March 14, 1933. H. K. POWELL ET AL 1,901,532

FOLDING CARTON

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Fig. 1.

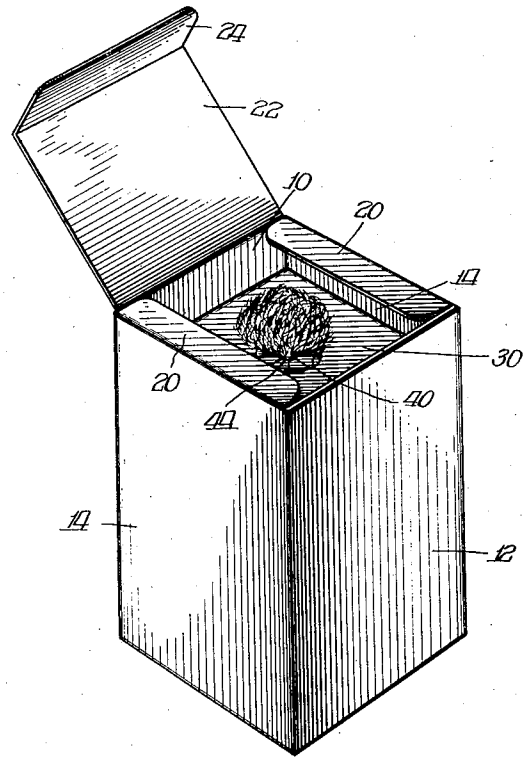


Fig. 2.

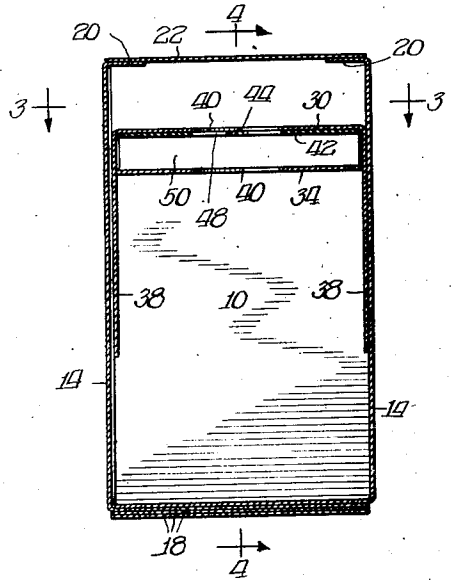
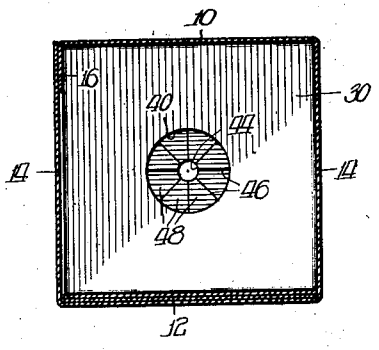


Fig. 3.



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Fig. 4.

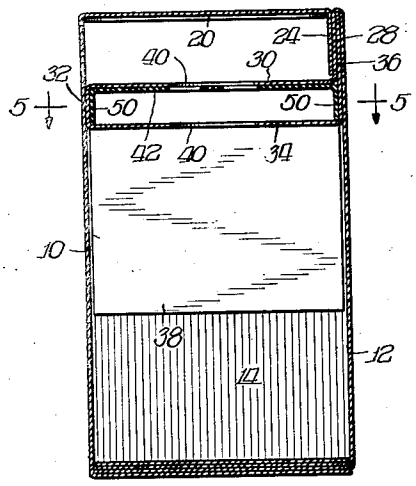


Fig. 5.

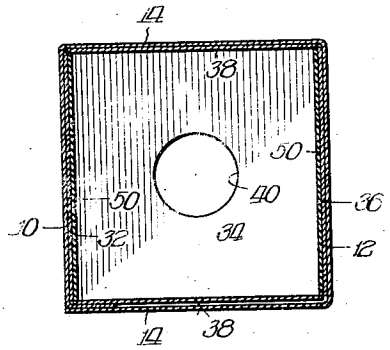


Fig. 6.

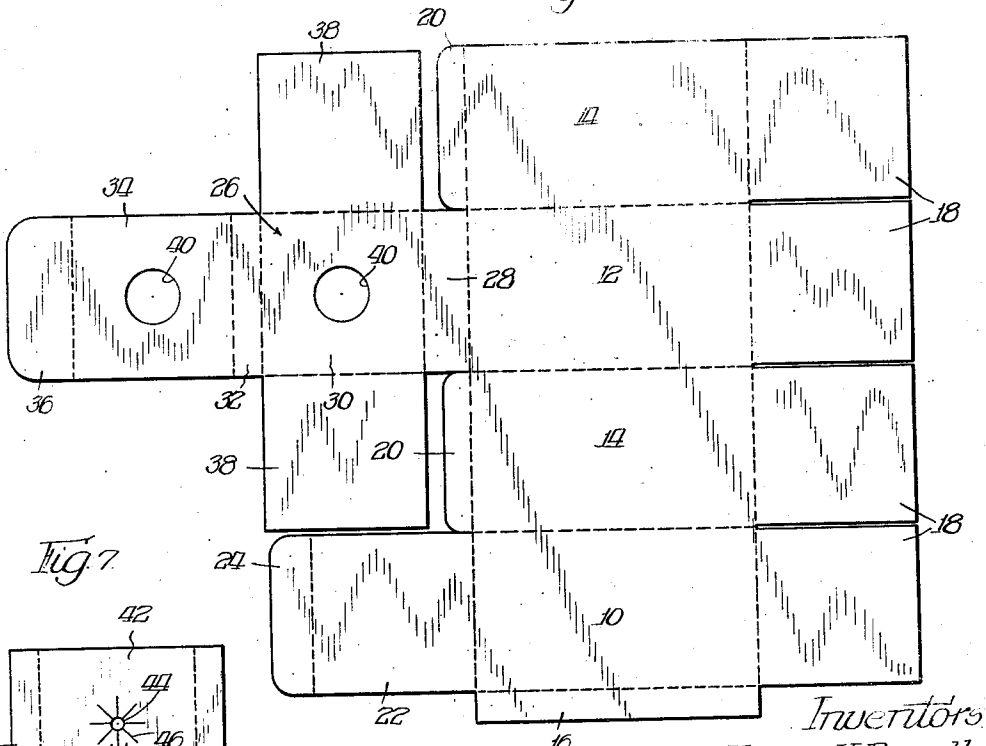


Fig. 7.

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UNITED STATES PATENT OFFICE

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FOLDING CARTON

Application filed January 14, 1931. Serial No. 508,573.

This invention relates to folded cartons. It may have many uses, but has been illustrated in a form especially suitable for stranded absorbent cotton.

This invention accomplishes a number of objects. It provides a cotton dispensing carton which may be cut and folded from a flat blank, is much cheaper than a similar cylindrical carton either of tin or cardboard, but has all the advantages thereof and other advantages in addition. There is provided a relatively large space for the packing of cotton and a first orifice for the preliminary separation of the strand being removed from the other strands, and a second orifice through which the strand passes for finally separating it from the other strands and a cotton gripper to permit the user to remove tufts of cotton from the strand without touching the remaining strand. This carton further provides a space above the upper orifice in which the remaining tuft may be kept in a sanitary and uncrushed condition. This invention also contemplates a folded carton having a partition or pair of partitions therein folded from the same blank, which may be suitable for many purposes.

With these and various other objects in view, the invention may consist of certain novel features of construction and operation, as will be more fully described and particularly pointed out in the specification, drawings and claims appended hereto.

In the drawings, which illustrate an embodiment of the device, and wherein like reference characters are used to designate like parts—

Figure 1 is a perspective view illustrating the general preferred form and use of the carton;

Figure 2 is a cross-section through the line 2—2 of Figure 1;

Figure 3 is a cross-section through the line 3—3 of Figure 2;

Figure 4 is a cross-section through the line 4—4 of Figure 2;

Figure 5 is a cross-section through the line 5—5 of Figure 4;

Figure 6 is a plan view of the blank from which the carton is formed; and

Figure 7 is a plan view of the blank from which a cotton gripper is formed.

Although this invention may take many forms, only one has been chosen for illustration. This form is designed especially for the packing and dispensing of stranded cotton.

The carton includes the back 10 and front 12 and the sides 14, the sides 14 including tabs 16, as shown best in Figures 3 and 6. These members form the central unbroken strip of the blank and are folded and glued to form the four side walls of a rectangular box. As is customary, the four side parts have folded thereon the bottom flaps 18, which are preferably glued together after the sides of the box have been folded and glued. Sides 14 also carry the customary flanges 20, two purposes of which in this instance are to hold the cover closed and to reinforce the sides. Also as is customary, the back 10 carries the cover 22 which has the tab 24 folded therefrom. When the cover is closed, the tab 24 fits between the flanges 20 and the front of the box, as shown best in Figure 4. The front 12 carries the partition extension 26. This extension includes the spacer 28, the upper partition 30, the partition spacer 32, the lower partition 34, partition tab 36 and the locking wings 38. The locking wings are formed as lateral extensions from the upper partition 30. Both of the partitions 30 and 34 have formed therein holes 40.

The whole partition member when in position is folded as shown best in Figures 4 and 2. The spacer 28 is doubled back so that the partition 30 is considerably below the top of the box. Partition 30 extends directly across the box as does partition 34, which is spaced from partition 30 by partition spacer 32. Partition tab 36 is tucked in between the front member 12 and the spacer 28. The locking wings 38 are folded downwardly from the upper partition 30 and lie adjacent the sides of the box. In the space between the partitions 30 and 34 is located the cotton gripper 42 which is preferably made of a stiffer, more permanent and resilient material, such as fiberboard. This cotton is formed as shown in Figure 7 with a

central orifice 44 from which axial slots 46 extend to form the resilient gripping fingers 48. Legs 50 are provided on two sides of the cotton gripper to rest on the lower partition 30 and support it on the upper partition 34.

In order to fold the partition member into place, the locking wings 38 are first folded flat against the upper partition 30 and then the lower partition 34 and its tabs 36 are folded under, and the partitions are tucked down into place. Then the lower partition is opened up, locking wings are permanently opened up, the cotton gripper is put in place, and the lower partition is folded back between the locking wings and into place with the partition tab 36 tucked into its position.

The partition members are now locked rigidly in position, as shown best in Figure 2, for the locking wings 38 are held pressed against the sides of the box by the lower partition 34. As probably best shown by Figure 4, the upper partition is held against movement jointly by the spacer 28 and by the locking wings 38. The locking wings prevent a rotative movement of the upper partition 30 such as would be the first movement in removing the partition member. The spacer 28 prevents a movement of rotation at right angles to the rotative movement presented by the wings and also prevents a non-rotative sliding of the partition member within the box. It should be realized that this partition construction may be used for many purposes and it may even be used at the end or substantially at the end of the box, as a bottom member.

The stranded cotton is packed in a box either by being wound around adjacent the walls, or by being laid back and forth so that the strands may be freely drawn out. The upper end of the strand is drawn through the lower partition 34 through the cotton gripper 42 and through the upper partition 30. As the cotton strand passes through the cotton gripper orifice 44, the tripping fingers 48 hold it sufficiently tightly so that small tufts may be removed from the strand, though if the strand as a whole is pulled, as much as it desired may be drawn out.

It is to be understood that we do not wish to be limited by the exact embodiment of the device shown, which is merely by way of illustration and not limitation, as various and other forms of the device will of course be apparent to those skilled in the art without departure from the spirit of the invention or the scope of the claims.

It is also to be understood that other materials may be used in the box as well as stranded cotton.

We claim:

1. A folded carton including side walls, a spacer folded from one of said walls, a partition folded from said spacer, and locking wings folded from said partition, a partition spacer also folded from said partition and a lower partition folded from said partition spacer.

2. A folded carton including side walls, a spacer folded from one of said walls, a partition folded from said spacer, locking wings folded from said partition, a partition spacer also folded from said partition and a lower partition folded from said partition spacer, and a partition tab folded from said lower partition and tucked between said spacer and the side of the box from which it is folded.

3. A folded carton including side walls, a spacer folded from one of said walls, a partition folded from said spacer, locking wings folded from said partition, a partition spacer also folded from said partition and a lower partition folded from said partition spacer, and a partition tab folded from said lower partition and tucked between said spacer and the side of the box from which said space is folded, each of said partitions having an orifice therethrough.

4. A folded carton including side walls, a spacer folded from one of said walls, a partition folded from said spacer, locking wings folded from said partition, a partition spacer also folded from said partition and a lower partition folded from said partition spacer, and a partition tab folded from said lower partition and tucked between said spacer and the side of the box from which it is folded, each of said partitions having an orifice therethrough, in combination with a cotton gripper associated with one of said partitions.

5. A folded carton including side walls, a transverse member secured along one of its edges to one of said side walls, a locking wing folded from an adjacent edge of said transverse member and extending a length equal at least half its width, its width at its lower end being substantially the internal width of the box, whereby the lower end of said locking wing will contact laterally with its side end portions against the adjacent side walls and prevent all rotative movement of said transverse member about its secured edge, and a second transverse member extending parallel to said first transverse member and arranged to lock said locking wing in substantial contact with the side wall parallel therewith.

Signed at Chicago, Illinois, this 14th day of November, 1930.

HENRY K. POWELL.
ADOLF G. BALLENBERG.