

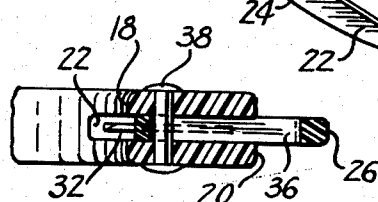
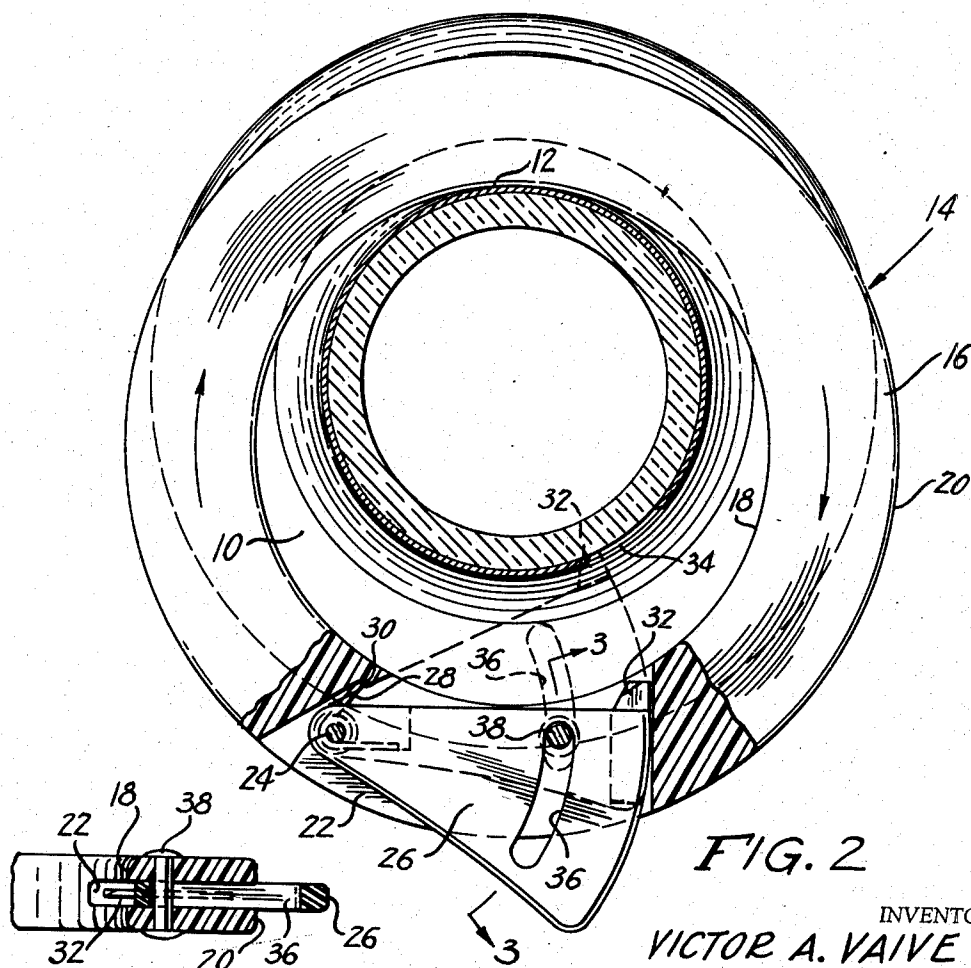
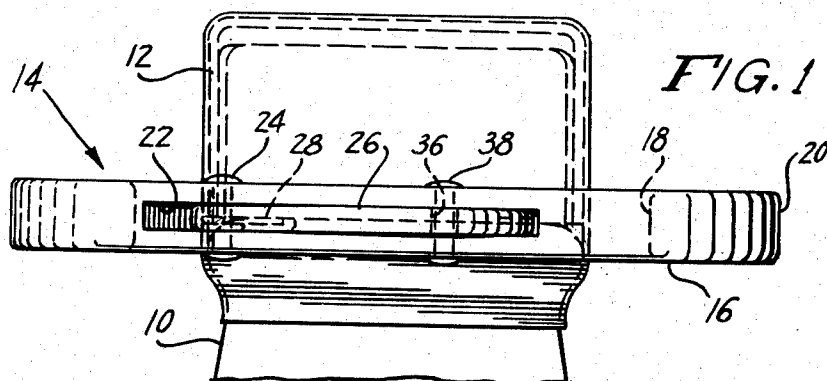
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BOTTLE SEAL CUTTER

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1

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BOTTLE SEAL CUTTER

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1 Claim. (Cl. 30—1.5)

This invention relates to seal-opening means, and it particularly relates to a device for cutting the plastic, sleeve-like seals placed around the necks of many bottles such as those containing spices, condiments or liquors.

Heretofore, it has been the practice for someone wishing to break the seal around the neck of a bottle to attempt to pry it off or tear it off by using a fingernail, or a knife, or a fork, etc. However, the seal is usually so firmly adhered that it is most difficult to pry it away by such make-shift means and often the instrument slips and injures the fingers or the broken or torn seal has jagged edges which cut the fingers.

It is one object of the present invention to overcome the above difficulties by providing a device which simply, easily and effectively cuts through the seals on bottle necks.

Another object of the present invention is to provide a seal cutting device which is simple in construction and easy to use.

Other objects of the present invention are to provide an improved seal cutting device, of the character described, that is easily and economically produced, which is sturdy in construction, and which is highly efficient in operation.

With the above and related objects in view, this invention consists in the details of construction and combination of parts, as will be more fully understood from the following description, when read in conjunction with the accompanying drawing in which:

Fig. 1 is a side elevational view of a device embodying the present invention, the device being applied to a seal around the neck of a bottle.

Fig. 2 is top plan view of the device of Fig. 1 with parts broken away to show the construction of the cutting means.

Fig. 3 is a sectional view taken on line 3—3 of Fig. 2. Referring now in greater detail to the drawing wherein similar reference characters refer to similar parts, there is shown a bottle neck 10 having a plastic, sleeve-type seal 12 around which is positioned a cutter device, generally designated 14.

The cutter device 14 comprises a ring-shaped body made of any desirable material such as metal, vinyl plastic, etc. and designated 16. The ring-shaped body 16 has an inner periphery 18 and an outer periphery 20 between flat end walls, the inner periphery defining an aperture of any desired diameter to fit the particular neck of the bottle to be opened.

At one portion of the ring-shaped body 16 is provided a peripheral slot 22 adjacent one end of which is provided a pivot pin 24 extending parallel to the axis of the ring-shaped body 16. Pivotaly mounted on pin 24 is a sector shaped blade 26 movably positioned in slot 22. A torsion spring 28 surrounds the pin 24 and has one end connected to the adjacent portion of the blade 26. The other end of the torsion spring 28 is engaged against a shoulder 30 formed in the wall defining the adjacent end of the slot 22. In this manner, the spring 30

2

acts to bias the blade 26 to the open position shown in full line in Fig. 2.

The end of the blade 26 opposite the pivot pin 24 is provided at its inner edge with a knife point 32; this knife point 32 is adapted to extend through the slot 22 in the inner periphery 18 when the blade 26 is pressed into the operative position indicated in dotted outline in Fig. 2.

In order to limit the blade 26 in its pivotal movement, the blade is provided with an arcuate slot 36 through which extends a guide pin 38 fixed to the body 16 and extending in a plane parallel to the axis of the body 16. This fixed pin 38 acts to limit the blade in its pivotal movement toward and from the operative position.

In operation, the device 14 is applied over the sealed bottle neck, in the manner indicated in Fig. 1, and then the blade 26 is pressed in with a finger so that the knife point 32 extends through slot 22 and pierces the seal 12 as shown at 34. Then, while still holding the blade pressed in, the device is rotated relative to the bottle neck 10 until a complete cut has been made around the seal. The blade 26 is then released and is immediately brought back into the open position by the spring 28. The device is then removed and the severed sections of the seal can then be removed or allowed to remain on the bottle. Even if left on the bottle, the cap or cork closure can be removed because of the relative movement permitted between the severed parts of the seal. When the closure is removed, one of the severed parts of the seal goes along with the closure while the other part remains on the bottle neck.

Although this invention has been described in considerable detail, such description is intended as being illustrative rather than limiting, since the invention may be variously embodied, and the scope of the invention is to be determined as claimed.

Having thus set forth and disclosed the nature of this invention what is claimed is:

A bottle seal opening device comprising a flat annular body having flat end walls and an inner and an outer circular periphery between said flat end walls, a blade housing slot extending through both peripheries midway between said flat end walls, a sector shaped blade having two straight sides and an arcuate side pivotally mounted by a pin in said body extending in an axial direction between said flat end walls through a pivot opening adjacent the apex angle between said straight sides of said sector-shaped blade, a knife edge on said blade on the straight sector side extendable through said inner periphery, and a finger pressure receiving dull edge on the opposite straight sector side extendable through said outer periphery, limit means for said blade comprising a second pin in said body through said blade housing slot parallel to said pivot pin extending through an arcuate slot in said blade concentric with said pivot pin, and a torsion spring about said pivot pin having one end abutting said blade on the sharp edge side and the other end abutting a wall of said blade housing slot in said body normally resisting the pivoting of said blade inwardly through said inner periphery and urging said blade outwardly therefrom, whereby said annular body may be placed in either direction about a bottle cap seal and rotated relative to said seal in a direction toward said blade pivot pin while said blade is pressed inwardly through said inner periphery to circumferentially cut the bottle seal.

References Cited in the file of this patent

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