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J. M. YOUNG

OPENING DEVICE FOR TEARING STRIP CANS

Filed July 28, 1924

Fig. 1

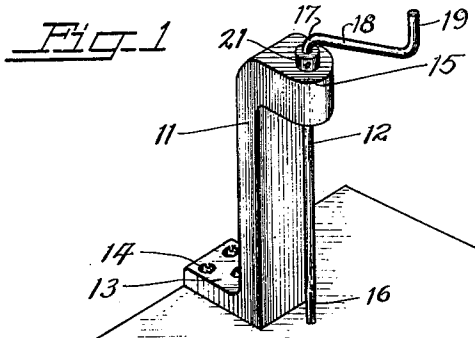


Fig. 2

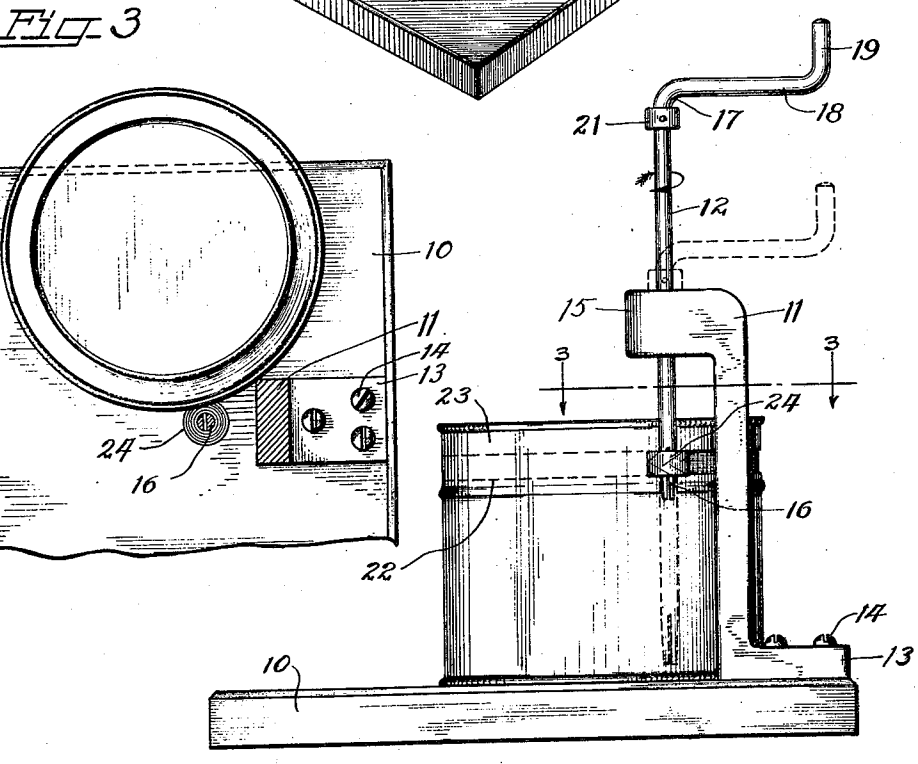


Fig. 3

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OPENING DEVICE FOR TEARING-STRIP CANS.

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This invention relates to a device for removing a side tearing strip from a can body to open the same. Said strip is provided with an extending tongue and is set off from the remainder of the can body by score lines permitting severing of the material as the strip is wound upon a removing member.

Prior to my invention it has been generally the custom to engage the tongue of tearing strips in cans of this character with wire keys, one of which is usually supplied with each can. The key thus furnished with each can must be as cheaply provided as possible and on this account is as small as it can be made and still accomplish its purpose. This circumstance is relatively unimportant where the housewife or the user of such a can has only need to perform an opening operation on rare occasions. While for such users the usual key of commerce is entirely satisfactory, the opening of a number of such containers with the key is unsatisfactory.

My present invention has for its principal object the provision of a device for more quickly and easily removing the tearing strip of cans of the character described and which may be provided at a small cost.

A further object of my present invention is the provision of a device for the above-mentioned purpose, which may be readily used without adjustment for cans of various heights and remove tearing strips located at various distances from the ends of the cans to be opened.

Since my invention contemplates the use of a single device upon a number of cans, it has for a further important object the provision of means for readily freeing itself of the tearing strip after removal.

While the invention is of perhaps greatest importance to large users of goods packed in cans having side tearing strips, the invention contemplates the provision of a device which may be constructed in such simple manner and at such low prices as to render its use practicable and desirable in the usual kitchen.

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 drawings, discloses a preferred embodiment thereof.

Referring to the drawings,

Figure 1 is a perspective view of a device embodying my present invention;

Fig. 2 is a side elevation thereof; and

Fig. 3 is a section taken substantially on the line 3—3 of Fig. 2.

For the purpose of illustrating my present invention, I have shown on the drawing a device in which it is embodied, and which device comprises a base 10, an upwardly extending bearing arm 11 and a tongue engaging member 12. While in the drawing the support 10 is illustrated as a mere block or board, it will of course be apparent that this support may be any table or counter available for the purpose. The arm 11 has an extended base or foot 13 through which screws 14 or other fastenings are arranged to secure it to the support. At the top the arm 11 is provided with a bearing part 15 arranged at a height above the support to accommodate beneath it the tallest can upon which the opening device may be required to operate.

The tongue engaging member 12 consists in the present instance of a bar or rod disposed through the bearing part 15 for both rotative and axial movement. The lower end of this tongue engaging member is slotted as indicated at 16 to receive the tongue of the can. Near its upper end the rod is bent at 17 to provide a crank part 18 terminating in a handle 19. A collar 21 is provided upon the rod above the bearing.

In the operation of the device of the drawing, a can of any size is placed upon the support and the member 12 slid upwardly through the bearing to arrange its lower slotted end above the can tearing strip tongue. This tongue is slipped into the slot 16 by lowering the rod. The rod is then rotated by the manipulation of the handle 19. This causes the strip to be torn along the score lines, indicated at 22, of the can which is indicated at 23. The strip 24 winds on the member 12 as the action progresses. The arm 11 confines rotation of the can to its own axis so that holding of the can by the operator is unnecessary. The strip is removed or disengaged from the rod end by pushing it down by hand out of the slot or by pulling the rod upwardly causing the bearing part of the arm to shed the strip off the end of the rod, said rod being tapered

at its lower end to facilitate the strip removing act in either event.

If desired, however, the can may be held in the hand instead of resting upon the support 10 and the tongue engaged in the slot 16 of the rod and the operation effectively performed as above described.

It is thought that the invention and many of its attendant advantages will be understood 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 described being merely a preferred embodiment thereof.

I claim:

1. An apparatus for removing a tearing strip set off in a can body by score lines extending about the body and having a tongue, which comprises a support for the can body, a member providing a fixed bearing above the can body and a rotatable tongue engaging member mounted in said bearing and adapted upon rotation to wind the strip upon itself and rotate the can body as said strip is removed.

2. An apparatus for removing a tearing strip set off in a can body by score lines extending about the body and having a tongue, which comprises a support for the can body, an arm extending up from said support and providing a bearing above the can body, a rotatable strip removing member mounted in said bearing and having a slotted lower end for engaging with the tongue on the tearing strip and adapted upon rotation to wind the strip upon itself and rotate the can body as said strip is removed.

3. An apparatus for removing a tearing strip set off in a can body by score lines extending about the body and having a tongue, which comprises a support for the can body, an arm providing a bearing above said can body on said support, a strip removing member mounted in said bearing for rotative and axial movement, said member moving axially to arrange the same in engagement with the tongue when the tearing strip is in various locations and moving rotatably to wind the strip upon itself as the strip is removed from the can.

4. An apparatus for removing a tearing strip set off in a can body by score lines extending about the body and having a tearing tongue, which comprises a support for the can body, an arm providing a bearing above a can body on said support, and a member mounted in said bearing for axial and rotative movements, said member being slotted at its lower end and adapted when moved down axially to engage the tearing tongue of the can in the slot of the member independently of the height of the tongue above said support and then being movable rotatably to wind said strip upon itself as the strip is severed from the can.

5. An apparatus for removing a tearing strip set off in a can body by score lines extending about the body, and having a tongue, which comprises an arm adapted to be suitably secured at its lower end to a support for a can body and having an elevated bearing portion, and a member mounted in said bearing for axial and rotative movement and adapted to engage the tongue of the strip and thereafter wind the strip upon itself as said member is rotated, said arm acting to confine rotation of the can to its own axis during the removal of the strip.

6. An apparatus for removing the tearing strip set off in a can body by score lines extending about the body, which comprises, a bearing member adapted to be fixed in position, and a member rotatably mounted in said bearing member having a tearing strip engaging end and a crank part, the manipulation of the crank part removing the strip and winding it upon said strip engaging part as the latter rotates.

7. An apparatus for removing a tearing strip set off in a can body by score lines extending about the body, which comprises, a bearing adapted to be suitably secured to a support for a can body, a part for engaging the can body to confine rotation of the can body to its own axis, and a member rotatably mounted in said bearing for engaging said strip and adapted upon rotation to remove the strip and rotate the can body in engagement with said part.

8. An apparatus for removing a portion of a can body set off by score lines and terminating in a tongue, which comprises, a bearing member and a rotatable member mounted in said bearing and formed for engagement with the tongue, said bearing and rotatable member permitting movement of the can as the portion removed is wound up upon said rotatable member.

9. An apparatus for removing a portion of a can body set off by score lines and terminating in a tongue, which comprises, a bearing member adapted to remain in relatively fixed position during the removing of said portion of the can, and a member rotatably mounted in said bearing and formed to engage the tongue of said can portion, said bearing member permitting movement of the can as the strip is progressively wound upon the rotatable member.

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