April 23, 1957 J. W. SINGLETON 2,789,727

CARTRIDGE DISPENSER

Filed Sept. 28, 1953 2 Sheets-Sheet 1

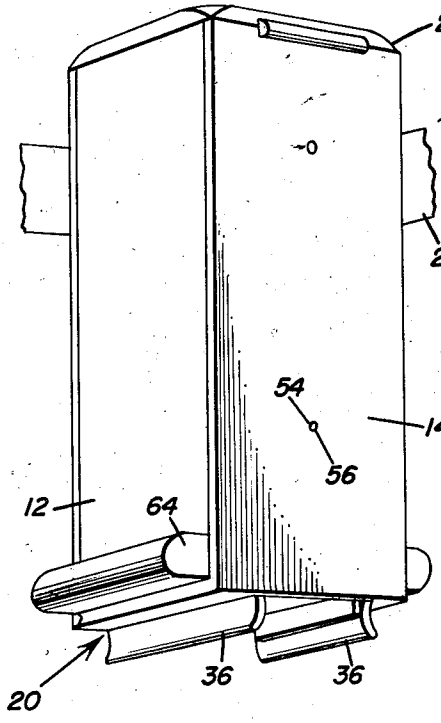


Fig. 1

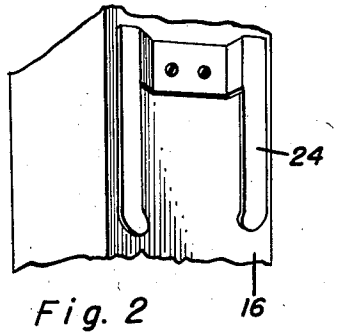


Fig. 2

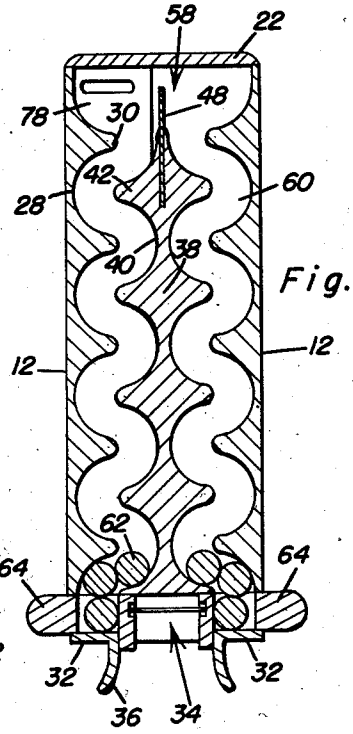


Fig. 3

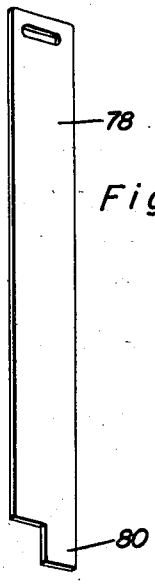


Fig. 5

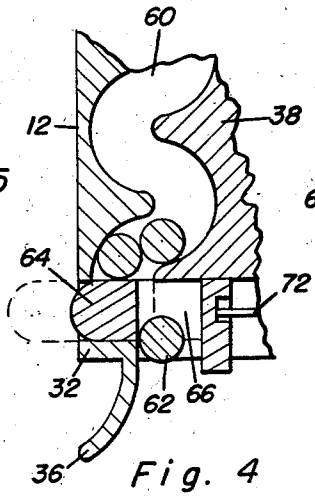


Fig. 4

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CARTRIDGE DISPENSER

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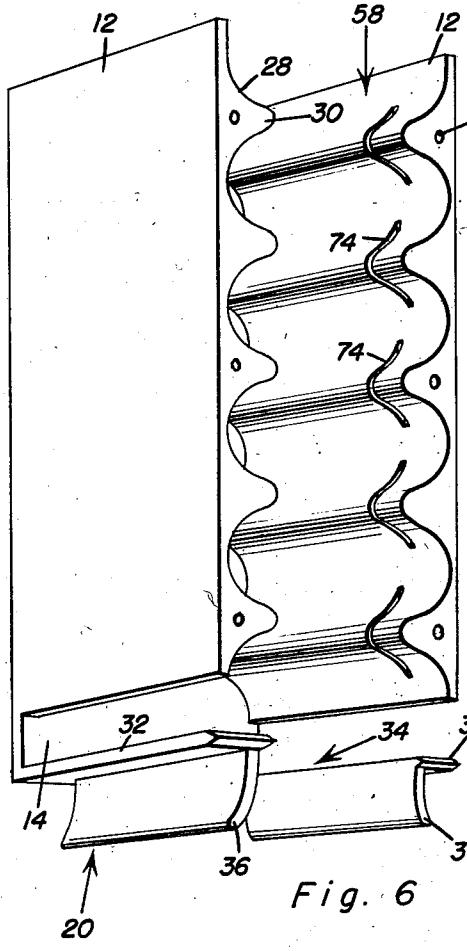


Fig. 6

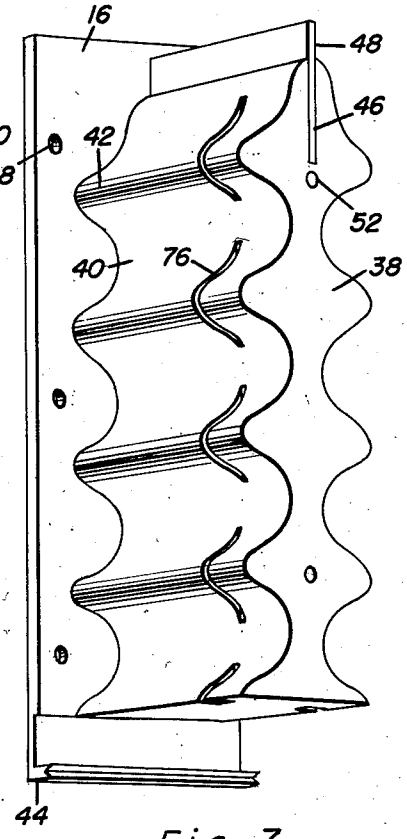


Fig. 7

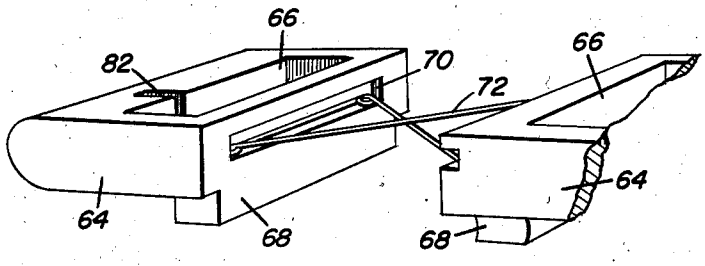


Fig. 8

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CARTRIDGE DISPENSER

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Application September 28, 1953, Serial No. 382,632

2 Claims. (Cl. 221—124)

The present invention relates to cartridge dispensers.

The primary object of the invention is to provide a cartridge dispenser whereby loose or packaged cartridges may be dropped into a compact and neat dispenser, which dispenser will unscramble the cartridges and by means of a finger clip on the bottom thereof will dispense them as needed into the hand.

Another object of the invention is to provide a cartridge dispenser having a novel magazine construction which will retain a large number of cartridges and which is adapted to be utilized with many different sized cartridges.

A still further object of the present invention is the provision of a cartridge dispenser including a novel, finger actuated dispensing clip for dispensing cartridges from the cartridge magazine into the hand.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a perspective view of the cartridge dispenser as suspended from a belt or the like;

Figure 2 is a rear perspective view of a portion of the dispenser disclosing the belt mounting clip;

Figure 3 is a front view of the dispenser in cross-section with the front wall thereof removed;

Figure 4 is an enlarged detail view taken substantially from the same position as Figure 3 disclosing the cartridge dispensing means in operation;

Figure 5 is a perspective view of a cartridge spacer member for insertion into one of the cartridge magazines of the dispenser;

Figure 6 is a perspective view of the cartridge dispenser with the back wall removed and the dispensing clips also removed;

Figure 7 is a perspective view of the back wall and the magazine separating partition of the dispenser; and

Figure 8 is an enlarged perspective view of the cartridge dispensing clips per se.

In the drawings, the numeral **10** designates the dispenser in its entirety, which dispenser is in the form of a cartridge container of rectangular shape including side walls **12**, front wall **14**, rear wall or back wall **16**, and bottom **20**. A top opening lid **22** normally closes the top of the container.

As will be seen in Figure 2, the rear wall **16** is provided with a belt clip **24** thereon for clipping the dispenser **10** over a belt or the like **26** shown in Figure 1.

Noting particularly Figures 6 and 7, it will be seen that the dispenser itself is formed generally of two parts, the one part consisting of the side walls **12**, front wall **14** and the major portion of the bottom **20**. The inner surfaces of the side walls are formed in the shape of vertically spaced, arcuate recesses **28** with the peaks **30** of the recesses being in registry with each other on opposite side walls.

The side walls **12** terminate above the lower edge of the front wall **14**, and a portion of the bottom **20** is secured to the lower edge of the front wall **14** and consists of a pair of rearwardly extending shelf-like members **32** which provide a central bottom opening **34** therebetween. Flanking the opening **34** and depending from the shelf-like extensions **32** are cartridge guide flanges **36**.

Secured to the rear wall **16** is a central, vertically extending partition **38** which projects forwardly therefrom. The opposite surfaces of the partition **38** are formed as vertically spaced, arcuate recesses or troughs **40** having the peaks **42** thereof disposed adjacent the bottoms of the troughs **28** formed in the side walls, whereby each peak **42** is spaced intermediate the peaks **30** of the side wall troughs.

The partition **38** terminates above the lower edge of the rear wall **16** and below the upper edge of the rear wall **16** whereas the forwardly extending ledge **44** projects from the lower edge of the rear wall **16** to complete the bottom **20** of the dispenser. As shown particularly in Figures 6 and 7, the free edges of the shelf extensions **32** and the ledge **44** are matingly beveled to assure a positive fit between these portions of the bottom **20**. The upper portion of the partition **38** is centrally slotted as at **46**, which slot opens into the top of the partition. Within this slot a partition extension **48** may be slipped to extend the upward projection of the partition.

To put the dispenser together, suitable apertures **49** and **50** are provided in the rear edges of the side walls **12** and the back wall **16** which register with one another for the reception of fasteners. Likewise, the front edge of the partition **38** is provided with apertures **52** which mate with apertures **54** in the front wall for the reception of fasteners **56**.

In Figure 3, wherein the dispenser **10** is shown with the front wall removed, it will be noted that the trough **28** on the side walls begins somewhat below the top edges of the side walls so that the uppermost peaks **30** will be disposed substantially opposite the top of the partition **38** so that substantially the entire cartridge chamber **58** will be receptive to cartridges as they are dumped into the dispenser upon opening of the lid **22**.

After such dumping, the cartridges are assimilated into each of the cartridge magazines **60** within the dispenser, being coerced into position without clogging since the tortuous path permitted through the dispenser by the magazines **60** by virtue of the recessed or troughed portions on the partition **38** and the inner surfaces of the side walls **12** unscrambles the cartridges. Ultimately, the cartridges **62** come to rest individually on the shelf-like extensions **32** forming a portion of the bottom **20** of the dispenser.

To dispense cartridges from the dispenser **10**, ejector plates **64** are slidably mounted within the container between the cartridge chamber **58** and the cartridge bottom **20**. These plates **64** are of slightly greater thickness or depth than a cartridge and normally slide on the shelves **32** and include openings **66** therethrough which are normally in registry with the magazine openings. Thus, cartridges **62** as they fall through the magazines **60** of the dispenser fall through the openings **66** of the plates **64** to rest on the shelves **32** of the bottom **20**. Portions of the plates **64** extend through the slots formed between the lower edges of the side walls **12** and the shelves **32** of the bottom, and depending stops **68** disposed within the central opening **34** of the bottom abut the guide flanges **36** to prevent withdrawal of the plates **64** through the slots.

To retain the plates **64** in the normal position, the facing surfaces of the plates are provided with elongated

recesses **70** within which seat the ends of a resilient X-spring **72**, which spring reacts against both the plates **64** to spread them from one another and maintain the stops **68** in position against the guide flanges **36**.

To dispense a cartridge **62** from the machine, it is only necessary to press one of the plates **64** inwardly from the side wall, as shown in Figure 4, to move the cartridge **62** into registry with the central bottom opening **34** from whence it is dropped between the guide flanges **36**. Upon release of pressure from the plate **64**, the spring **72** again returns the plate to its normal position wherein the stop **68** abuts its associated bottom flange **36**. This ejection mechanism is both simple and accurate, and is practically fool-proof in operation.

To adapt the dispenser for the dispensing of different sized cartridges, registering vertical slots **74** and **76** are provided on the inner surfaces of the side walls **12**, and the partition **38**, respectively, into which spacer members **78** may be slipped to decrease the length between the front and rear of each cartridge magazine **60**.

The lower end portions on the spacer members **78** are each formed of reduced width, as at **80**, to correspond to the width of the openings **66** in the ejector plate **64**. Notches **82** opening into one wall of each plate **64** defining the opening **66** slidingly embrace the reduced extension **80** as the plates **64** are moved to their ejecting positions.

To use the dispenser, the operator may load it singly, in other words, cartridge by cartridge, or by handfulls, or by simply tearing off the end of the cartridge box and placing it in the top portion of the dispenser. The tortuous cartridge path through the dispenser provided by the alternating corrugations or troughs straightens the cartridges out and places them into the cartridge magazines in single file whereby they may be ejected into the hand as desired by selective pressing of either of the ejector plates **64** to bring the openings **66** into registry with the central bottom opening **34**.

From the foregoing, the construction and operation of the device will be readily understood and further explanation is believed to be unnecessary. However, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the appended claims.

What is claimed as new is as follows:

1. A cartridge dispenser comprising a cartridge container having a cartridge chamber therein, means for inserting cartridges in said container, and means for dispensing cartridges from said container, said container having side walls, front and rear walls and a bottom wall, vertically spaced, horizontally extending arcuate troughs formed on the inner surfaces of said side walls constituting cartridge guides, a vertical partition within said chamber dividing the same into a pair of cartridge magazines, said bottom having an opening therethrough beneath said partition out of registry with said cartridge magazines, said dispensing means selectively moving cartridges from either of said magazines through said opening, said bottom having cartridge guide flanges depending thereof flanking said opening, said dispensing means including plates slidably mounted in said container between said cartridge chamber and said bottom, said plates each having an opening therein normally in registry with one of said magazines and having portions thereof projecting through said side walls for moving a cartridge from a magazine over said bottom opening for dispensing the cartridge from the container, said plates including stop means engaging said guide flanges to prevent withdrawal of the plates from the container, and resilient means disposed between and reacting against said plates to normally retain said stop means in engagement with said guide flanges.

2. A cartridge dispenser comprising a housing having a pair of cartridge magazines opening into the top thereof, said housing having a transverse bore therethrough adjacent the bottom thereof passing through both of said magazines and opening into opposite sides of the housing, said housing having a dispensing aperture in the bottom thereof opening into said transverse bore between said magazines, closures slidably disposed in opposite end portions of said transverse bore, each closure having an opening therein for receiving a cartridge normally in registry with a magazine, stop means on said closures engaging the edges of the housing bottom at opposite ends of said dispensing aperture to prevent outward movement of the closures from said transverse bore, resilient means reacting against said stop means urging the stop means into abutment with said housing bottom edges, inward movement of either of said closures moving a cartridge from the magazine to the dispensing aperture.

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