

April 2, 1968

A. L. PLATKY
CHAIN DISPENSER

3,375,918

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2 Sheets-Sheet 1

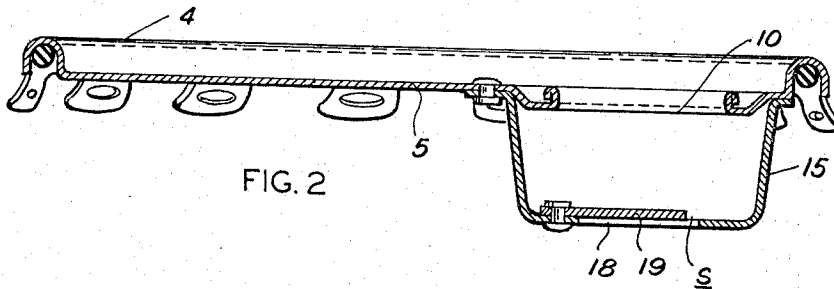


FIG. 2

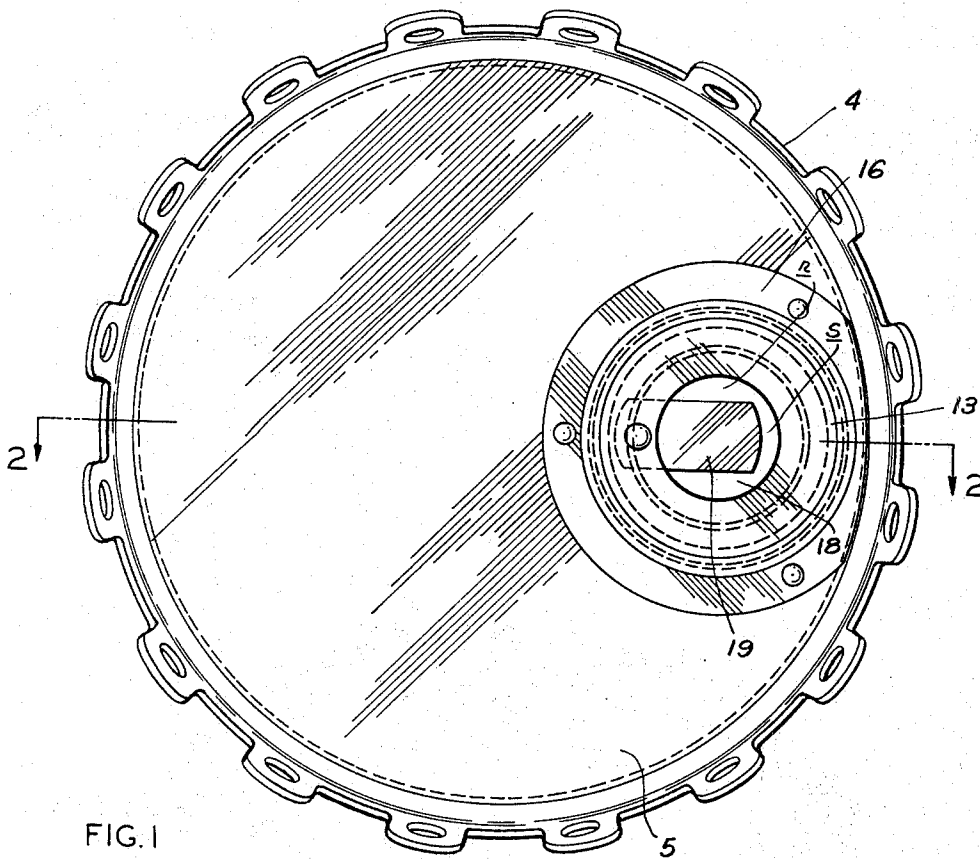


FIG. 1

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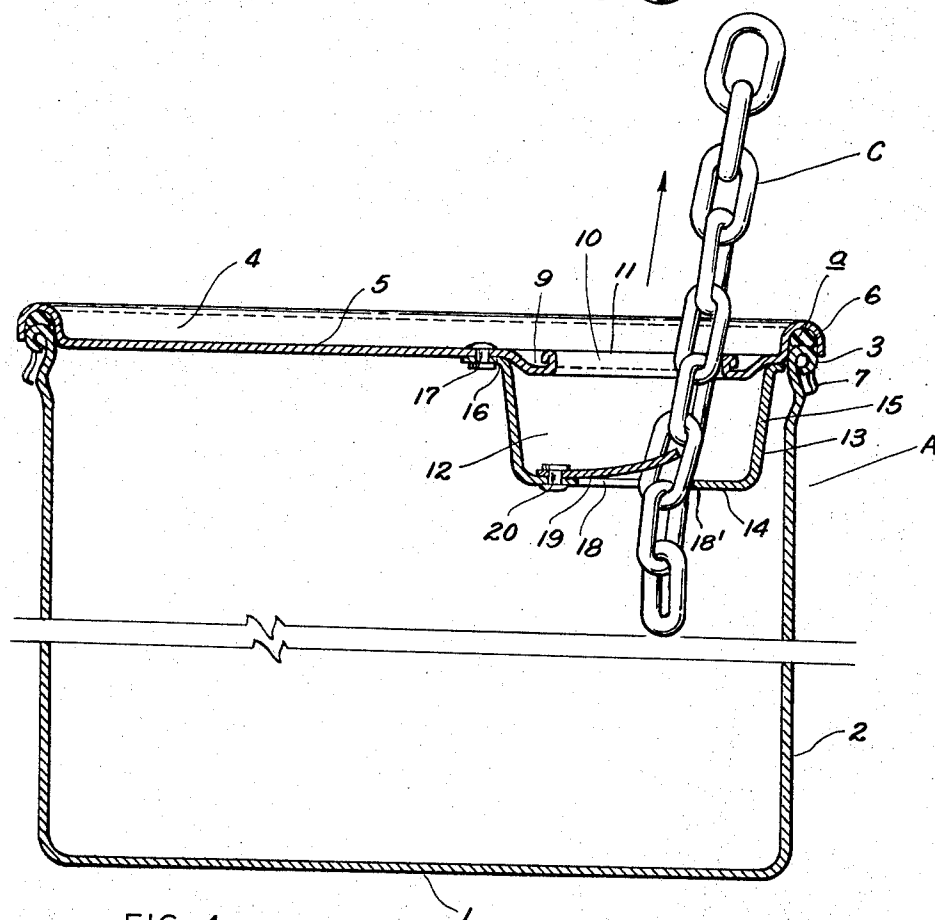
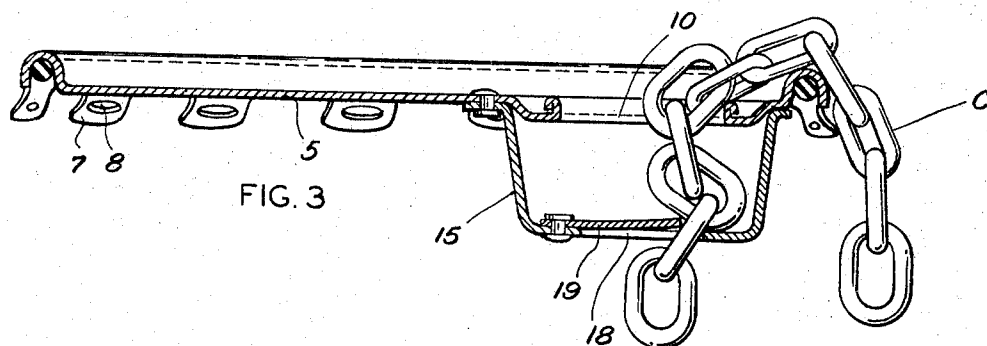


FIG. 4

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CHAIN DISPENSER

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ABSTRACT OF THE DISCLOSURE

A device for dispensing a desired length of chain from a closed container having a chamber-defining portion with an opening for withdrawal of chain therethrough; there being a resilient finger extending across said opening for gripping of the chain between said finger and the proximate edge of the opening when in a state of rest and being upwardly swingable upon application of a pulling force on the chain to allow withdrawal through said opening.

Background of the invention

This invention relates in general to dispensers for continuous material and, particularly, to a device for facilitating the dispensing of a predetermined length of chain from a continuous length thereof within a closed container.

Heretofore chains have been commonly retained against sale of lengths thereof in open-top type containers, which were thus readily available to customers, who could readily inspect the chain and make the appropriate selection. Said open-top containers customarily provided receptacles for the normal litter and debris encountered in retail establishments, such as waste paper, wrappers, cigars, cigarette stubs, etc., which rendered the chain as displayed most unsightly. Moreover, due to atmospheric conditions, as particularly by moisture condensation, the chains thus exposed became rusted and thus unattractive for sale. Additionally, the free end of the chain was most often difficult to locate due to the normal twisting and heaping, requiring the services of a store attendant to locate the end for withdrawal. The present invention thus permits of a manner in which predetermined lengths of chain may be dispensed from a closed container with means for exposing a section of said chain so as to advise the prospective customer of the nature thereof, while simultaneously protecting the supply within the container against conditions obtaining in the particular environment.

Summary of the invention

It is an object of the present invention to provide a device for dispensing predetermined lengths of chain from a continuous supply within a closed container and having means for presenting the free end for withdrawal while preventing the same from inadvertently returning within the container.

It is another object of the present invention to provide a chain dispenser of the character stated, having a simplicity of parts which may be so economically manufactured as to allow of disposal with the related container after the chain supply has been exhausted; which is durable and reliable in useage; and which may be applied to existing containers.

It is a further object of the present invention to provide a chain dispenser of the type stated which incorporates a resiliently mounted gate for impeding chain withdrawal which may be removed from restraining position by the application by the user of a suitable force upon the chain.

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Brief description of drawing

FIGURE 1 is a bottom plan view of a cover for a chain container having a chain dispenser constructed in accordance with and embodying the present invention.

FIGURE 2 is a vertical transverse section taken on the line 2—2 of FIGURE 1.

FIGURE 3 is a vertical transverse section taken substantially on the line 2—2 of FIGURE 1, showing the withdrawn portion of the chain in retained condition.

FIGURE 4 is a vertical transverse sectional view of the chain container with the chain being shown in a state of withdrawal.

Description of the preferred embodiment

Referring now by reference characters to the drawing, which illustrates the preferred embodiment of the present invention, A generally designates a container as of cylindrical form having a bottom wall 1 and an upstanding continuous annular sidewall 2. The upper edge portion of sidewall 2 is turned radially outwardly and thence back upon itself to form a mounting bead 3. Presented for disposition across the open upper end of container 1 is a closure or cover 4 comprising a flat circular plate 5 with the edge portion thereof being turned upwardly and then curved downwardly to provide a hollow rim 6 complementary to bead 3 for snug seated disposition thereon; there being an intervening resilient gasket a for assuring tight closing. A plurality of peripherally spaced fingers 7 are formed integrally with said rim 6, depending therefrom, for enhancing the engagement between same and bead 3 as well as conducting to reliable securement of said closure 4 upon container A by reason of apertures 8 formed therein for receiving securing means.

Plate 5 of closure 4 is provided, preferably eccentrically, with an annular depression or recess 9 within which there is formed an aperture 10; the edges of said aperture being bent upwardly to present a reinforcing rim 11. Said aperture 10 opens into a relatively shallow chamber 12 defined by a cup-shaped member 13 having a bottom wall 14 and a circular sidewall 15, the upper edge of which is peripherally turned outwardly to present a mounting flange 16 for abutment on its upper surface against the confronting underface of plate 5 of closure 4; there being a plurality of circumferentially spaced-apart rivets, or the like, 17 extending through registered openings in said flange 16 and plate 5 for maintaining said member 13 in position. Sidewall 15 of chamber 12 tapers downwardly and inwardly. Bottom wall 14 of chamber 12 is provided with an opening 18 in axial alignment with aperture 10 but of relatively reduced diameter.

Provided for extension across opening 18 is a flat gate or restraining finger 19 being fixed at one end, as by a rivet 20, upon bottom wall 14 and with its opposite end being free. As may best be seen in FIGURE 1, the free end of finger 19 terminates inwardly of, but in relatively immediate adjacency to, the proximate edge of aperture 18, as at 18', so that the spacing therebetween, as at s, is of less extent than the minimum thickness of the material to be dispensed, as will be discussed more fully hereinafter. Said finger 19 is of such width that the distance between the lateral edges thereof and the adjacent edge portions of aperture 18, as at r, are also of less extent than the minimum thickness of the material to be dispensed. Said finger 19 is formed of relatively hard, yet resilient, material so as to be normally biased downwardly at its free end but to allow for limited upward springing under applied force.

As suggested hereinabove, container A is of the type customarily utilized for link chain as of the type indicated at C, which is retained therein as in a retail establishment, with the closure normally fully removed so as

to permit withdrawal of the chain for severing by a suitable tool into preselected lengths. It is to be understood that the present invention would be useable with any continuous length material, but its use with link chain is illustrative of its unique operation.

Thus, with container A being substantially filled with chain C, the upper end of the chain length will be fed upwardly through opening 18 in bottom wall 14 of chamber 12 and pulled so as to deflect finger 19 upwardly (as shown in FIGURE 4) to provide adequate clearance for said chain C. After pulling upon said chain C for a short distance, the user will then discontinue the pull and thus remove the force operating against finger 19 to permit same to return downwardly through its normal bias into the position shown in FIGURE 3, thereby effecting a gripping of the interposed chain link between said finger 19 and the proximate edge portion of opening 18. The upwardly extending section of chain C may be allowed to extend upwardly through aperture 10 for draping over rim 6 as shown in FIGURE 3, so that the end extremity is readily available for gripping. It is also apparent that, if desired, the section of chain C upwardly of bottom wall 14 may be disposed within chamber 12, which is of such volume as to receive a relatively short length. With the free end portion of chain C so held by finger 19, closure 4 is retained in position on container A, thereby providing protection to the chain in said container as against atmospheric conditions, as well as damage or the like through foreign matter entering said container A.

When it is desired to provide a particular length of chain from the supply within container A, the user merely grasps the free end extremity and applies an upward pulling force thereon, so that the chain cam-wise operates against the under surface of finger 19 to lift same for allowing passage of the chain through the now enlarged space between said finger and the edge of opening 18. The pulling force is continued until the desired chain length is available, whereupon the user with a suitable tool will sever chain C at the appropriate juncture. Upon such severance, the force against finger 19 is relieved so that the latter may return to downward or chain-engaging condition with the section thereabove being available for gripping for the succeeding withdrawal action.

Thus, the present invention provides a positive manner in which to restrain continuous material, such as particularly chains, against inadvertent removal while allowing the container to remain in fully closed condition for protection of the material. It is, of course, apparent that the dispenser of the present invention may be located at other points on a container or its closure but is shown herein as being integral with the closure for exemplary purposes.

It is understood that changes and modifications in the formation, construction, arrangement, and combination of the several parts of the chain dispenser may be made and substituted for those herein shown and described without departing from the nature and principle of this invention.

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

1. In combination with a container having a bottom wall and upstanding side walls for receiving a supply of material of continuous length, a closure for said container, said closure having an opening therein for pas-

sage therethrough of the material to be dispensed, a chamber-forming member having a bottom wall and side walls mounted on the underface of said closure, said chamber bottom wall having an opening aligned with said closure opening, and resilient means provided transversely of said chamber bottom wall opening, said resilient means being spaced from portions of the edge of said chamber bottom wall opening a distance less than the minimum thickness of a flexible, rigid, link-type of material to be dispensed, whereby upon upward pulling of said material said resilient means will be flexed to permit passage of said material through said chamber bottom wall opening and said closure opening, with said resilient means upon release of said pulling force being restored through normal bias to a position of rest wherein said material will be gripped between said resilient means and confronting edge of said chamber bottom wall opening.

2. In combination with a container having a bottom wall and upstanding side walls for receiving a supply of material of continuous length, a closure, as defined in claim 1 and further characterized by said resilient means comprising a finger-shaped member secured at one end upon the upper surface of said chamber bottom wall and extending transversely across said chamber bottom wall opening with its opposite or free end spaced from the confronting edge portion of said chamber bottom wall opening a distance less than the minimum thickness of said material.

3. In combination with a container having a bottom wall and upstanding side walls for receiving a supply of material of continuous length, a closure as defined in claim 2 and further characterized by said chamber side wall extending inwardly and downwardly.

4. In combination with a container having a bottom wall and upstanding side walls for receiving a supply of material of continuous length, a closure as defined in claim 2 and further characterized by said resilient finger-shaped member having lateral edge portions spaced from the proximate, confronting edge portions of said chamber bottom wall opening a distance less than the minimum thickness of said material to be dispensed.

5. In combination with a container having a bottom wall and upstanding side walls for receiving a supply of material of continuous length, a closure for said container as defined in claim 1 and further characterized by an annular member mounted on said container and having an upwardly bent continuous rim portion for encircling the container opening so as to present a reinforced surface for abutment by the material being dispensed.

References Cited

UNITED STATES PATENTS

1,901,532	3/1933	Powell et al.	206—63.5
1,974,132	9/1934	Bennett	221—11
1,983,139	12/1934	Lovell	220—24
2,015,653	10/1935	Andrews	206—56
3,001,643	4/1961	O'Meara et al.	206—56

FOREIGN PATENTS

829,216 3/1960 Great Britain.

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