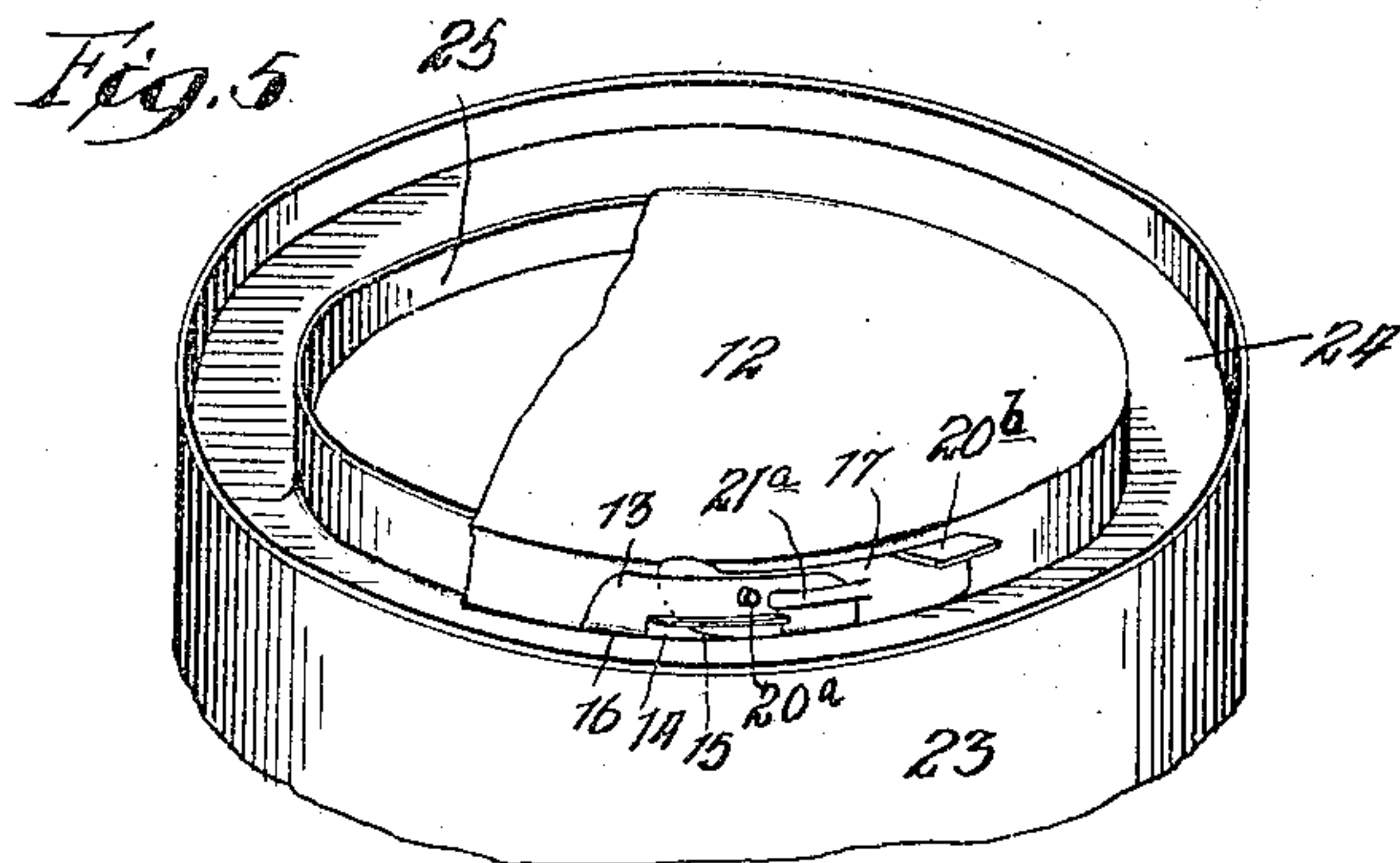
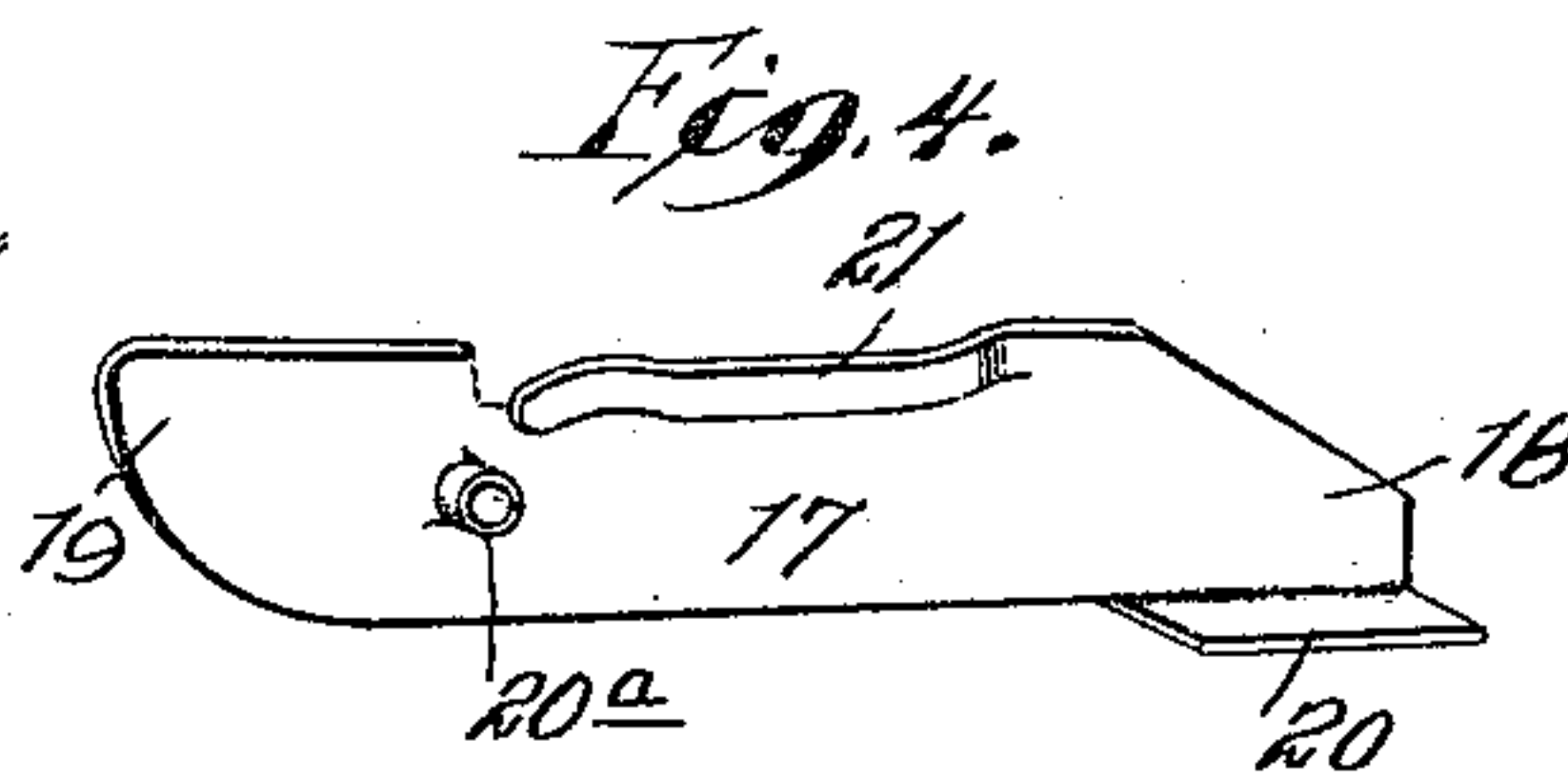
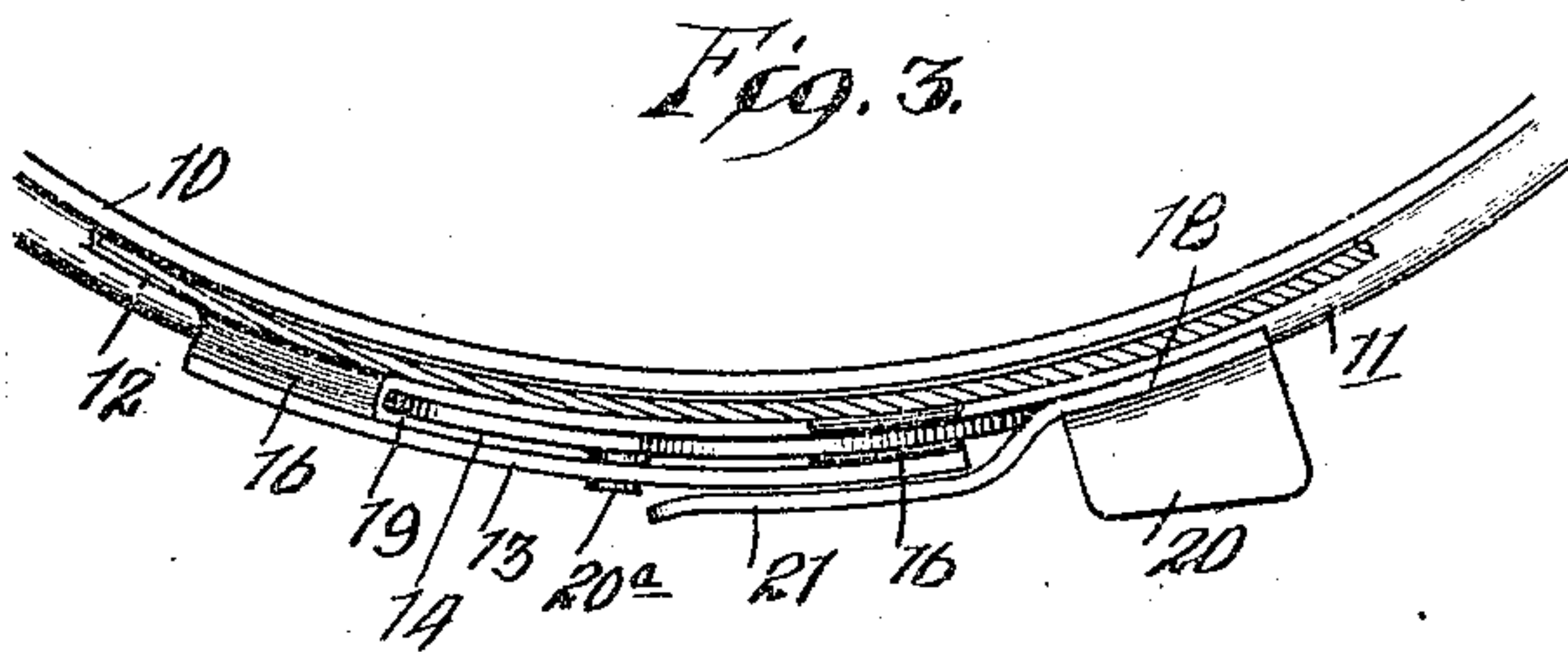
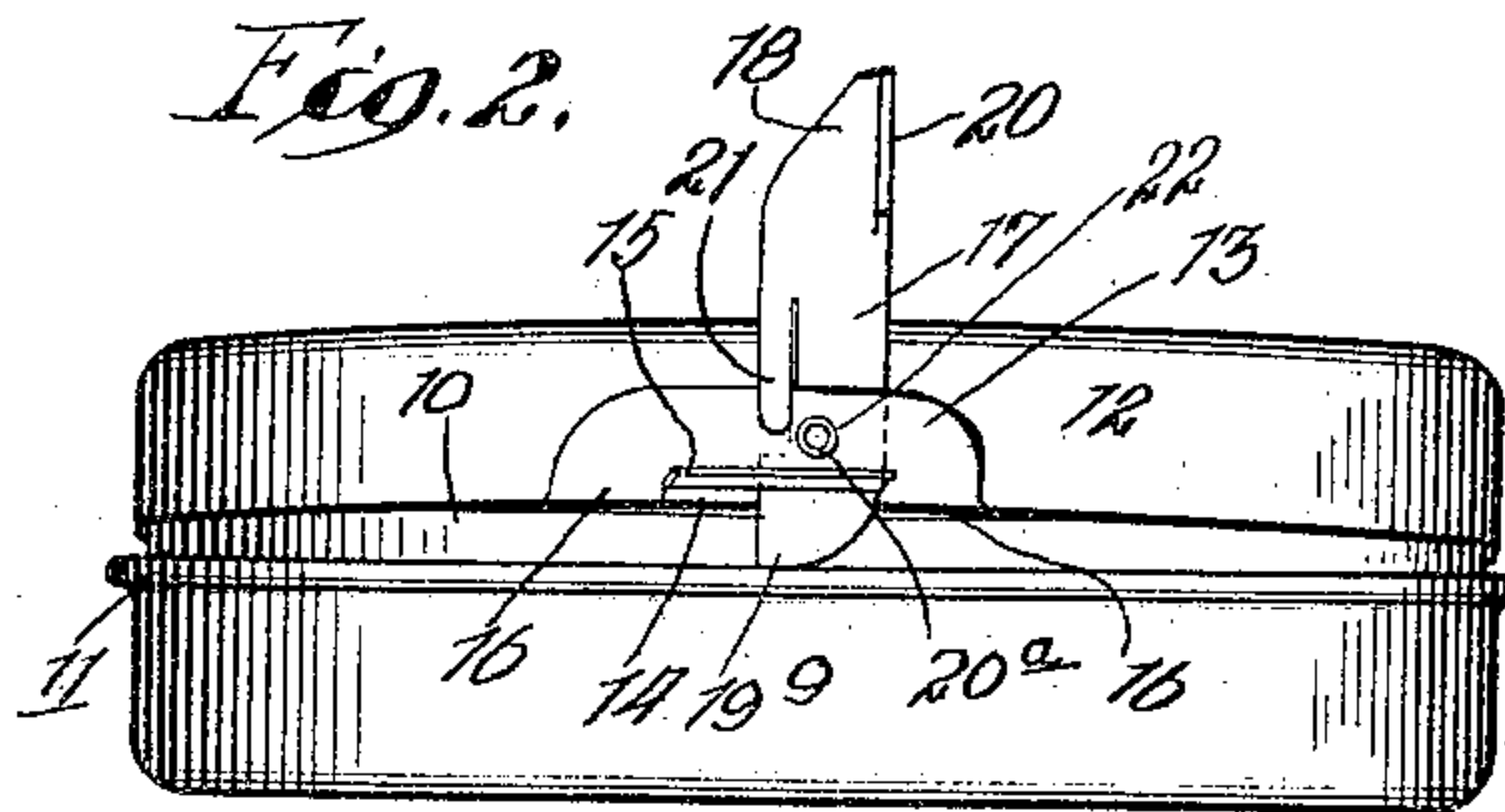
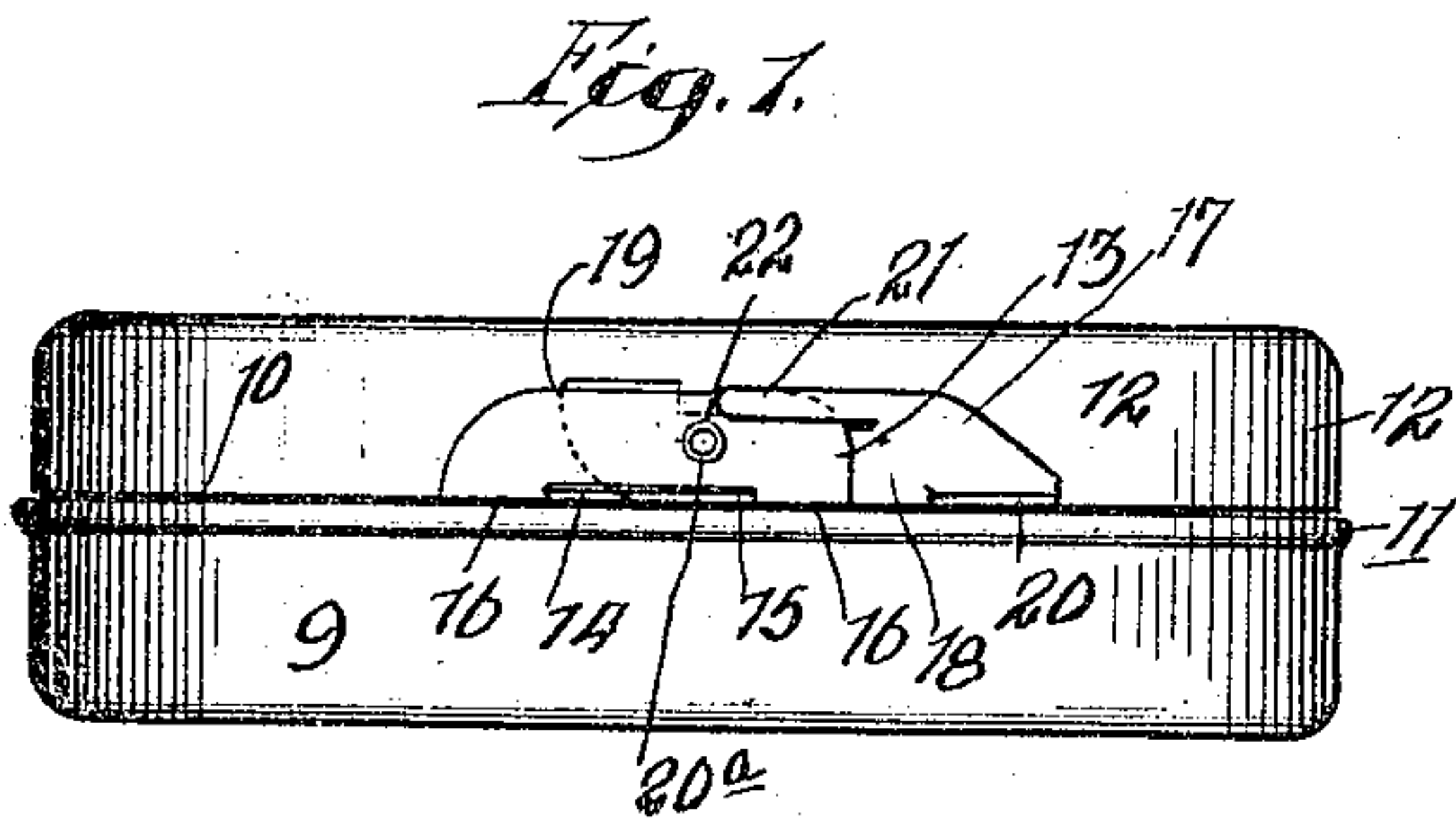


G. C. WEBER.
BOX OPENING DEVICE.
APPLICATION FILED MAY 25, 1909.

948,152.

Patented Feb. 1, 1910.

2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2.

Fig. 6.

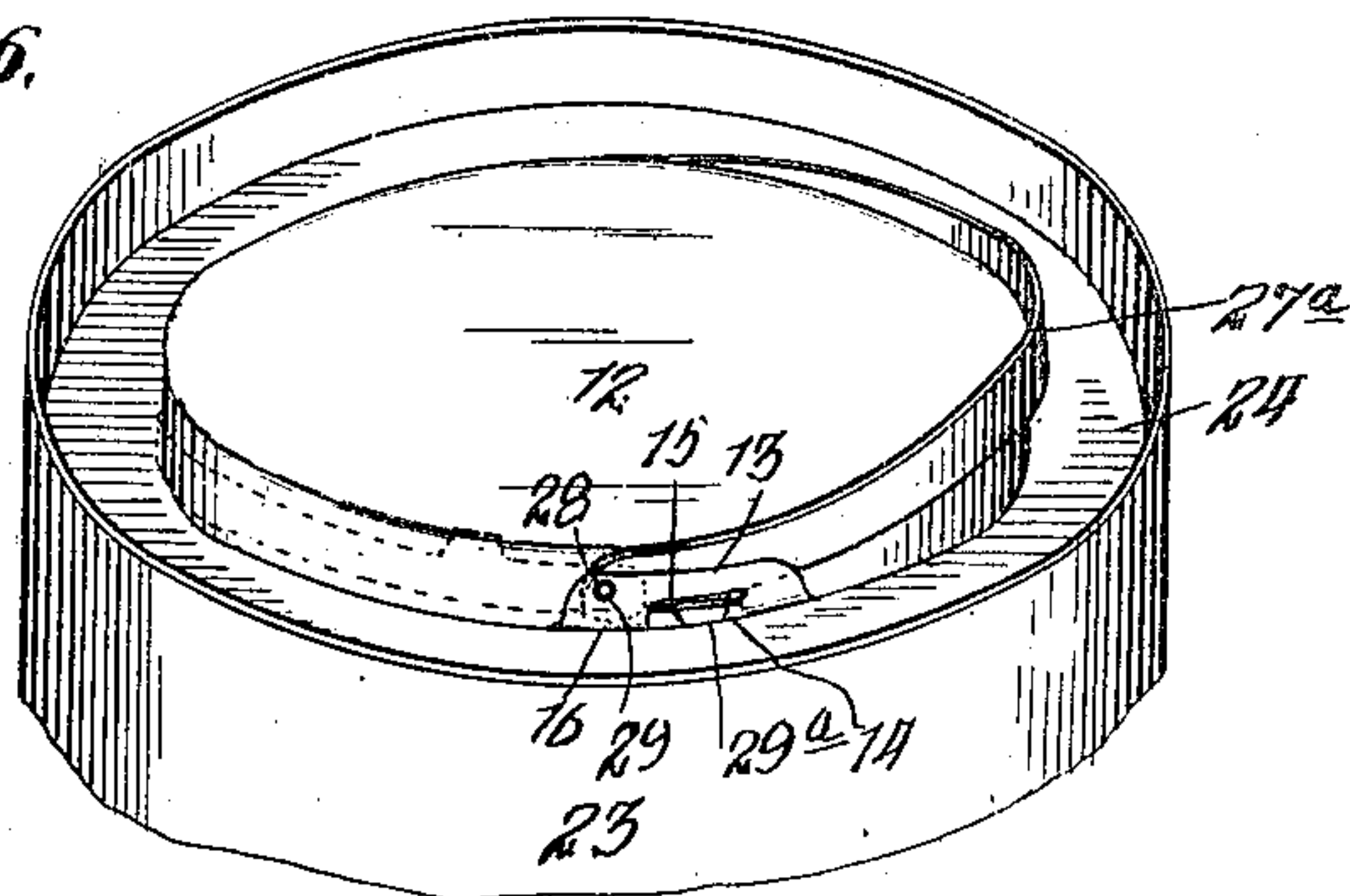


Fig. 7.

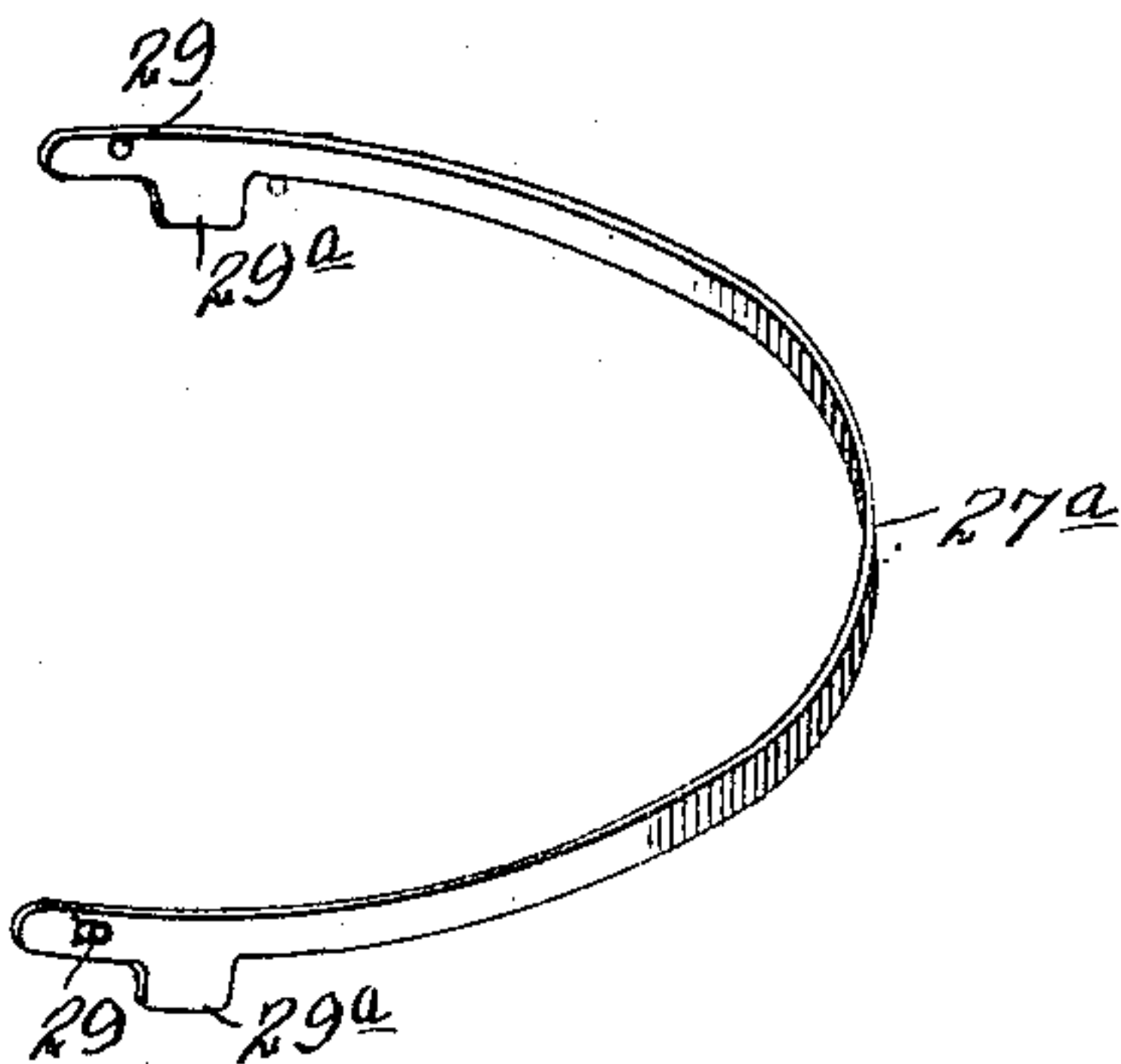
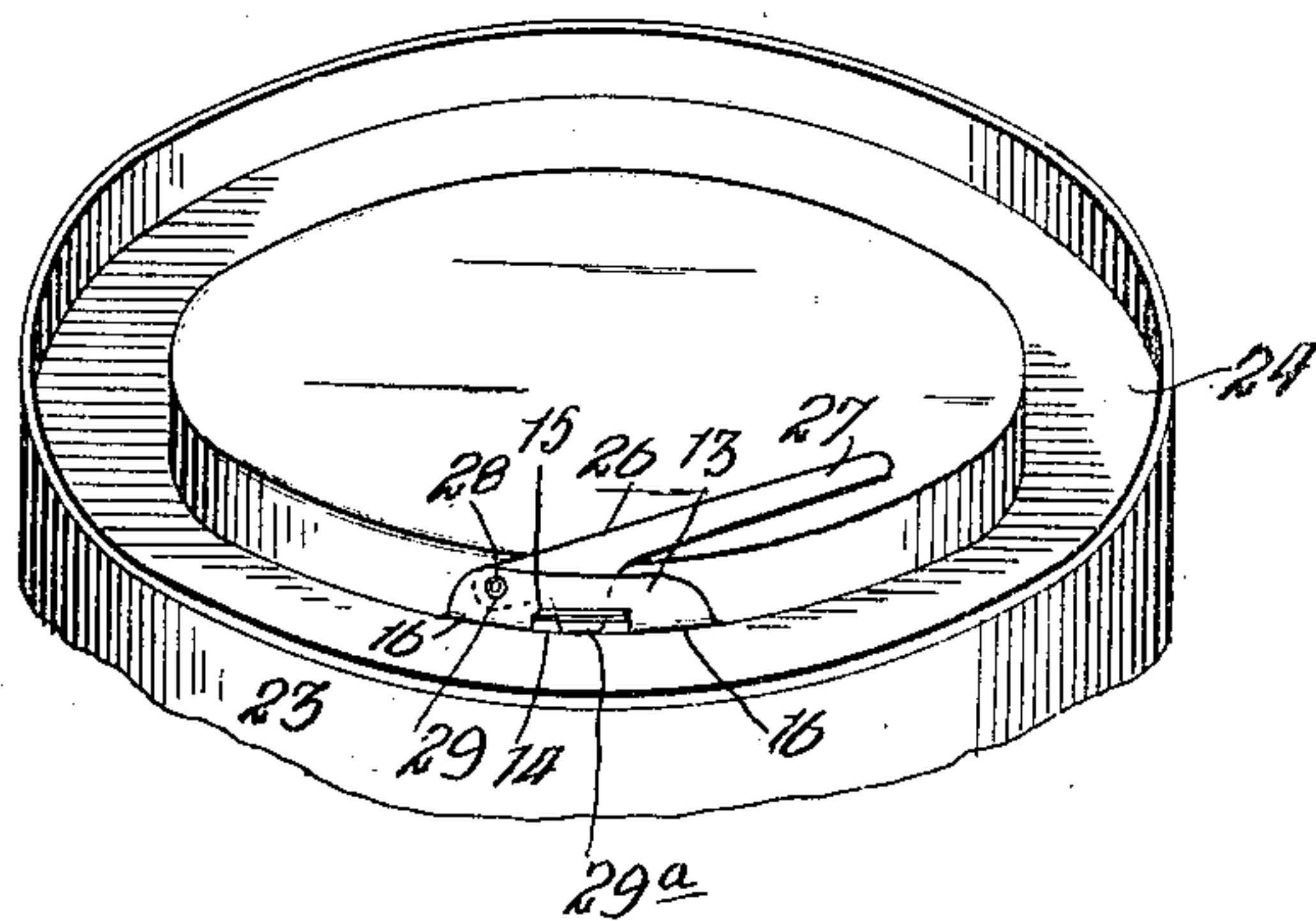


Fig. 8.



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UNITED STATES PATENT OFFICE.

GEORGE C. WEBER, OF CHICAGO, ILLINOIS.

BOX-OPENING DEVICE.

948,152.

Specification of Letters Patent.

Patented Feb. 1, 1910.

Application filed May 25, 1909. Serial No. 498,336.

To all whom it may concern:

Be it known that I, GEORGE C. WEBER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Box-Opening Devices, of which the following is a specification.

This invention relates to box or can opening devices, which are adapted to facilitate the loosening or removal of the cover from a can or box of the general style employed in the packing of blacking, stove polish, paint, baking powder, and similar commodities. Cans of this character ordinarily are provided with caps or covers which slip down over the mouth of the can or box, and in order to properly preserve the contents of the can or box, it is necessary that the joint be a tight one, with the result that difficulty is frequently experienced in attempting to remove the cap or cover.

The object of the present invention is to so construct the can opening devices that they may be applied to a cap or cover of the style mentioned without piercing the wall of the cap or cover, which might result in damage to the contents of the can.

Another object of the invention is to so secure the key lever to the cover that it may be left off to facilitate packing and shipment of the boxes or cans and may thereafter be readily applied in place when the cans are furnished to the consumer.

Further objects will appear from a detailed description of the invention, which consists in the features of construction and combination of parts hereinafter described and claimed.

In the drawings, Figure 1 is a side elevation of a blacking or shoe polish can closed and having the opening device of the present invention applied thereto; Fig. 2, a similar view, showing the cap or cover partly raised; Fig. 3, an enlarged edge view partly in section, showing the key lever and adjacent parts; Fig. 4, a perspective view of the key lever; Fig. 5, a perspective view with a slightly modified form of key lever, as applied to a paint can; Fig. 6, a perspective view of a slightly modified form of double key lever applied to a paint can; Fig. 7, a perspective view of the key lever; and Fig. 8, a perspective view illustrating another slight modification of the key lever.

Referring to Fig. 1, the opening device

is applied to a can, comprising a body portion 9, having a rim 10, which is separated from the body portion by a wide bead or flange 11. The can is closed by a flanged cover 12, which slips down over the lip in the manner characteristic of stove polish and blacking cans.

The edge of the cover 12, at a suitable point, is turned back to furnish a lip 13, the bend of which is provided with a slot 14, the metal from which slot is struck up to furnish a re-inforcing flange 15, leaving at each end a connecting bend or tongue 16 of sufficient length to afford considerable rigidity to the lip.

The lip co-acts with a key lever 17, comprising a handle portion 18 and a rounded cam end 19. The handle portion is provided at its outer end with a finger piece 20, which is bent out from the under edge at right angles thereto. The key lever is further provided, near its cam end 19, with an outwardly projecting pivot stud 20^a, which is preferably in the form of a tubular bur struck out from the body of the metal by a punching operation. The upper edge of the key lever is cut and struck outwardly to furnish a spring tongue 21, which is adapted to bear against and co-act with the outer face of the lip 13 when the key lever is in position. The key lever is pivoted to the lip by inserting the stud 20^a through a hole 22 formed in the lip 13 above the slot 14, and the parts are so proportioned that when the key lever is pivoted in position, a lifting movement of the handle portion of the lever will throw down the cam end thereof into engagement with the bead 11, the spring tongue 21 meanwhile riding over the edge of the lip and bearing against the outer face thereof in such a manner as to hold the stud 20^a properly positioned within the hole 22.

Fig. 5 shows the invention applied to a paint can, having a cylindrical body portion 23 and an annular top wall or roof 24, which lies below the upper edge of the body wall and terminates on its inner edge in a rim 25, the construction being one to afford an annular groove or channel around the top of the can. This style of paint can is standard and well understood in the trade. The rim 25 is closed by means of a cap or cover 12 similar in all respects to that previously described. The key lever 17, furthermore, is like that hitherto described, except that the tongue 21^a is struck out from the body of the key

lever and not from its upper edge, as shown in construction of Fig. 1, and the finger piece 20^b is bent outwardly from the upper edge of the key lever and not from the under edge thereof. In lifting the cover of Fig. 5, the cam end of the lever bears against the annular top wall or roof 24, which serves the function of the bead 11 of Figs. 1 and 2.

Fig. 8 illustrates a paint can having a cover similar in all respects to that shown in Fig. 5 and provided with the same lip, but showing a slight modification of the key lever. In Fig. 8 a key lever 26 is employed, which is provided at one end with a handle portion 27. The opposite end is provided with a stud 23 similar to the stud 20^a, which stud projects through a hole 29 to one side of the slot 14 in the lip 13. The key lever is provided, on its under side, with a depending tongue 29^a, which is adapted to act through the slot and against the roof 24 of the can by a downward thrust of the key lever. Figs. 6 and 7 show a similar arrangement, with the exception that two key levers, each similar in all respects to that shown in Fig. 8, are employed and connected together by means of a curved handle portion 27^a, having a curvature which adapts it to embrace the cap or cover and to lie down within the groove or channel around the cap or cover.

In use, the key levers can be easily applied to or removed from the lips with which they cooperate. In applying the key levers of Figs. 1 to 5 inclusive, the edge of the lever can be slipped down between the lip 13 and the adjacent wall of the cover, springing out the lip to the extent necessary to permit the pivot stud to be entered into the pivot hole, and at the same time forcing the tongue 21 or 21^a, as the case may be, into spring engagement with the outside of the lip. The tongue serves to hold the pivot stud in position despite the fact that the lip may be bent away to greater or less degree from its proper position with respect to the adjacent wall of the cover, so that a proper bearing for the parts will be maintained at all times. In order to pry up the cover, the key lever will be lifted by inserting the finger under the finger piece and throwing up the key lever in the position shown in Fig. 2, by which operation, the curved cam end of the lever will be forced against an underlying portion of the can body, which acts as a stop or abutment in prying up the cover. In the construction of Fig. 8, a similar result is accomplished by forcing down the handle of the key lever, which may be applied to or removed from the lip in the manner previously described.

In Figs. 6 and 7, when it is desired to house the key lever below the top of the cover, the key lever can be swung over to a position as shown in dotted lines, which brings the smooth edge of the double key

lever into position to lie down outside of the cover. When the double key lever is moved to a position shown in full lines in Fig. 6, the depending tongues 29^a will be both brought into contact with the top of the can body, so that the cover can be pried up by forcing down the lever.

I claim:

1. The combination of a cover and a box or can body having a rim adapted to receive the cover and having below the rim a projecting portion adapted to serve as an abutment, a lip upturned from the edge of the cover and provided at its bend or angle with a slot, and a removable key lever provided with an outwardly projecting pivot stud adapted to be entered through the lip and provided with a portion adapted to operate through the slot to act against the projecting portion of the can or box body for prying up the cover by a movement of the key lever, substantially as described.
2. The combination of a cover and a box or can body having a rim adapted to receive the cover and having below the rim a projecting portion adapted to serve as an abutment, a lip upturned from the edge of the cover and provided at its bend or angle with a slot, and a removable key lever provided with an outwardly projecting pivot stud adapted to be entered through the lip and provided with a portion adapted to operate through the slot to act against the projecting portion of the can or box body for prying up the cover by a movement of the key lever, the key lever being further provided with a spring tongue adapted to bear against the outer face of the lip for holding the pivot stud in position, substantially as described.
3. The combination of a cover and a box or can body having a rim adapted to receive the cover and having below the rim a projecting portion adapted to serve as an abutment, a lip upturned from the edge of the cover and provided at its bend or angle with a slot, and a removable key lever, having at one end a handle portion provided with an outwardly projecting finger piece, and having at its other end a cam portion adapted, when the handle portion is lifted, to be turned down through the slot to act against the projecting portion of the can or box body, and having an outwardly projecting pivot stud entered through the wall of the lip, substantially as described.
4. The combination of a cover and a box or can body having a rim adapted to receive the cover and having below the rim a projecting portion adapted to serve as an abutment, a lip upturned from the edge of the cover and provided at its bend or angle with a slot, a removable key lever, having at one end a handle portion provided with an outwardly projecting finger piece, and having

at its other end a cam portion adapted, when the handle portion is lifted, to be turned down through the slot to act against the projecting portion of the can or box body, and having an outwardly projecting pivot stud entered through the wall of the lip, and a spring tongue outwardly struck from the key lever and adapted to bear against the outer face of the lip for holding the pivot stud in place, substantially as described.

5. The combination of a cover and a box or can body having a rim adapted to receive the cover and having below the rim a projecting portion adapted to serve as an abutment, a lip upturned from the edge of the

cover and provided at its bend or angle with a slot, and a key lever, having at one end a handle portion provided with an outwardly projecting finger piece, and having at its other end a cam portion adapted, when the handle portion is lifted, to be turned down through the slot to act against the projecting portion of the can or box body, and having an outwardly projecting pivot stud entered through the wall of the lip, substantially as described.

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