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R. C. TAYLOR

2,183,595

CONTAINER

Filed Nov. 5, 1938

Fig. 1

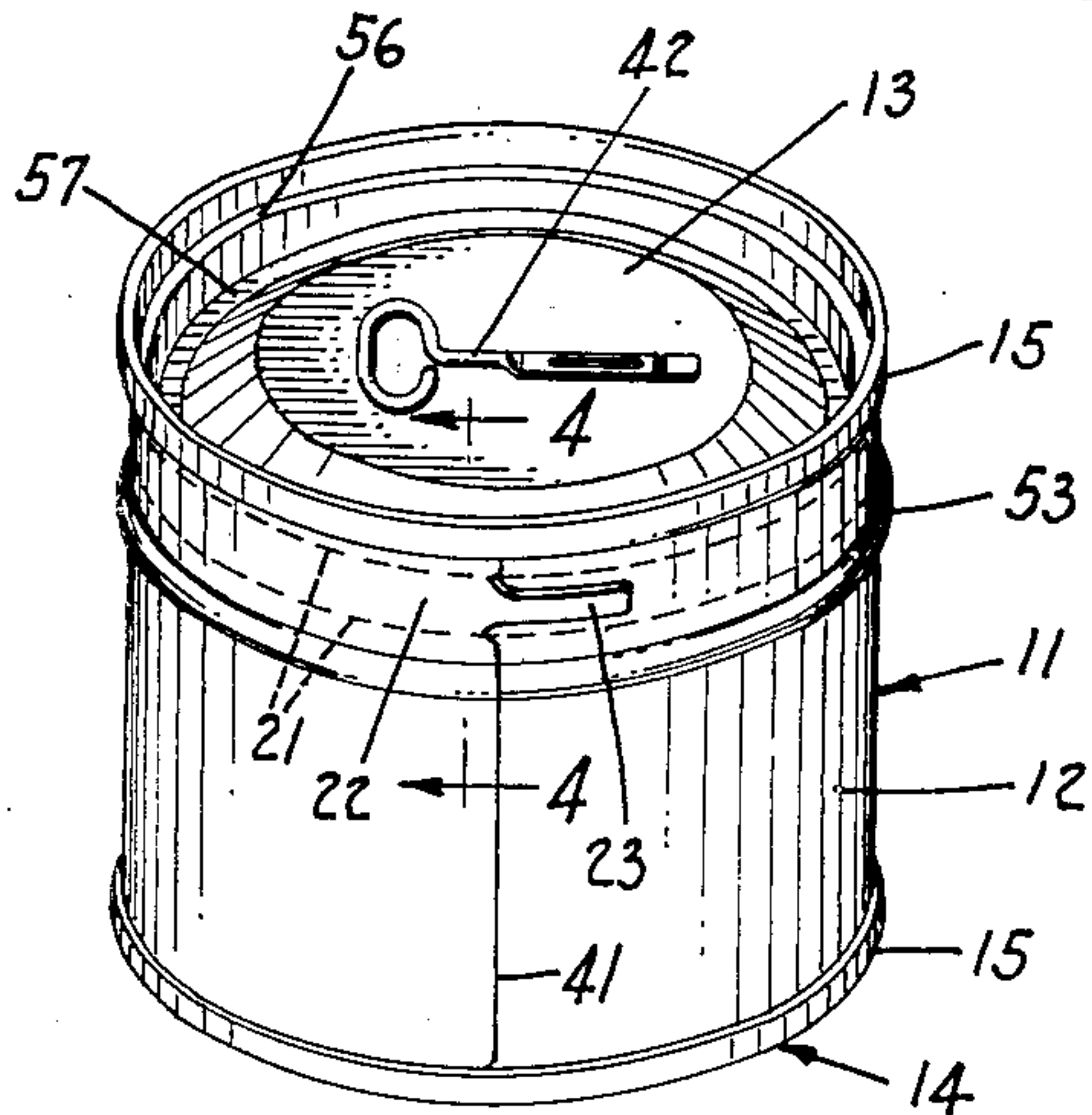


Fig. 6

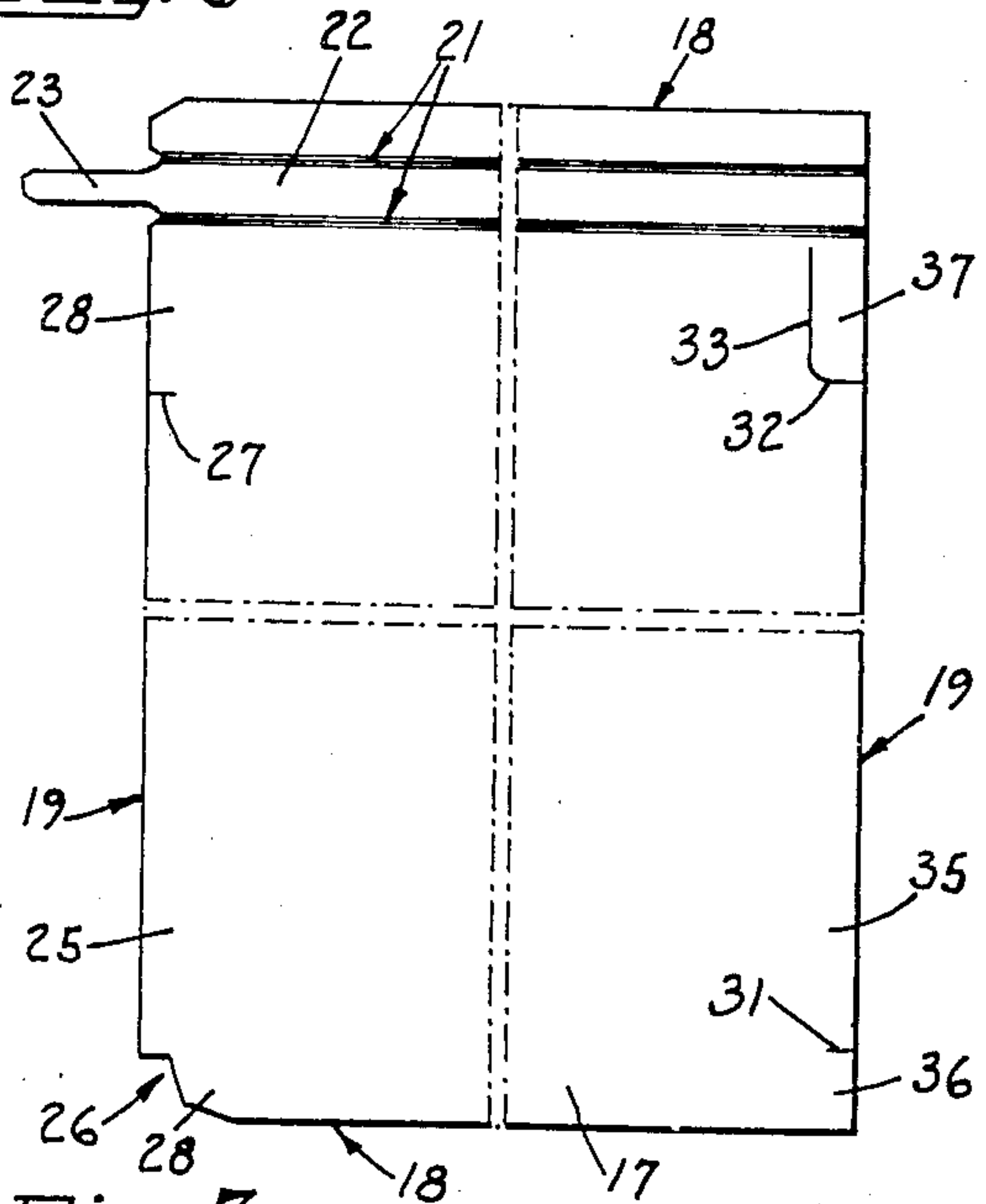


Fig. 2

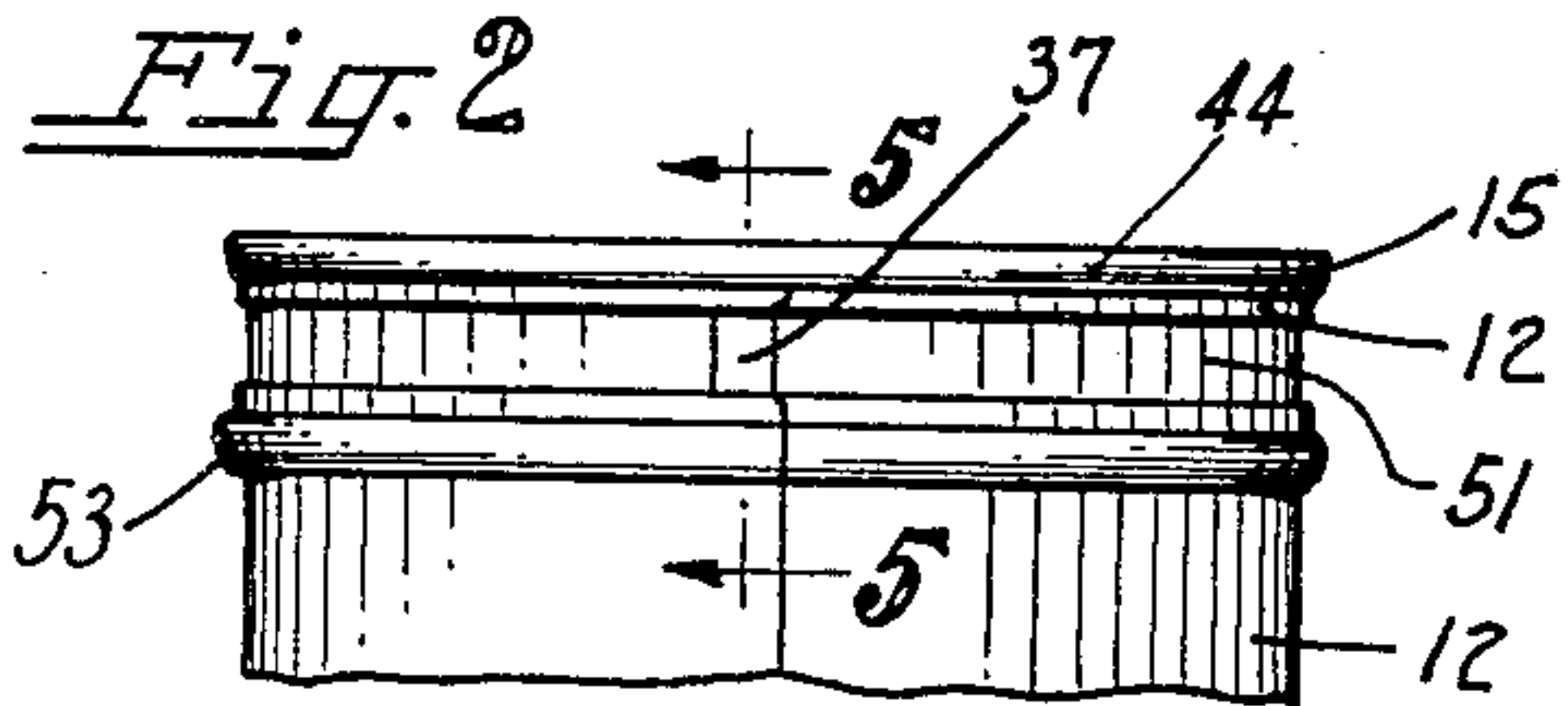


Fig. 7

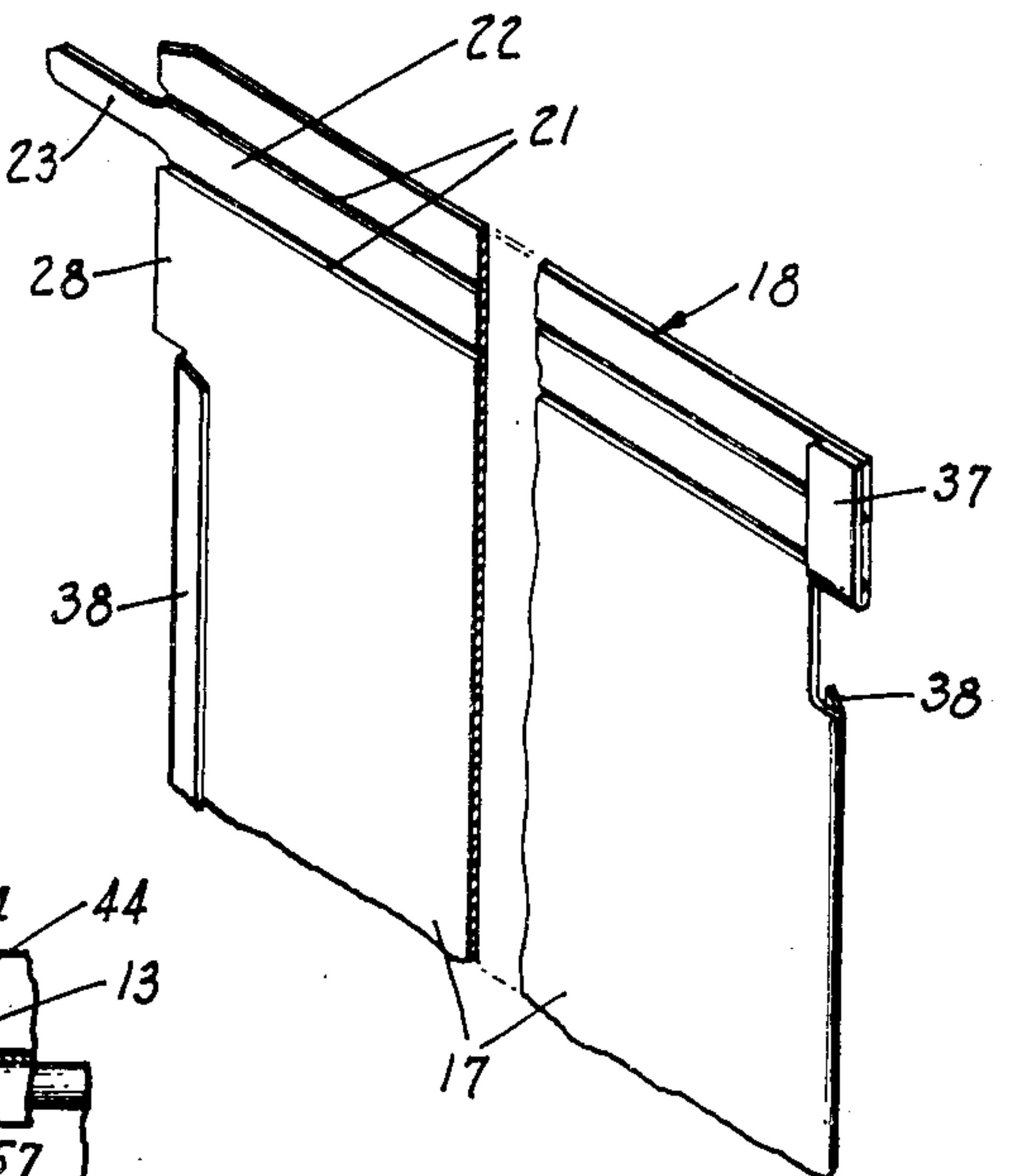


Fig. 3

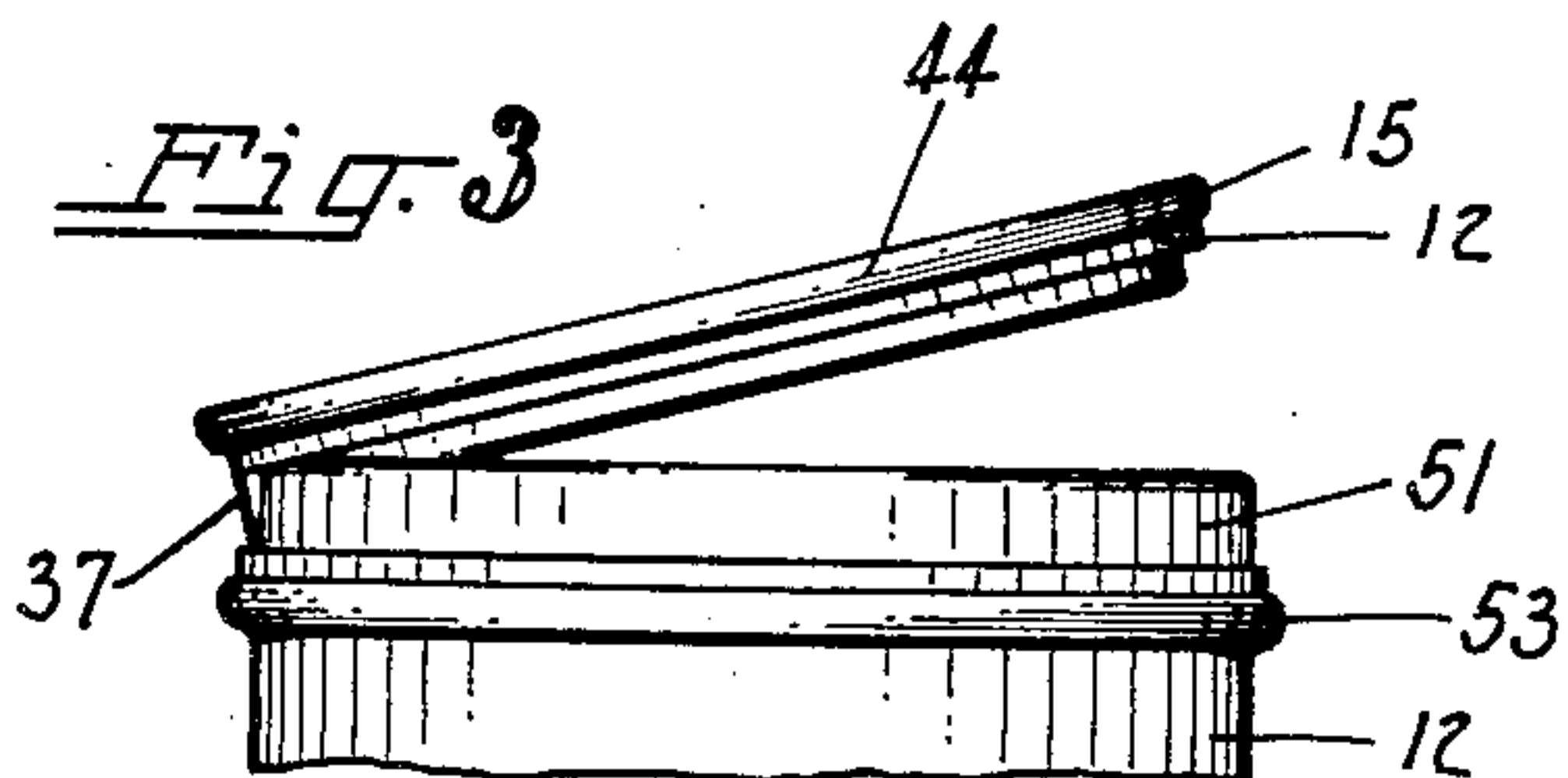


Fig. 4

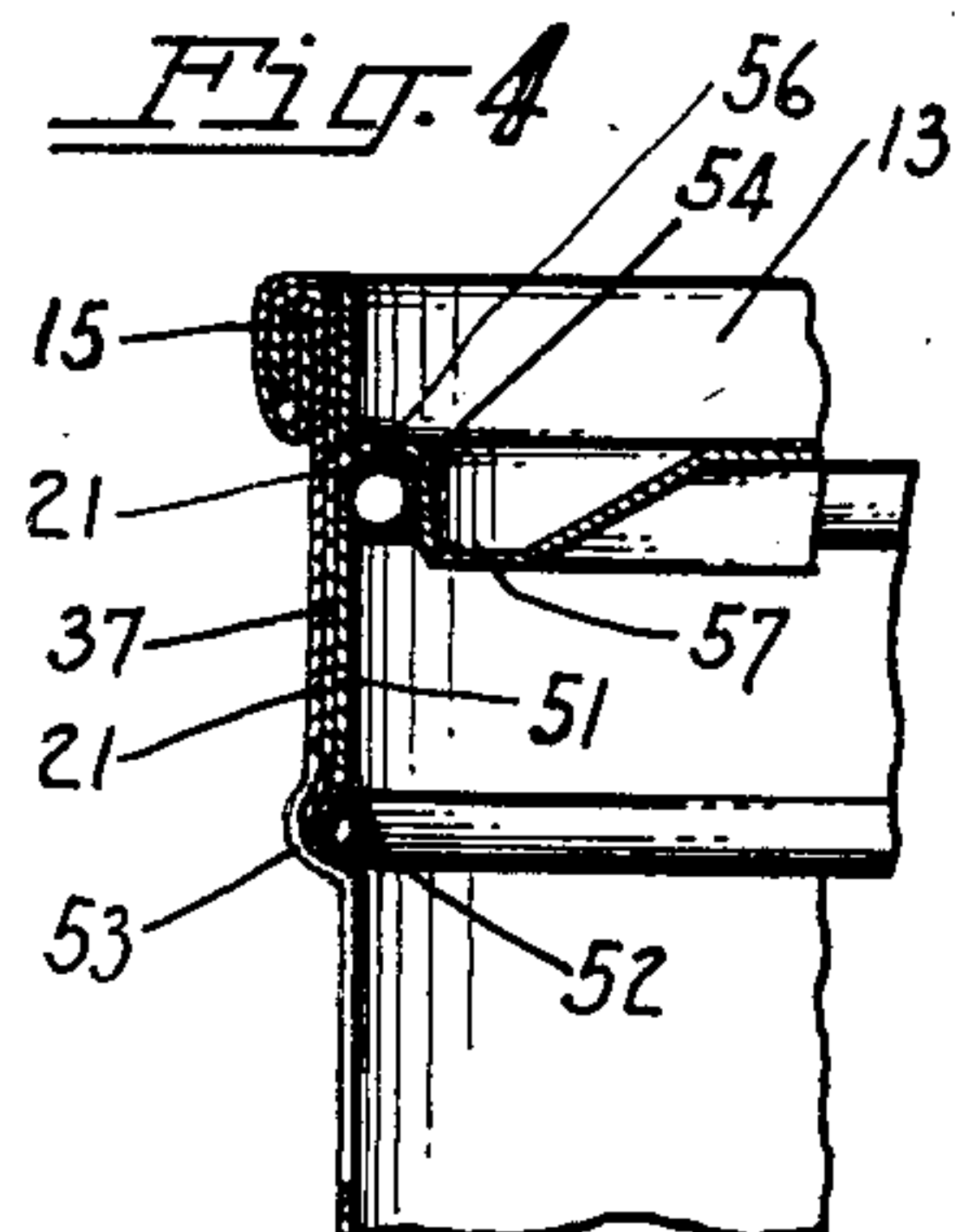
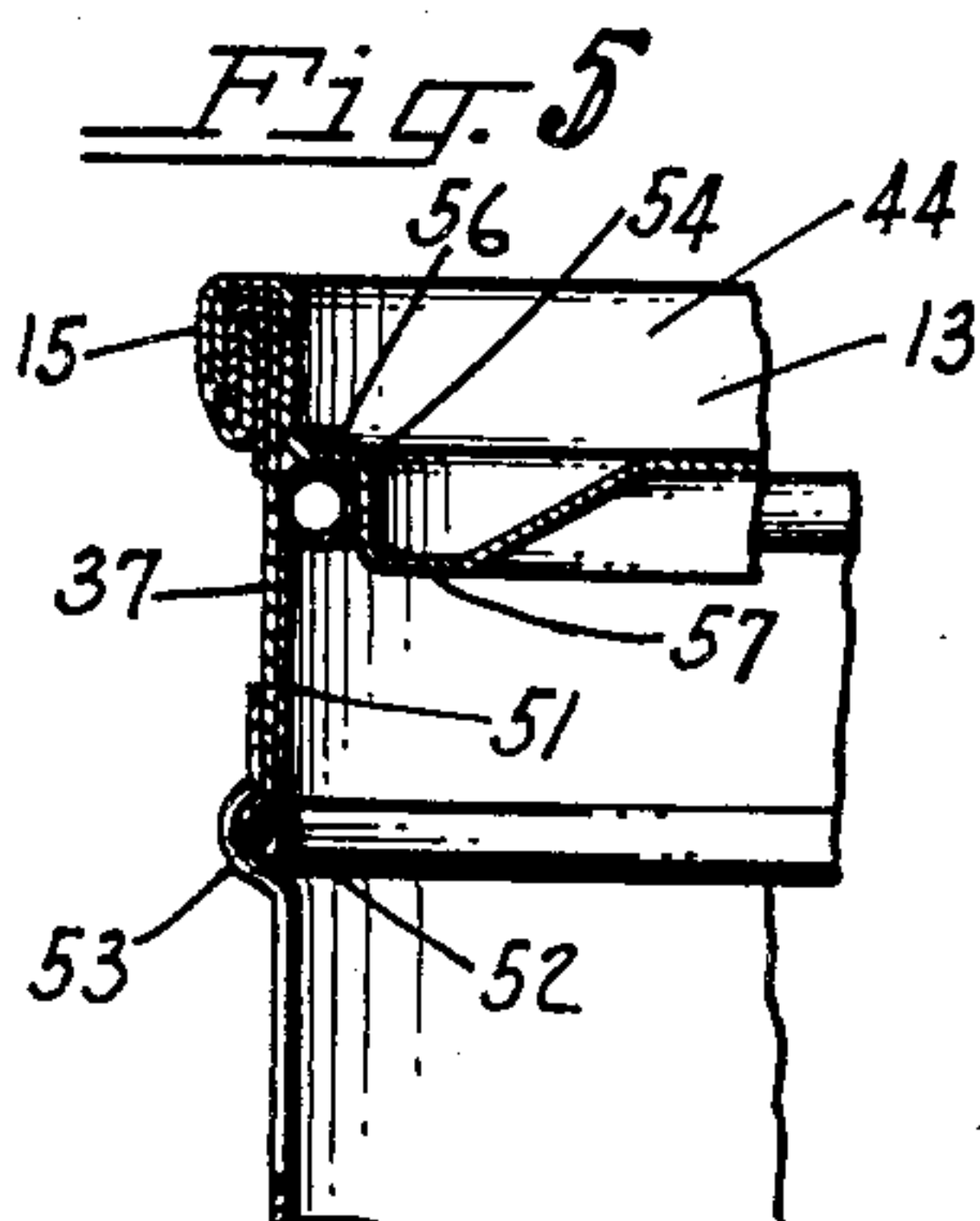


Fig. 5



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2,183,595

CONTAINER

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2 Claims. (Cl. 220—54)

The present invention relates to containers or cans of the tearing strip character and has particular reference to a hinge member formed from a portion of the can body adjacent its side seam and used for hingedly connecting the can body to a reclosure cover produced by removal of the tearing strip.

An object of the invention is the provision in a tearing strip can, of a hinge member for connecting the can body with a reclosure cover produced by removal of the tearing strip wherein the hinge member is an integral part of the can body being struck out from a section of the body wall below the tearing strip and in the side seam of the body and being contained within the confines of the usual body outline thereby producing an efficient hinge without augmenting the cost of manufacture of the can or increasing the material of the body blank.

Numerous other objects and advantages of the invention will be apparent as it is better understood from the following description, which, taken in connection with the accompanying drawing, discloses a preferred embodiment thereof.

Referring to the drawing:

Figure 1 is a perspective view of a sealed can embodying the instant invention;

Fig. 2 is a side elevation of the upper portion of the can illustrated in Fig. 1 and showing the can in partially opened condition;

Fig. 3 is a view similar to Fig. 2 showing the can further opened;

Figs. 4 and 5 are enlarged fragmentary sections taken substantially along the lines 4—4 and 5—5 in respective Figs. 1 and 2;

Fig. 6 is an enlarged plan view of a flat blank from which the body of the can is made, with parts broken away; and

Fig. 7 is an enlarged perspective view of the can body blank after certain forming operations have been performed on it.

As a preferred embodiment of the invention the drawing illustrates a cylindrical sheet metal container 11 (Fig. 1) which includes a body member 12 and top and bottom end or closure members 13, 14 secured to the body member by suitable end seams 15.

The body member 12 is preferably of the lock and lap side seam type and is produced from a flat rectangular blank 17 (Fig. 6) having longitudinal or flange edges 18 and transverse or side seam edges 19. Adjacent the upper flange edge 18, the blank is formed with a pair of spaced and parallel score lines 21 which extend the full

length of the blank setting off between them a tearing strip 22. At one end of the blank (the left as viewed in Fig. 6) the tearing strip is provided with a tongue 23.

One side seam edge 19 (at the left as viewed in Fig. 6) is provided with a lock seam portion 25 which is set off between a lower notch 26 and an upper slit 27. Adjacent the notch 26 and also between the slit 27 and the lower score line 21 there are set off lap seam portions 28. The other side seam edge 19 (at the right in Fig. 6) is provided with a lower slit 31 and an upper line cut consisting of right angled long and short slits 32, 33. Between the slits 31, 32 there is set off a lock seam portion 35 and below the slit 31 a lap seam portion 36. The slits 32, 33 set off, from the side seam edge, a hinge member 37 which is thus a part of the body. It is to this hinge feature that the invention is particularly directed.

Prior to bending the blank 17 into can body shape the lock seam portions 25, 35 are formed into oppositely directed hooks 38 (Fig. 7). That portion of the side seam edge 19 which is set off by the slits 32, 33 and defining the hinge member 37 is folded upwardly and back on itself so that it extends across the score lines 21 as shown in Fig. 7, the upper edge of the hinge member being adjacent the upper flange edge 18 of the blank.

When the blank is formed into the conventional can body shape, the side seam hooks 38 are interengaged and folded over in the usual manner and the lap portions 28, 36 are overlapped and soldered together to provide a regular lock and lap side seam 41 (Fig. 1) which holds the body edges together. In such a can body the tearing strip 22 extends entirely around the can with its tongue 23 overhanging the side seam on the outside of the body where an opening key 42 may be readily applied to it for opening the can. The hinge member 37 is on the inside of the can body in alignment with the side seam.

After forming the body the conventional flange edges 18 are bent over to form outwardly projecting flanges which are preferably interfolded with similar flanges on the closure members 13, 14. It is these flanges when interfolded that produce the end seams 15. It should be noted in this interfolding of the flanges that the upper or free end of the hinge member 37 which is adjacent the can body upper flange is incorporated in the upper end seam 15. Thus the hinge member above the tearing strip 22 is secured in the

end seam and below the tearing strip is an integral part of the can body.

Hence when the tearing strip 22 is removed to open the can a reclosure cover 44 is produced 5 which is connected to the can body by the hinge member 37 as shown in Figs. 2, 3 and 5. This cover includes the top member 13 and that portion of the body 12 above the tearing strip which is secured to the top member by the end 10 seam 15. The hinged reclosure cover may thus be repeatedly used as a reclosure for the can.

Provision is made for seating the cover on the can when used as a reclosure. For this purpose a collar or band 51 of sheet metal is disposed 15 inside the can body adjacent and back of the tearing strip 22. The lower edge of the collar is preferably provided with an edge curl 52 which is locked in a bead 53 formed in the body for holding the collar in place.

20 The upper end of the collar is formed with an inwardly bent edge curl 54 which provides a smooth curved seat for the top member 13 of the reclosure cover 44. The top member 13 is formed with a shouldered step 56 (Figs. 4 and 5) 25 which fits over the collar edge curl. This step 56 merges into a countersunk panel 57 which extends down within the mouth of the collar thus providing what is commonly termed in the art as a double step cover. After the reclosure cover 30 44 is produced it may be readily hinged in both open and closing position, in the latter position being seated on the collar.

It is thought that the invention and many of its attendant advantages will be understood 35 from the foregoing description, and it will be apparent that various changes may be made in the form, construction and arrangement of the parts without departing from the spirit and scope of the invention or sacrificing all of its material advantages, the form hereinbefore de- 40

scribed being merely a preferred embodiment thereof.

I claim:

1. A sheet metal container, comprising a body having a side seam, and an end closure member 5 secured to said body by an end seam, said body being provided with score lines setting off a tearing strip extending entirely around the body adjacent said end closure member, said body 10 also having a hinge portion thereof partially cut out of its side seam and set off below said tearing strip, said hinge portion being folded upwardly across said tearing strip and against the adjacent body wall and having its free end where it 15 extends above the tearing strip, secured in said end seam thereby providing a hinge connecting the body with a reclosure cover produced from the part of said container above the tearing strip when said tearing strip is removed.

2. A sheet metal container, comprising a body 20 having a side seam, an annular collar disposed in said body, and a double step and member secured to said body by an end seam, said body being provided with score lines setting off a tearing strip extending entirely therearound adjacent 25 said end closure member, said body also having a hinge portion thereof partially cut out of its side seam and set off below said tearing strip, said hinge portion being folded upwardly across said tearing strip and against said body wall and 30 having its free end where it extends above the tearing strip secured in said end seam thereby providing a hinge connecting the body with a reclosure cover produced from the part of said container above the tearing strip when said tearing strip is removed, said hinged reclosure cover 35 utilizing said collar as a friction base when the reclosure cover is in closed position on the container.

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