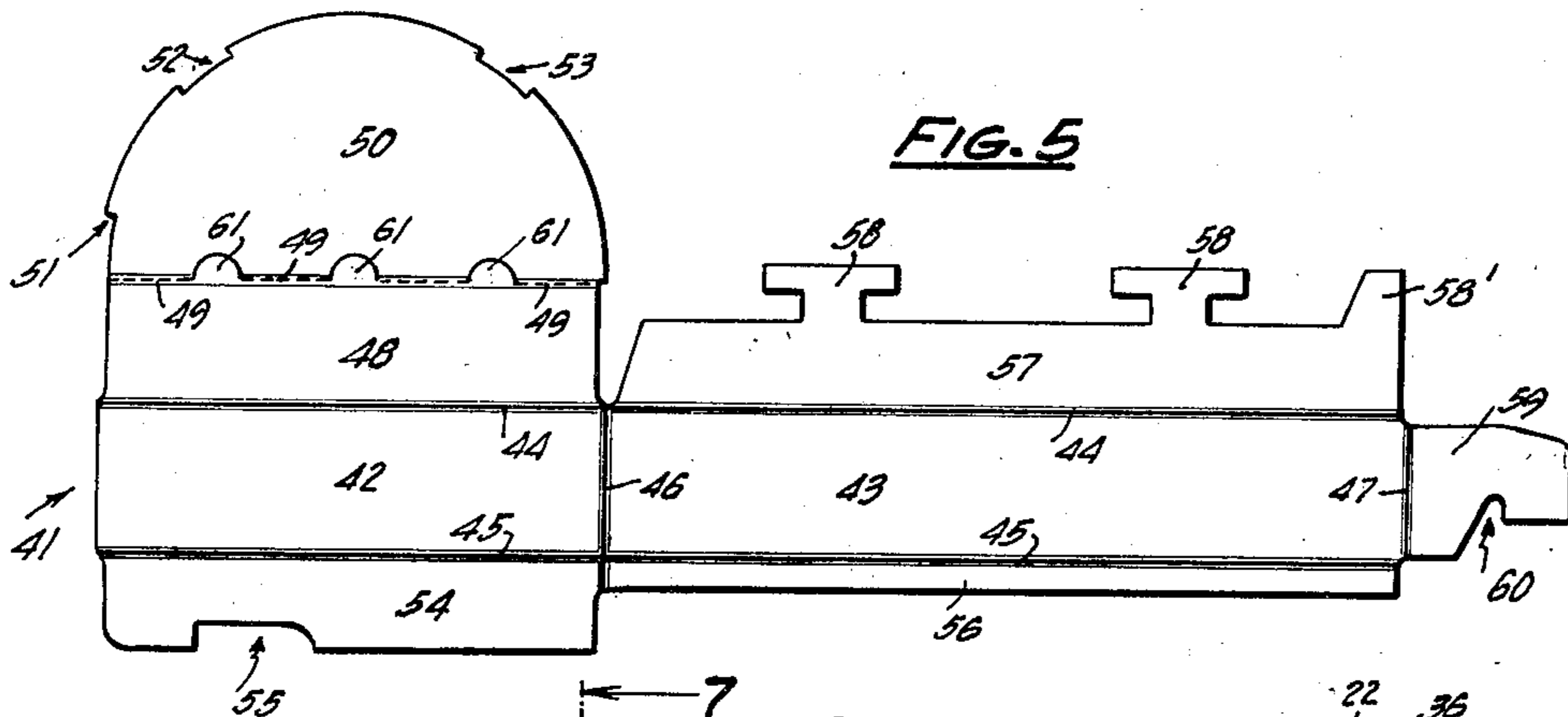


FIG. 8

Inventor
Henry L. Metzger
by *Quinn & Smith*
His Attorneys

June 7, 1955

H. L. METZGER

2,710,132

COVER OR CONTAINER MEMBER FOR A SEMICIRCULAR TELESCOPIC BOX

Filed Dec. 29, 1949

3 Sheets-Sheet 3

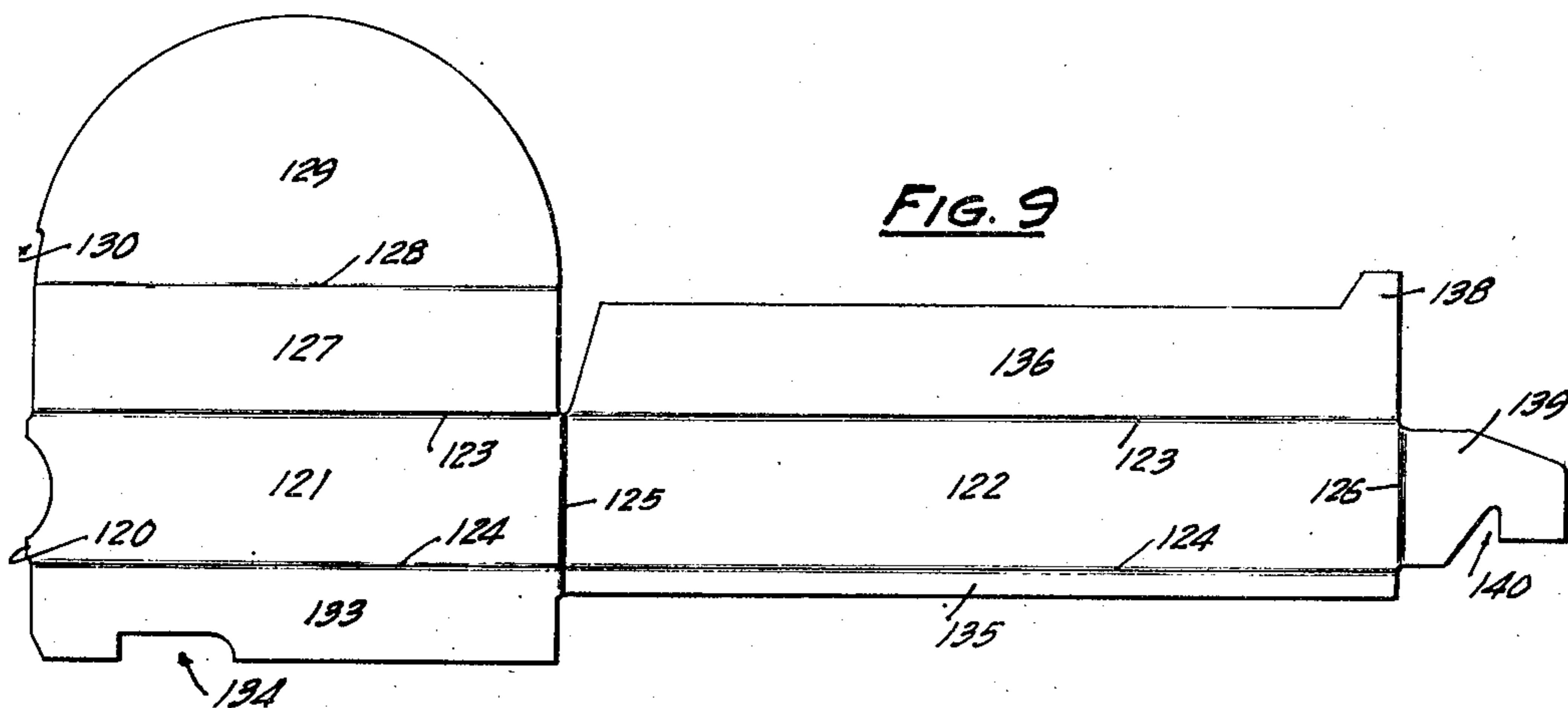


FIG. 9

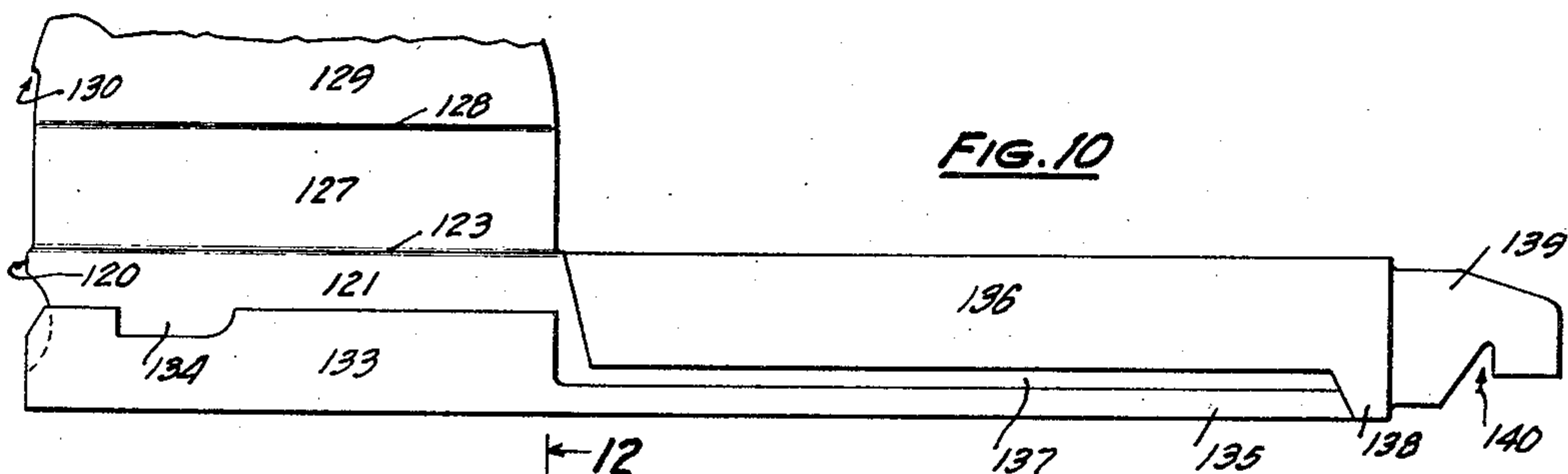


FIG. 10

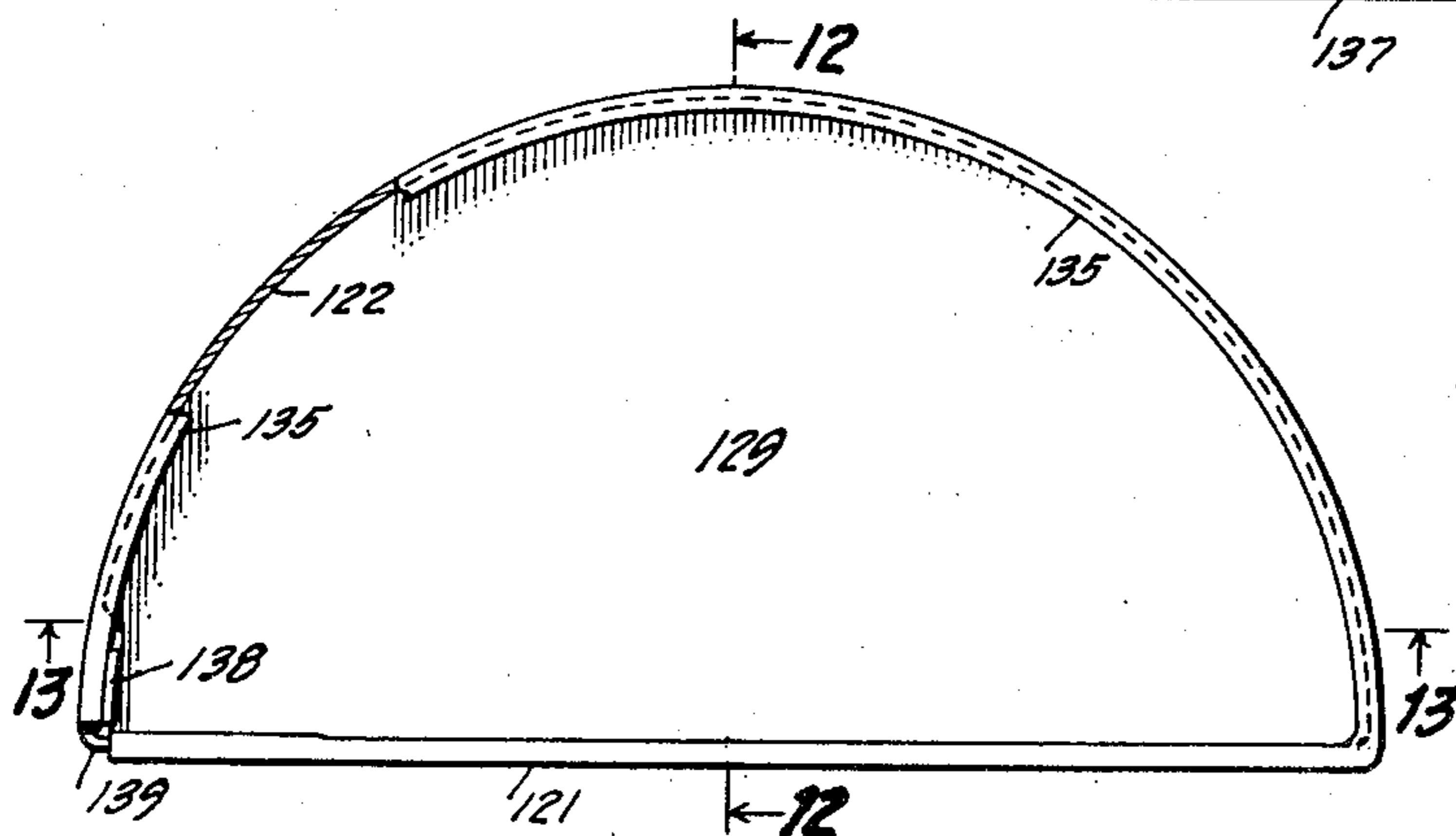


FIG. 11

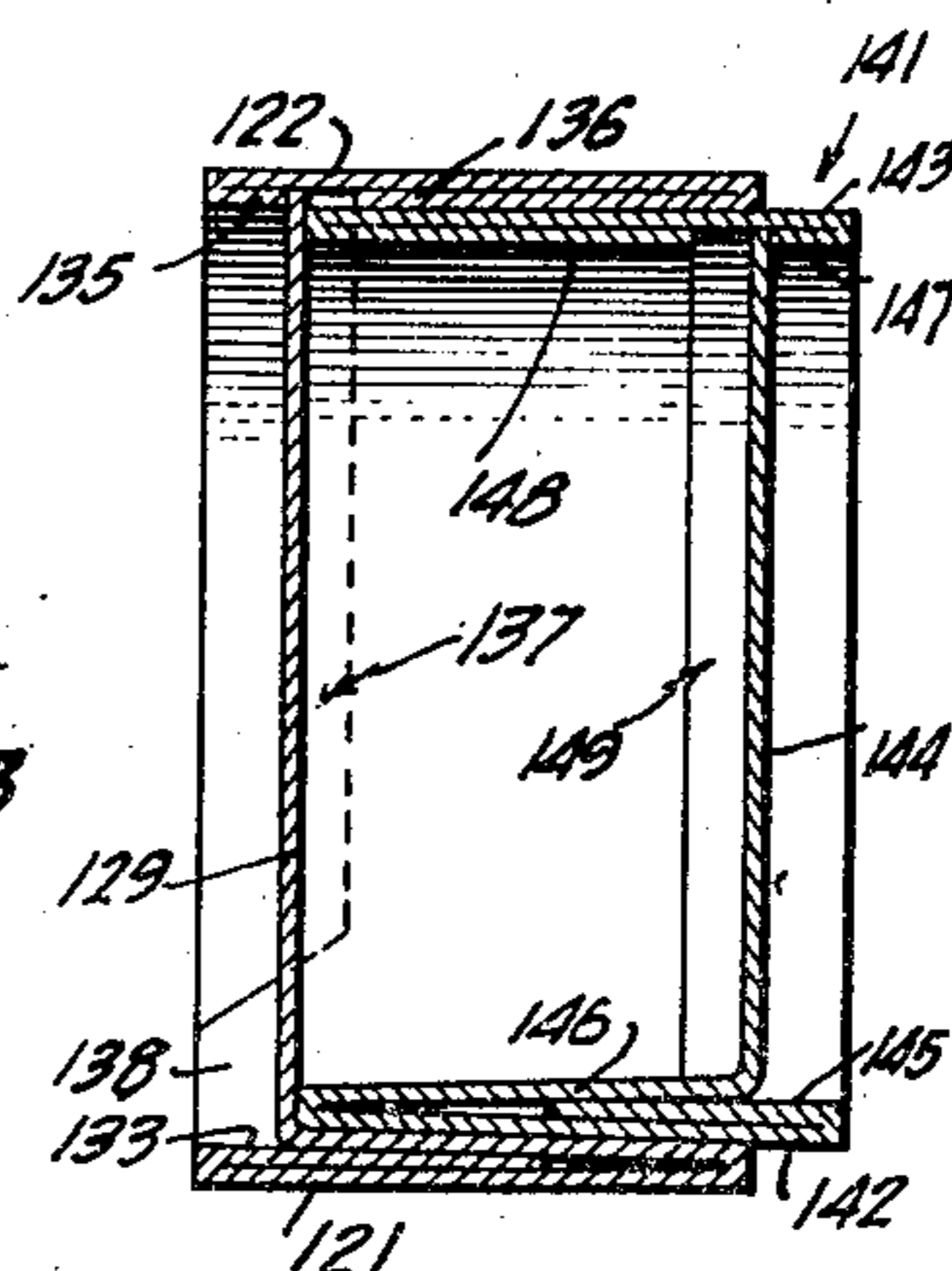


FIG. 12

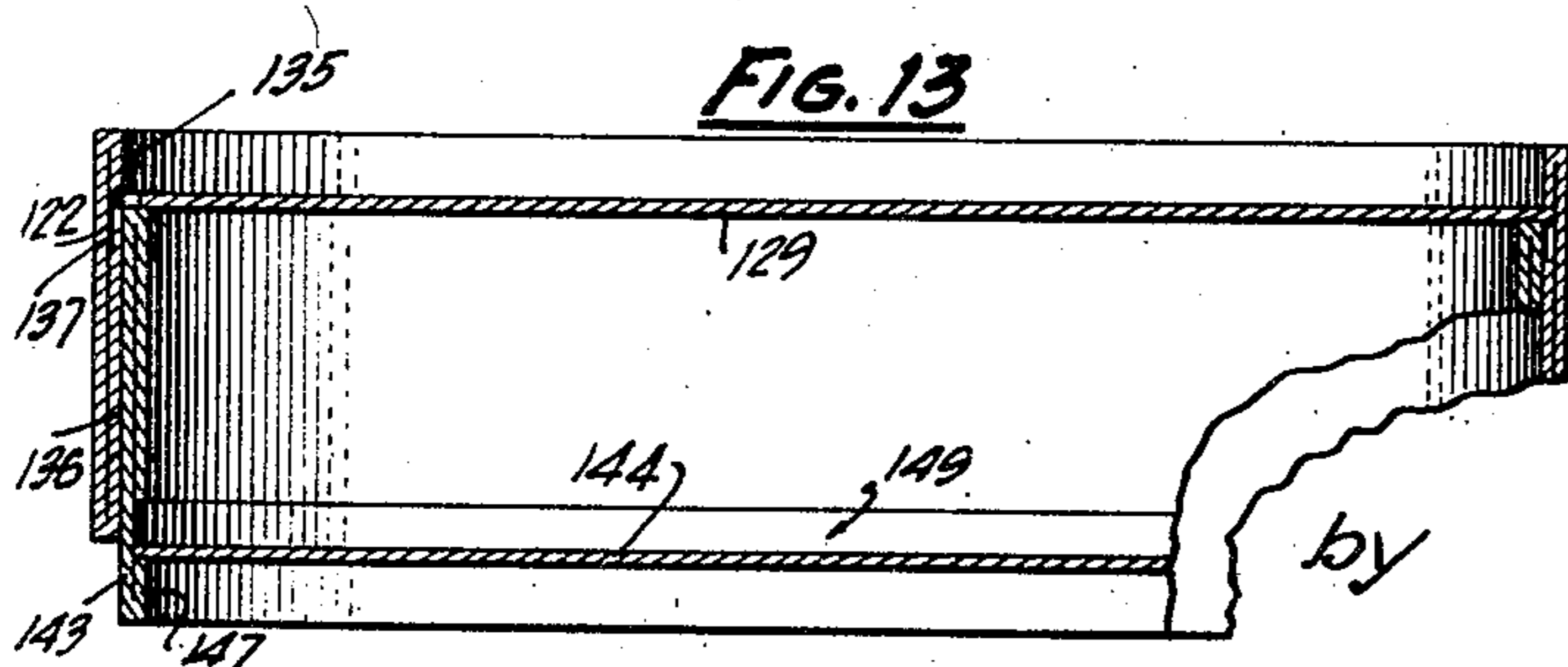


FIG. 13

Inventor:
Henry L. Metzger
by *Charles F. Smith*
His Attorneys.

1

2,710,132

COVER OR CONTAINER MEMBER FOR A SEMI-CIRCULAR TELESCOPIC BOX

Henry L. Metzger, Castleton on Hudson, N. Y.

Application December 29, 1949, Serial No. 135,621

3 Claims. (Cl. 229—18)

This invention relates to boxes and particularly to improvements in boxes of the general type ordinarily used as containers for Camembert and other cheeses. Such boxes are conventionally made of thin wood and are comparatively expensive. It is an object of the present invention to make such boxes of paperboard material, preferably with a coating of paper material simulating wood, thus eliminating the expense involved in providing such boxes as heretofore made of wood material.

Another object of the invention is to provide a semi-cylindrical box and a cover therefor of the same material but slightly larger in construction, each of which is formed from a single, integral blank of paperboard material or the like.

A further object is to provide blanks of paperboard material or the like of such configuration that they can be folded to form a semi-cylindrical box.

A still further object is to form a box of such character from paperboard blanks that, when folded to form a box, certain portions of the blanks will be interlockingly engaged or interfitted in such a manner that they will hold the various portions of the blanks in box-forming relation.

Other objects of the invention will in part be obvious and will in part appear hereinafter.

The invention accordingly comprises an article of manufacture possessing the features, properties, and the relation of parts which will be exemplified in the article hereinafter described and the scope of the application of which will be indicated in the claims.

For a fuller understanding of the nature and objects of the invention, reference should be had to the following detailed description taken in connection with the accompanying drawings, in which:

Fig. 1 is a plan of a cut and scored blank embodying, in this particular view, a cover portion of the box contemplated by the invention;

Fig. 2 is a plan view, with a portion broken away, illustrating the blank in Fig. 1 partially folded and ready to be set up into cover forming relation;

Fig. 3 is a perspective view, with a portion broken away, of the blank of Figs. 1 and 2 partly folded and secured together ready to receive the closure portion;

Fig. 4 is a perspective view, with a portion broken away, of the cover completely assembled and secured together;

Fig. 5 is a plan view of a cut and scored blank depicting the container portion of the box which is similar in construction, but somewhat smaller in area, than the cover member shown in Fig. 1;

Fig. 6 is a top view of the box showing the cover member of Figs. 1 through 4 fitted over the container member;

Fig. 7 is a transverse sectional view taken along the lines 7—7 of Fig. 6 illustrating the completed box with the cover of Fig. 6 placed over the blank of Fig. 5 after the latter has been folded and secured together to provide the container portion of the box in the manner illus-

2

trated and described in connection with the cover shown in Figs. 1 through 4;

Fig. 8 is a transverse sectional view taken along the lines 8—8 of Fig. 6;

Fig. 9 is a plan view of a cut and scored blank illustrating another modification of the invention, this particular view depicting the cover member, being somewhat larger but otherwise identical in construction to the container member, a view of the latter having been omitted as not being necessary to further illustrate the invention;

Fig. 10 is a plan view of the blank of Fig. 9 with a portion broken away, partly folded and ready to be set up into cover formation;

Fig. 11 is a top view of the cover shown in Figs. 9 and 10 when assembled and placed over a container member to provide the modified form of box;

Fig. 12 is a transverse sectional view taken along the line 12—12 of Fig. 11 showing the cover member assembled over a container member of the same construction as the blank shown in Figs. 9 and 10; and

Fig. 13 is a sectional view, with a portion broken away, taken along the line 13—13 of Fig. 11 further showing the cover member thereof placed in position over the container member.

Referring more particularly to Figs. 1 through 4 of the drawings, there is shown a cut and scored blank of flexible material, such as paperboard stock, which represents an unassembled cover member for the container. It will be understood that the cover of the container is similar in construction to the container member shown in blank form in Fig. 5. The blank depicted in Fig. 1 constitutes a central strip indicated generally at 20 which comprises a flat side wall 21 and a remaining wall portion 22 which is adapted to be folded into curved position to form a curved side wall. The strip 20 is defined by the spaced horizontal score lines 23 and 24, and vertical score lines 25 and 26.

Extending from the top of the flat side wall 21 is a panel 27 defined by the score line 23 and another weakened line of fold 28. Hingedly attached to the panel 27 along the score line 28 is a closure panel 29 having cut-out portions indicated at 30, 31 and 32, the purpose of which will be more fully explained hereinafter.

Extending from the opposite side or bottom of the flat side wall 21 along a portion of the score line 24, is a flap 33 having a notched or cut-out portion indicated generally at 34.

Attached to the bottom portion of the strip 22 along a remaining portion of the score line 24 is a narrow marginal flap 35 adapted to be folded along the score line 24 to provide a ledge for the closure panel 29. Extending from the top of the strip 22 along the score line 23 is a flap 36 adapted to be folded along the score line 23 onto the strip 22 with portions of its free edge spaced apart from the free edge of the marginal portion 35 to provide a groove indicated generally at 37 (Fig. 2). T-shaped projections 38 extend from the flap 36 and overlie the narrow marginal flap 35. Another projection, 38', overlies and aids in holding the free corner edge of the narrow marginal flap 35 in position when the blank is folded ready for use.

At the extreme end of the strip portion 22 is an interlocking flap 39 having a cut-out portion indicated generally at 40.

In setting up this portion of the container, the flap 33 is folded onto the flat side wall 21 together with the marginal strip 35 which is folded onto the portion 22. The flap 36 is similarly folded so that the T-shaped projections 38, and projection 38', overlie the marginal strip 35 as indicated in Fig. 2. Thereafter, the strip portion 22 is curved or bent until the flap 39 can be inserted be-

tween the side wall 21 and the flap 33 and the cut-out portions 34 and 40 are made interlockingly to engage each other, as shown in Fig. 3. Then the panel 27 is pushed downwardly into the curved portion 22 until it overlies the flap 33 and the closure portion 29 is pushed downwardly into position until its free edges engage the groove 37 with the cut-out portions 31 and 32 straddling the vertical legs of the T-shaped projections 38, and with the cut-out portion 30 overlying the projection 38' thus forming the closure wall for this portion of the box.

The blank illustrated in Fig. 5 represents the portion of the box which, when folded and assembled, forms the container member therefor. It is substantially identical with the blank shown in Fig. 1 and constitutes an elongated strip indicated generally at 41 forming a flat side wall portion 42 and an extended wall portion 43 which is adapted to form the curved side wall for the container portion of the box. These wall portions are defined by the spaced horizontal score lines 44 and 45 and vertical score lines 46 and 47. Extending from the top of the flat side wall 42 along a portion of the score line 44 is a panel 48 which is defined by the score line 44 and a weakened line of fold 49. Connected to the panel 48 along the line of fold 49 is a closure wall or panel 50 having cut-out portions indicated at 51, 52 and 53, the purpose of which is the same as heretofore described in connection with the cover member in Figs. 1 through 4, namely to straddle or overlie the projection 38' and T-shaped projections 38, respectively.

Along the bottom of the flat side wall 42 is a flap or panel 54 having a cut-out portion indicated generally at 55. This panel is defined by a portion of the horizontal score line 45 and vertical score line 46.

Extending from the bottom of the wall portion 43 along the remainder of the horizontal score line 45 is a marginal flap 56 which preferably is connected to the flap 54 and which is adapted to be folded, together therewith, against the elongated strip 41 forming the wall portions 42 and 43.

Extending from the top of the wall portion 43, along the score line 44, is a flap 57 with T-shaped projections 58 and projection 58'.

At the extreme end of the wall portion 43 is an extension flap 59 having a notched or cut-out portion indicated generally at 60. Since this blank, when assembled, constitutes the container portion of the box, it is necessarily smaller in area than the cover portion into which it is fitted. Along the weakened line of fold 49 are partially cut-out tabs 61 which provide ventilation orifices when the blank is assembled into container formation. This blank is assembled in the same manner as described in connection with the assembling of the blank shown in Figs. 1 and 2 to provide the cover portion of the box as shown in Figs. 3 and 4 and it was not deemed necessary to include a view similar to that shown in Fig. 2 wherein the folding operation prior to assembly is disclosed. However, the blank of Fig. 5, when so folded into container formation, is amply illustrated in Figs. 7 and 8 with the cover member shown in Figs. 3, 4 and 6 telescoped thereover to show the completely assembled box. The closure wall or panel 50 is supported between the free edges of the marginal flaps 56 and 57 which provide a groove 37' similar to that indicated at 37 (Fig. 2). The T-shaped projections 58 and the projection 58' extend across the groove and are straddled by the cut-out portions 52, 53 and 51 respectively, of the closure wall or panel 50.

The modification of the invention illustrated in Figs. 9 and 10 is substantially similar to what is shown in Figs. 1 and 5 with the exception that there are no T-shaped projections 38 such as those shown and described in the previous modification. Actually, the views of the blank shown in Figs. 9 and 10 are intended to illustrate a cover member for the box, but they also serve to illustrate a container member therefor, since both members

are identical in construction except that one is necessarily smaller than the other. However, Figs. 9 and 10 will be described as a cover member since the container member is amply illustrated in connection with Figs. 12 and 13.

The blank illustrated in Fig. 9 comprises an elongated strip indicated generally at 120. This strip constitutes a flat side wall 121 and a remaining wall portion 122, which, when folded to set up the cover member, comprises a curved side wall. The wall portions 121 and 122 are defined by the spaced horizontal score lines 123 and 124 and the spaced vertical score lines 125 and 126.

Hingedly attached to the top of the side wall 121 along a portion of the score line 123 is a panel member 127 which is defined by the score line 123 and another score line 128. Hingedly attached to the panel 127 along the score line 128 is a closure wall or panel 129 having a cut-out portion 130, the purpose of which will appear hereinafter.

Extending from the bottom of the flat side wall panel 121 along a portion of the score line 124 is a flap 133 having a cut-out or notched portion 134. Preferably integral with this panel at the bottom of the score line 125 is a narrow marginal flap 135 connected to the panel 122 along the remaining portion of the score line 124. Along the top of the wall portion 122 along the score line 123 there extends a larger flap 136. When the flap 133 is folded along the score line 124, together with the narrow marginal flap 135 to overlie the wall portions 121 and 122 respectively, and the larger flap 136 is also folded against the wall portion 122, a groove 137 (Fig. 10) is provided which is adapted to receive the curved edge of the closure wall or panel 129 when the blank is folded into cover or container-forming relationship.

The larger flap 136 has a projection 138 at its end which will extend across the groove 137 when the panel 136 is folded against the panel 122 and this extension will rest on the folded narrow marginal flap 135 as shown in Fig. 10. Projecting from the extreme end of the wall 122 is a flap 139 having a cut-out portion 140.

After the panels 133, 135 and 136 have been folded against the side wall 121 and the wall 122, respectively, the latter is folded or curved in such a manner that the cut-out portion 140 in the projection 139 is made interlockingly to engage the cut-out portion 134 of the flap 133. The wall portion 122 will thus define a curved side wall in the manner described in connection with the previous modification. Thereafter, the panel 127 is pushed downwardly against the flap 133 and the closure panel or wall 129 is similarly pushed downwardly inside the curved wall 122 until the free edge of the panel 129 is located in the groove 137. The cut-out portion 130 will straddle the projection 138 snugly to aid in holding down the corner of the narrow flap 135.

As above pointed out, the above described modification may be regarded as a cover portion or as the container portion for the completed box. The container portion is identical in structure except, as above stated, it is smaller in size and when a blank of similar construction to that described in Figs. 9 and 10 is folded in the same manner, it is ready for the reception of a commodity so that the cover portion above described can be telescoped thereover as shown in Fig. 12 wherein the container portion is indicated generally at 141. Briefly, the container member also constitutes a flat side wall 142, a curved side wall 143 and a bottom closure or panel 144. It will be seen that there is a flap 145 corresponding to the flap 133, a hinged panel 146 corresponding to the hinged panel 127, a short marginal flap 147 similar to the flap 135, and a larger flap 148 which is identical to the flap 136. A groove indicated generally at 149, similar to the groove 137, is also provided to interlockingly receive the free edge of the closure panel 144.

A simply constructed and inexpensive box provided by paperboard material such as that above described can readily be substituted for the more expensive wood boxes

now used. In order to give the appearance of a wood box, the outside surface of the blanks forming the box are covered with a thin sheet of finish paper which simulates wood in appearance thus providing a completed box which to all intents and purposes will have the appearance of conventional wood boxes.

It will thus be seen that the objects hereinbefore set forth may readily and efficiently be attained and since certain changes may be made in the carrying out of the above invention, and different embodiments of the invention could be made without departing from the scope thereof, it is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

It is also to be understood that the following claims are intended to cover all of the generic and specific features of the invention herein described, and all statements of the scope of the invention which, as a matter of language, might be said to fall therebetween.

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

1. In a cover or container member for a semi-circular telescopic box, formed from a single die-cut and scored blank of paper board comprising a relatively narrow central longitudinally extending strip, one smaller portion of said strip providing a straight side wall for said member, and a remaining larger portion of said strip forming a semi-circular side wall therefor; a rectangularly shaped flap laterally attached along one longitudinal edge of said smaller portion and folded thereon, and having a notch in its free longitudinal edge adjacent one end of said smaller portion; a narrow rectangularly shaped marginal flap, having a straight free edge, laterally attached along one edge of said larger strip portion and folded thereon; a second marginal flap laterally attached along the opposite edge of said larger strip portion and folded thereon but in spaced relation from said first marginal flap to provide a groove between the edges of said marginal flaps; an interlocking flap, having a cut-out portion constituting a hook extending from the free end of said larger semi-circular side wall portion, which hook is interlockingly engaged with said notch in said rectangularly shaped flap on said smaller straight side wall portion; and a closure panel section, having a semi-circular portion, laterally attached along said smaller straight side wall portion, opposite said notched flap, and folded thereon, said semi-circular portion, along its peripheral edge, being engaged with said groove to provide an end closure for said box member between said straight side wall and said semi-circular side wall.

2. In a cover or container member for a semi-circular telescopic box, formed from a single die-cut and scored blank of paper board comprising a relatively narrow central longitudinally extending strip, one smaller portion of said strip providing a straight side wall for said member, and a remaining larger portion of said strip forming a semi-circular side wall therefor; a rectangularly shaped flap laterally attached along one longitudinal edge of said smaller portion and folded thereon, and having a notch in its free longitudinal edge adjacent one end of said smaller portion; a narrow rectangularly shaped marginal flap, having a straight free edge, laterally attached along one edge of said larger strip portion and folded thereon; a second marginal flap laterally attached along the opposite edge of said larger strip portion and folded thereon but in spaced relation from said first marginal flap to provide a groove between the edges of said marginal flaps;

an interlocking flap, having a cut-out portion constituting a hook extending from the free end of said larger semi-circular side wall portion, which hook is interlockingly engaged with said notch in said rectangularly shaped flap on said smaller straight side wall portion; and a closure panel section, having a semi-circular portion, laterally attached along said smaller straight side wall portion, opposite said notched flap, and folded thereon, said semi-circular portion, along its peripheral edge, being engaged with said groove to provide an end closure for said box member between said straight side wall and said semi-circular side wall; said closure panel section being provided with an intermediate panel portion between said straight side wall to which it is attached along one side, and said semi-circular portion to which it is attached along its other side, which intermediate panel portion overlies said notched panel and said hook snugly to press them together against said straight side wall when said semi-circular portion is seated in said groove with its peripheral edge braced against said semi-circular side wall.

3. In a cover or container member for a semi-circular telescopic box, formed from a single die-cut and scored blank of paper board comprising a relatively narrow central longitudinally extending strip, one smaller portion of said strip providing a straight side wall for said member, and a remaining larger portion of said strip forming a semi-circular side wall therefor; a rectangularly shaped flap laterally attached along one longitudinal edge of said smaller portion and folded thereon, and having a notch in its free longitudinal edge adjacent one end of said smaller portion; a narrow rectangularly shaped marginal flap, having a straight free edge, laterally attached along one edge of said larger strip portion and folded thereon; a second marginal flap laterally attached along the opposite edge of said larger strip portion and folded thereon but in spaced relation from said first marginal flap to provide a groove between the edges of said marginal flaps; an interlocking flap, having a cut-out portion constituting a hook extending from the free end of said larger semi-circular side wall portion, which hook is interlockingly engaged with said notch in said rectangularly shaped flap on said smaller straight side wall portion; and a closure panel section, having a semi-circular portion, laterally attached along said smaller straight side wall portion, opposite said notched flap, and folded thereon, said semi-circular portion, along its peripheral edge, engaged with said groove to provide an end closure for said box member between said straight side wall and said semi-circular side wall; said second marginal flap being provided with at least one intermediate T-shaped projection overlying said groove and narrow marginal flap, said semi-circular portion of said closure panel section having a peripheral cut-out portion, whereby said semi-circular portion interlockingly embraces said projection and additionally is supported thereon.

References Cited in the file of this patent

UNITED STATES PATENTS

1,545,771	Hout	July 14, 1925
1,576,672	Miller	Mar. 16, 1926
1,597,065	Davis	Aug. 24, 1926
1,597,286	Pinkerton	Aug. 24, 1926
1,861,206	Burgess	May 31, 1932
2,068,763	Powell	Jan. 26, 1937

FOREIGN PATENTS

588,232	Great Britain	May 16, 1947
---------	---------------	--------------