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3,423,143

STORAGE AND SALES CONTAINER

Filed July 13, 1965

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Fig. 2a

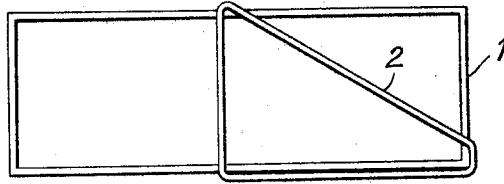
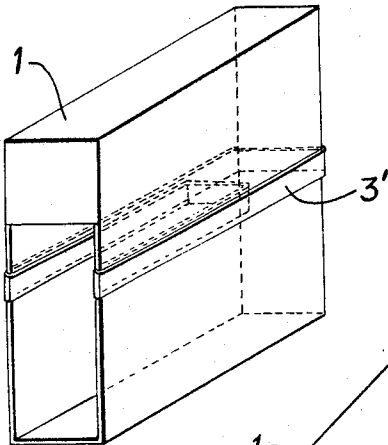


Fig. 1a

Fig. 1

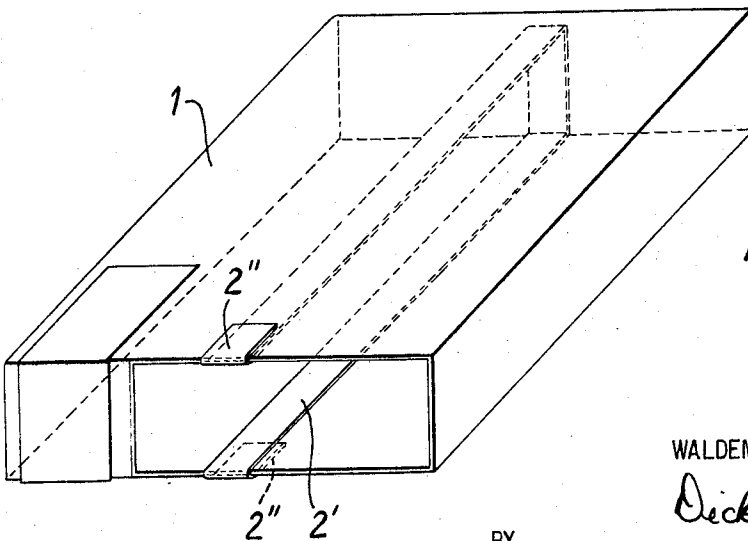
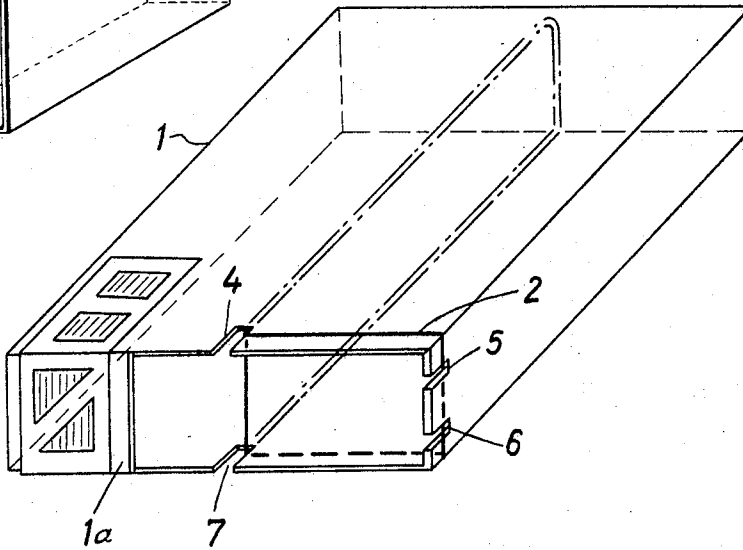


Fig. 1b

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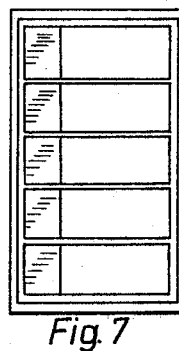
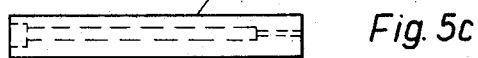
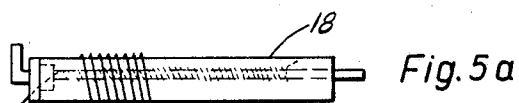
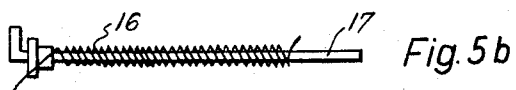
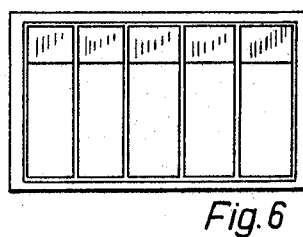
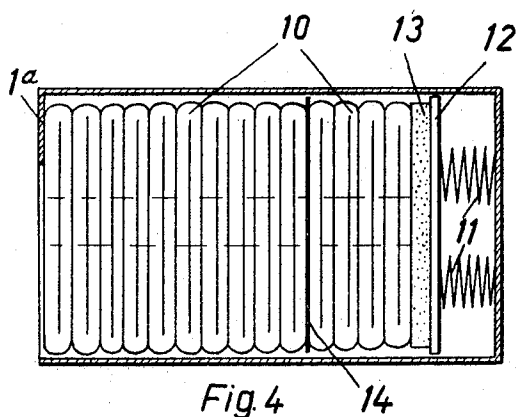
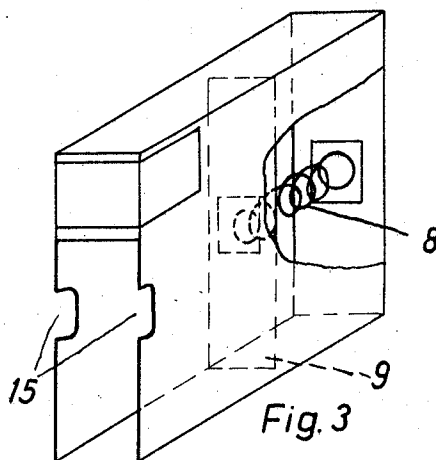
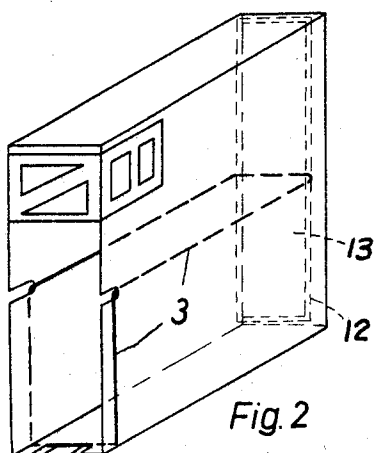
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Sheet 2 of 2



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STORAGE AND SALES CONTAINER
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ABSTRACT OF THE DISCLOSURE

A container for shipping and dispensing sales items wherein a box having one substantially open end forming a dispensing opening is provided with an elastic band extending into said box through said opening so as to surround the sales items therein biasing them toward said opening and a cover member positioned over a minor portion of the side of said box containing said dispensing opening.

The present invention relates in general to containers and more particularly to display dispensers.

With the advance of the preselection and self-service system in stores, the extensive presentation and display of small sales items in wide assortments of different colors and sizes, for example small textile wares, such as ribbons in reeled or rolled form or of spools of yarn or the like, becomes a space and cost problem.

It has, therefore, already been proposed to display the sales items or groups of items of such small wares not only in baskets, trays, or the like, but also on hooks in walls provided with holes. In that case, however, the surface area needed for the display is many times larger than the surface otherwise occupied by the merchandise, since the ability to stack items depends upon the size and strength of the supporting member. Also accessibility is seriously limited with such an arrangement.

A more favorable utilization of the available space was afforded by the also previously proposed use of a furniture-like sales aid of permanent construction, for example, in the form of a chest or cabinet open either at the front or at the top thereof so as to form a dispenser. The sales items are stored therein in compartments and pushed forward to the place from which they are to be removed by springs disposed either at the rear wall or at the bottom of the chest. This provision had the disadvantage, however, that the compartments are expensive to manufacture and are quite heavy and bulky so that their use as a display medium is seriously limited. In addition, these storage members have to be refilled in the store, and so, for each sales item or group of items of different shape or size, a separate stationary compartment has to be provided corresponding to that dimension or size and thus the combination of the assortment has to be largely prearranged or pre-established in just one specific manner. In addition, a space of suitable size or shape cannot be provided for all items thereby limiting such containers to use only with items for which they were originally constructed.

In accordance with the present invention, the sales items or groups of items are intended to be offered for sale directly in the storage unit as furnished by the factory, and the front end thereof, serving as the place from which the items are removed, which is thus employed simultaneously as storage and also as sales container is occupied in each case by the sales items or group of items that has been pushed forwardly. It thus becomes possible to combine assortments in any desired manner and independently of stationary sales aids or expeditors, and to

display a larger number of articles and colors on the smallest sales surface area.

The inventive concept is reduced to practice by effecting the feed of the sales items to the display surfaces and to the area of removal thereof by means of a conveying or feed means connected with the storage unit. In addition, the packing of the storage units as well as the conveying means are so simple and inexpensive that they can be discarded after the contents thereof have been taken out.

The storage unit for a predetermined number of sales items of the wares mentioned hereinbefore is constituted as a closed, box-like container from carton or plastic which is open either only at one end or also at both ends thereof and which itself is provided with the feed means or conveying means in the form of an elastic thread or band or a spring, or an element acting in a similar manner, so that the storage container and the feed or conveying means constitute one unit.

While elastic bands have already been proposed for feeding or advancing cigarettes, for example, the containers involved are bipartite, both parts of which are necessary for securing the rubber band in position. Such containers are relatively expensive and are not thrown away when empty, but are refilled.

It is an object of the instant invention to provide a container to be used for displaying and dispensing goods for sale which avoids or otherwise eliminates the disadvantages inherent in prior art devices of a similar nature.

It is another object of the instant invention to provide a container to be used for shipping and later for displaying and dispensing goods for sale.

It is a further object of the instant invention to provide a dispensing shipping container of the type described which is sufficiently inexpensive to manufacture to be disposable.

It is still another object of the instant invention to provide a dispensing container of the type described which is lightweight and compact but sufficiently sturdy to be used for shipping and display purposes.

It is still a further object of the instant invention to provide a dispensing container of the type described which includes an extremely simple and inexpensive means for maintaining the goods at the dispensing end of the container.

It is yet another object of the instant invention to provide a dispensing container of the type described which is of simple unitary construction so as to be sufficiently sturdy for shipping and sufficiently inexpensive to be disposable when empty.

Several embodiments of the present invention and of the storage and sales container proposed therein have been illustrated in the attached drawings, wherein;

FIGURE 1 shows a container wherein a rubber band is provided as feed or conveying means in the horizontal position thereof;

FIGURE 1a shows a modification of the container of FIGURE 1;

FIGURE 1b shows another modification of the container of FIGURE 1;

FIGURE 2 shows the container of FIGURE 1 in the vertical position thereof;

FIGURE 2a shows a modification of the container of FIGURE 2;

FIGURE 3 illustrates a container with a helical spring serving for the feed;

FIGURE 4 is a cross-sectional view through a container which shows the position of the sales items;

FIGURES 5(a), (b) and (c) illustrate a helical spring serving for the feed which is positioned in a fractional manner on a casing or sleeve (similarly to a spring roller), and

FIGURES 6 and 7 show combinations of storage and sales containers.

According to FIGURE 1, the container 1 consists basically of a carton which is closed at four sides providing a sealed shipping container. A portion of one end face thereof is removable so that the front end face thereof is covered only to one third or one fourth by a carton portion 1a. This cover constitutes the stop for the foremost sales group and maintains this item in a position which is visible and easily accessible to the customer. The cover 1a also serves simultaneously for receiving a label with information or details relative to the sizes and colors of the sales unit or group. In the place of the carton portion 1a, the aforementioned label may also be provided that it alone may serve as cover.

A rubber band 2 is provided as the feed means for the goods within the carton and the position thereof in the relieved or slackened condition has been illustrated in FIGURE 1 by a heavy line. For the purpose of securing the rubber band in position at the carton 1, the latter is provided with slots or narrow cut-out sections 4 and 7, in the center portion of two opposing sides of the carton. A pair of slots 5 and 6 are also provided in a third side of the carton to serve as a securing means for the band. When the storage carton is being filled, the portion of the rubber band between the slots 4 and 7 assumes the position which has been illustrated by a dash-dotted double line, thereby exerting a pressure on the goods in the carton tending to force them constantly toward the dispensing end of the carton.

When the sales unit is placed vertically, the position thereof will be that shown in FIGURE 2 and the rubber band or the rubber thread 2 has been shown in the position which will be assumed after the container has been filled. This application or mounting of the rubber band or rubber thread according to FIGURES 1 and 2 results in a storage and sales container which can be made very easily and very inexpensively, and provides a very compact and versatile display and dispensing medium.

A further simplification may be attained, as seen in FIGURE 1a, if the rubber band is partially guided over the open place of removal, for example, from slot 4 to slot 6, in which case, a specific cover, such as the one obtained with the carton part or portion 1a, may be omitted, if desired. In the place of one rubber band, it is also possible to use two such bands which will then be secured in position at the container in a similar manner as the single band of FIGURE 1a by means of slots in all four sides of the container. Moreover, in the place of the rubber bands, thin metal helical bands and, respectively, threads may, of course, also serve for the feed or conveyor device.

According to FIGURE 3, the feed of the sales unit or group of items within the container is effected by a helical spring 8 which acts as a pressure spring bearing against the items and secured to the rear end wall in a simple manner, for example, by an adhesive tape or other common securing means. The spring acts either directly on the rearmost sales unit or group of items, or presses against an insert or follower 9 which is positioned behind the last sales unit or group of items.

FIGURE 4 shows how the various sales units or groups of items are positioned in the storage and sales container of the instant invention. This figure is a cross-sectional view through the carton whose removal-end face is covered only at the top thereof by the carton part or portion 1a and illustrates that in this manner a stop is provided for the sales items or groups of items filled into the container. FIGURE 4 illustrates as sales items fourteen bands 10 in a reeled arrangement and two pressure springs 11 provided therein for the purpose of achieving the feed of the goods to the dispensing end of the carton, which springs act on an intermediate plate or follower 12.

Provided between the last band roller 10 and the intermediate plate 12 is a layer 13 from a highly elastic,

and thus very readily compressible, material, such as foam rubber or the like. It constitutes a reserve force for the feed which will become operative when the slackening or relaxation of the springs does not suffice for the complete feed or advance of the last sales group. The same effect could also be achieved by retightening the elastic feed means.

FIGURE 4 additionally shows an intermediate layer 14 which serves as an indication that the dispenser is almost empty and of the necessity for reordering a specific storage unit or groups of items. This arrangement is of importance particularly in non-transparent cartons. As a further simplification, this indicating intermediate layer may be provided so as to be self-adhesive so that it may be glued onto an order card or the like. It is obvious that both the intermediate layer 14 and the elastic insert 13 may be employed in all embodiments of the sales container constructed in accordance with the instant invention.

FIGURE 5a illustrates as a further feed means a helical spring (FIGURE 5b) 16 wound over a rod-like member 17 (FIGURE 5b) which is positioned in a fractional manner in a sleeve or casing 18 (FIGURE 5a) and wound around this spring arrangement is a thread, band or the like 19 which pulls the sales units or groups of items forwardly in response to unwinding of the spring 16. Another form of the feed means could be conceived in the form of one or several helical springs being connected with the container. It is also possible to provide a feed means in the form of a wide elastic band 2' shown in FIGURE 1b which is inserted into the container in a manner similar to the portion of the rubber band or rubber thread shown in dash-dotted lines in FIGURE 1 and whose ends 2'' are placed around the outside of the two lateral walls of the container and are, for example, glued in position thereat. Such a band may be employed also in the form of a ring placed around the container at the outside thereof at half the height thereof, for example, according to FIGURE 2a and in that case, the band portion extending over the open end face of the container, is pressed into the interior of the container when the latter is filled. This provision may be used also with rubber threads and thin tension springs.

A further embodiment which has not been illustrated is created by the use of a highly elastic pouch which is stretched during filling thereof and which will be contracted in proportion to its being emptied. In case such a pouch is used, the rim or border thereof must be secured in position at the place of removal of the container similar to the ends of the band 2' shown in FIG. 1b.

All of these embodiments have the advantage that they represent a simplified storage container and feed means which has been rendered possible with the simplest means. The containers may thus be readily thrown away once they are empty. Each storage and sales container may be used individually; however, if desired, several units may also be combined in collecting boxes or the like, as shown, for example, in FIGURE 6 for the juxtaposition of the vertically placed units, and in FIGURE 7 for the superimposed arrangement of horizontally positioned units.

In order to facilitate the removal of the various items, cut-out sections or notches 15 may be provided for the fingers, as shown in FIGURE 3. The removal may moreover be rendered easier in such a manner that the feed means are so provided that they will push or press, for example, the lower part of the sales unit to a greater extent over the edge of the container than the rest of the unit.

I claim:

1. A sales and storage container for storing and displaying small sales items, particularly small textile wares in the form of reels, spools, rollers, or the like comprising

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an enclosure in the form of a box of essentially unitary construction having one open end provided with a cover member positioned over a minor portion of said end so as to leave a major portion of said end open thereby forming a dispensing opening, said enclosure being otherwise closed, and

feed means connected to said enclosure for biasing sale items therein towards said end containing said dispensing opening and cooperating with said cover member to effect a pivoting of the outer sales item at said dispensing opening about one edge of said cover member so that said outer sales item extends at least partially through said dispensing opening to the outside of said enclosure,

said feed means including at least one elastic strand secured at the outer faces of said box and forming a loop extending into said box through said dispensing opening so as to surround the sales items therein, said elastic strand contacting the edges of said enclosure defining said dispensing opening at points which are spaced a substantial distance above said cover member.

2. A sales and storage container as defined in claim 1 wherein said loop formed by said elastic strand lies in a plane substantially transverse to the end of said enclosure containing said dispensing opening and intersects with said dispensing opening.

3. A sales and storage container as defined in claim 1, further comprising at least one notch at approximately the median point of each of two opposite edges of said enclosure defining said one end providing said dispensing opening, said elastic strand being in the form of a closed loop positioned within said notches and extending across said dispensing opening.

4. A sales and storage container as defined in claim 3 wherein said cover member is formed by an adhesive label secured to at least two sides of said box.

5. A sales and storage container as defined in claim 3 wherein said cover member is formed by a portion of said feed means.

6. A sales and storage container as defined in claim 3, and further including a movable follower member in the form of a rigid plate positioned in contact with said elastic strand between said strand and the sales items

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in said box, and an elastic sheet member covering the surface of said follower member on the side thereof opposite from said elastic strand.

7. A sales and storage container as defined in claim 3 and further including a follower member provided between said feed means and the sales items in said box, said feed means contacting said follower member at substantially the middle portion thereof.

8. A sales and storage container as defined in claim 3 wherein at least an additional pair of notches is provided in a third edge of said box defining said dispensing opening, said elastic band being interwoven through said pair of notches for affecting a securing of the band to the side of said box.

9. A sales and storage container as defined in claim 3 wherein said one end providing said dispensing opening is entirely open and said cover portion is provided by a portion of said elastic strand extending diagonally across the open end between transverse sides of said box.

10. A sales and storage container as defined in claim 3 wherein said cover member is formed as an integral part of said box.

References Cited

UNITED STATES PATENTS

3,270,915	9/1966	Auer	221—2
281,075	7/1883	Jaeger.	
946,341	1/1910	Dooley.	
2,347,021	4/1944	Auerbach	206—56
2,621,787	12/1952	Harris.	
86,277	1/1869	Brewster	312—61
831,489	9/1906	Thomas	312—71 X
977,305	8/1910	Heppe	312—71
1,648,074	10/1924	Sticht	221—227
2,021,659	11/1935	Judkins	221—59 X
2,464,426	3/1949	Williams	221—58
2,750,049	6/1956	Hunter	312—71 X

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