March 18, 1941. A. A. BLINSTRUB 2,235,473

DISPENSING CONTAINER

Filed June 6, 1940 4 Sheets-Sheet 1

Fig. 1.

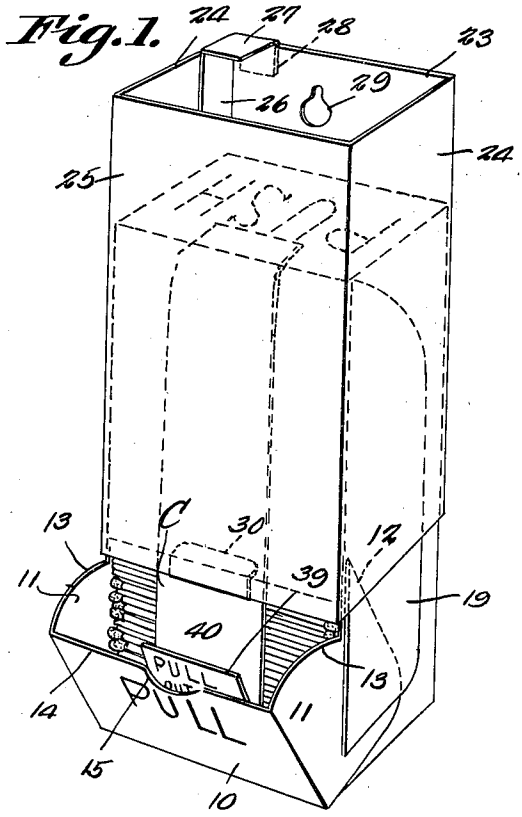
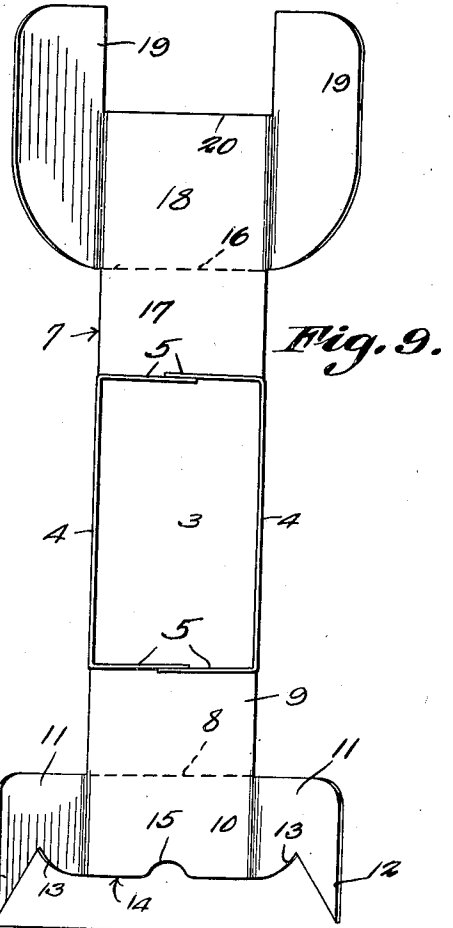


Fig. 9.



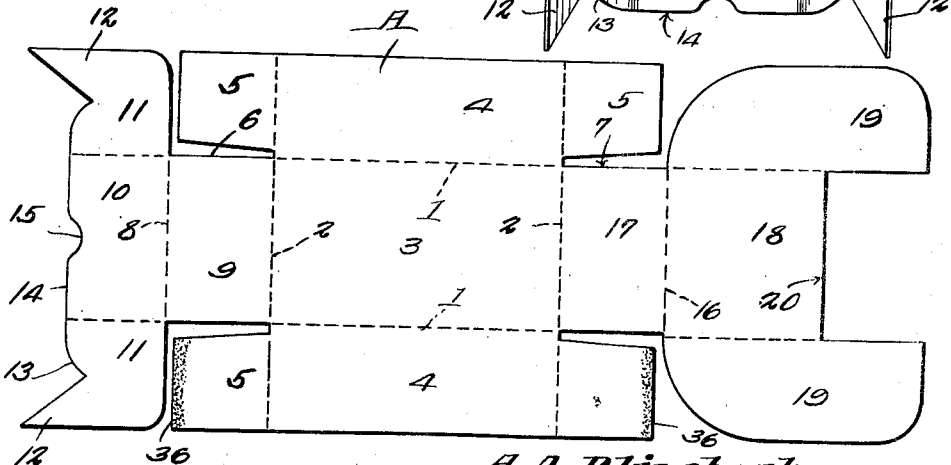


Fig. 8.

A. A. Blinstrub INVENTOR.

BY A. Snowden

ATTORNEYS.

March 18, 1941. A. A. BLINSTRUB 2,235,473

DISPENSING CONTAINER

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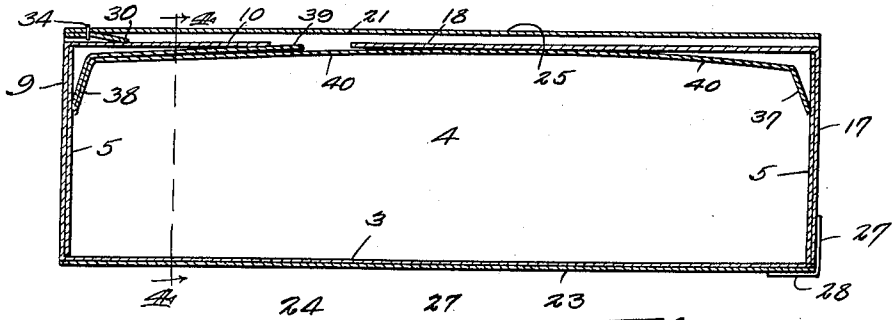


Fig. 3.

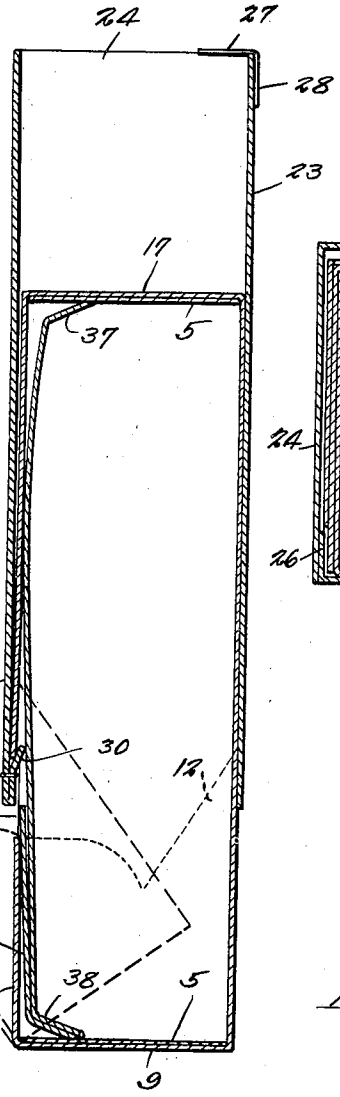


Fig. 2.

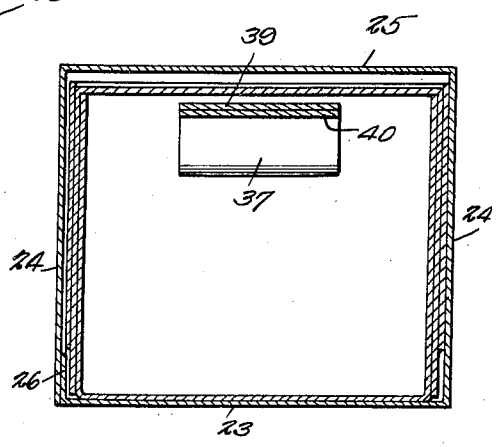


Fig. 4.

A. A. Blinstrub

INVENTOR.

BY Albert Co.

ATTORNEYS.

March 18, 1941. A. A. BLINSTRUB 2,235,473

DISPENSING CONTAINER

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Fig. 5.

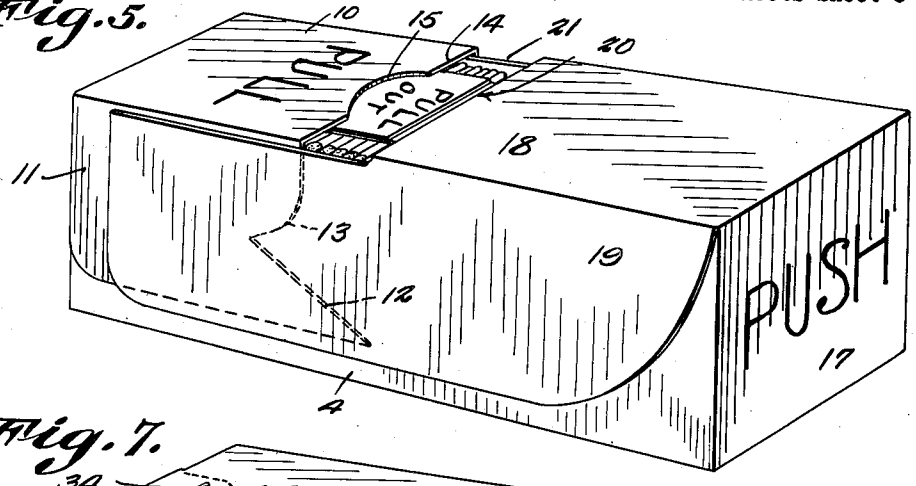
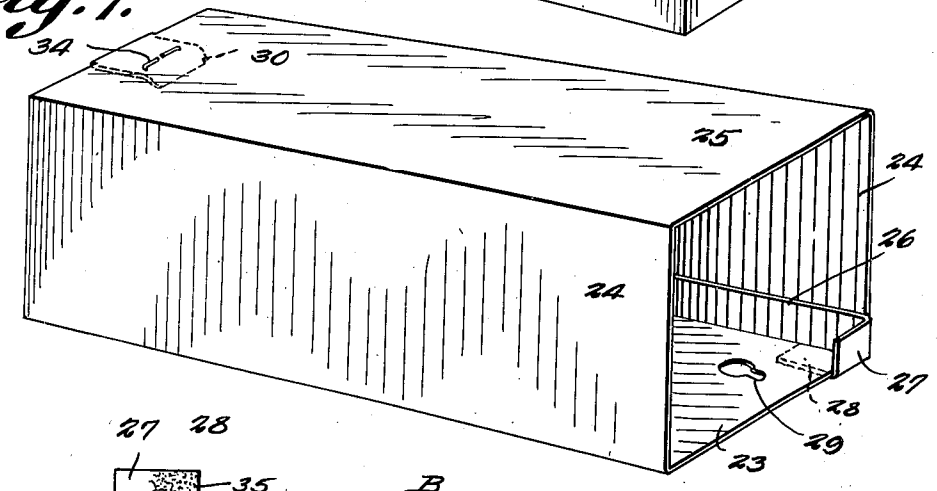


Fig. 7.



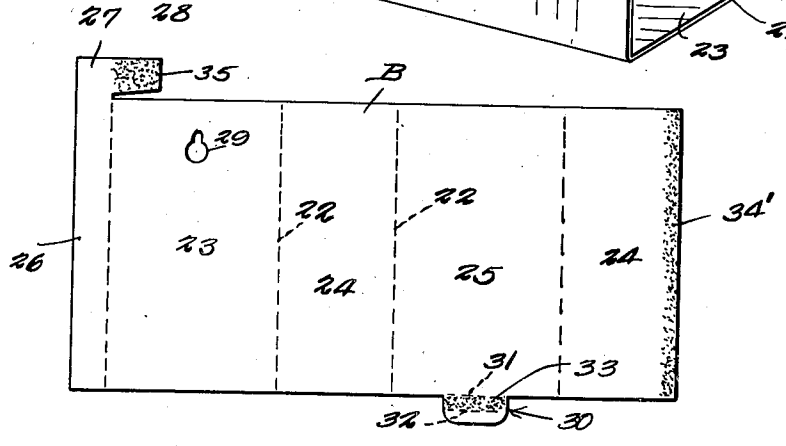


Fig. 6.

A. A. Blinstrub

INVENTOR.

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March 18, 1941. A. A. BLINSTRUB 2,235,473

DISPENSING CONTAINER

Filed June 6, 1940 4 Sheets-Sheet 4

Fig. 10.

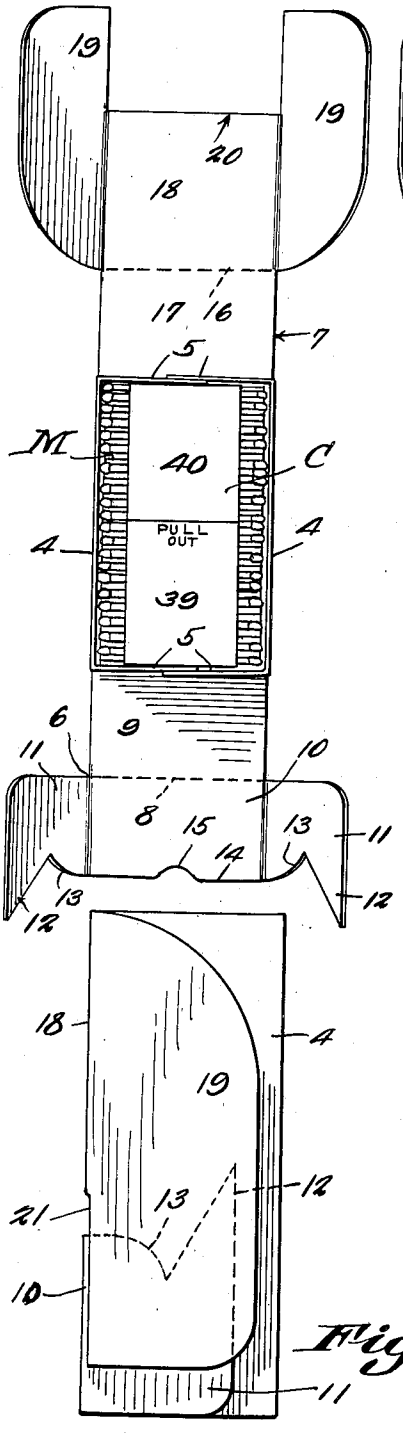


Fig. 11.

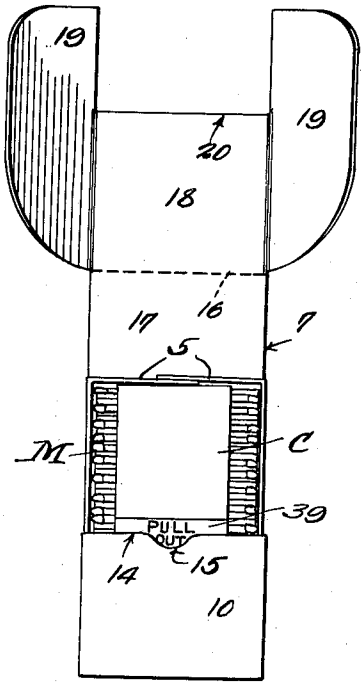


Fig. 13.

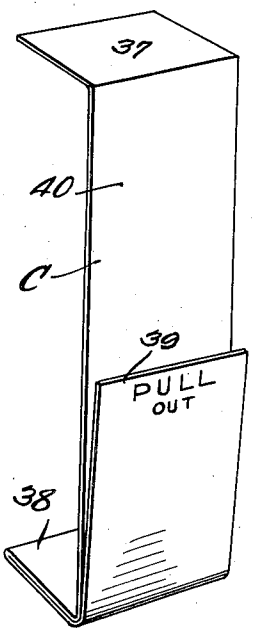


Fig. 14.

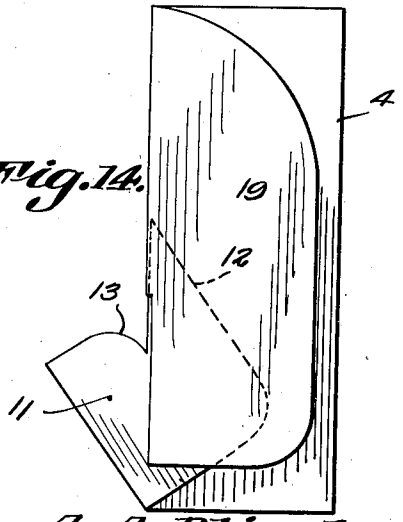


Fig. 12.

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INVENTOR.

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ATTORNEYS.

Patented Mar. 18, 1941 2,235,473

UNITED STATES PATENT OFFICE

2,235,473

DISPENSING CONTAINER

Alfons A. Blinstrub, Silverpeak, Nev.

Application June 6, 1940, Serial No. 339,196

4 Claims. (Cl. 206—31)

This invention relates to a dispensing container in the form of a box or carton adapted to be formed of sheet material, one of the objects being to provide a device of this character which can be opened quickly to afford convenient access to its contents, it being possible to support the structure from a nail or the like at any convenient point.

A further object is to provide a container of this character formed of but three parts and which includes, in its structure, a stop device in the form of a catch or hook whereby the main members of the container can be held against relative displacement after the device has been opened for use.

Another object is to provide a dispensing container including an outer casing and an inner box section, these two parts being mounted for relative sliding movement, the inner section being provided with a hinged dispensing trough having side wings cooperating with one wall of the casing to limit the movement of the trough to dispensing position and said casing in turn being provided with means for holding the wings at all times in position for accurate operation.

Another object is to provide the casing of the container with a means for positively preventing the inner or box section from being thrust in the wrong direction when it is desired to open the device for use.

A further object is to provide the container with a removable retaining means which constitutes a guard or protector for the catch or hook while the container is being opened and serves to hold the contents of the container in properly restrained position until the container has been opened and is ready to dispense its contents.

With the foregoing and other objects in view which will appear as the description proceeds, the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claims, it being understood that changes may be made in the construction and arrangement of parts without departing from the spirit of the invention as claimed.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings

Figure 1 is a perspective view of the device set up for use, the retaining member being in position prior to removal.

Figure 2 is a vertical longitudinal section, the dispensing trough being shown by full lines in closed position and by broken lines in open position.

Figure 3 is a longitudinal section through the closed container.

Figure 4 is a section on line 4—4, Figure 3.

Figure 5 is a perspective view of the filled inner section or box of the container.

Figure 6 is a plan view of a blank from which the outer section or casing is formed.

Figure 7 is a perspective view of the casing produced from the blank.

Figure 8 is a view of the blank from which the inner section or box is formed.

Figure 9 is a plan view illustrating one of the steps followed in the formation of the box from the blank.

Figure 10 illustrates the partly completed box after it has been filled and the retaining strip placed therein.

Figure 11 is a plan view of the filled box with the trough portion folded into position.

Figure 12 is a side elevation of the completely folded box prior to being inserted into the casing or outer section.

Figure 13 is a perspective view of the retaining strip used in the box and placed therein at the time the box is filled.

Figure 14 is a view similar to Figure 12 and illustrating the dispensing trough in its outer or dispensing position.

By referring to the drawings it will be noted that the dispensing container constituting the present invention is formed from three blanks of sheet material, namely blank A comprising the inner or box section, as shown in Figure 8; blank B from which is formed the outer section or casing; and blank C from which the retaining member is formed.

The blank forming the inner or box section of the container is scored longitudinally and transversely as indicated at 1 and 2, to define a bottom panel 3 and side panels 4 while extending from the ends of the side panels are end flaps 5.

The scores 2 divide the panel 3 from end tongues 6 and 7 extending throughout the width of panel 3. Tongue 6 is provided with a transverse score or weakening line 8 which separates it into an end panel 9 and the front panel 10 of a hopper, this latter panel being formed at its sides with wings 11. Each wing has a V-shaped extension 12 at the outer side thereof the inner or oblique side edge of which terminates at one end of an arcuate edge 13 which merges into the straight transverse free edge of the panel 10.

This straight free edge 14 may be formed at its center with a recess 15.

The tongue 7 is divided by a transverse score or weakening line 16 into an end panel 17 and a front panel 18. This front panel is provided at its sides with guide wings 19 projecting beyond the free transverse edge 20 of the front panel and of a width somewhat less than the width of the side panels 4 as will be noted by referring particularly to Figures 12 and 14. The lengths of the panels 10 and 18 are such that when these panels are folded down onto the top of the completed box section they will not come together but, as shown particularly in Figure 5, will form a gap therebetween which is indicated at 21.

The outer section or casing of the container shown in detail in Figure 7 is formed from blank B which, as shown, is divided by transverse scores 22 into a bottom panel 23, side panels 24, a front or top panel 25, and a side flap 26. Flap 26, which extends throughout the width of the blank, has an extension at one end forming a tongue 27 provided with a laterally projecting wing 28. An opening 29 may be formed in panel 23 near one edge for the reception of a nail or other supporting means when the device is in use. Projecting from the opposite edge of the blank adjacent to the center of the panel 25 is a tongue 30 adapted to be bent along the score lines 31 and 32.

After the blank B has been shaped as shown in Figure 6 the tongue 30 is folded back onto panel 25 along line 31 and is fastened thereto by an adhesive 33 and/or a staple 34 shown in Figure 7. The end of the tongue is left free back to the line 31 so as thus to form a catch or hook. It is to be understood that this tongue 30 can extend partly or entirely across the end of the panel 25, as preferred.

Blank B is folded along the lines 22 so as to assume the contour of a rectangular tube and the free side edge of panel 24 is applied to the flap 26 and held thereto by an adhesive 34'. Tongue 27 is then bent downwardly over the adjacent corner portion of the tube and its wing 28, which has a coating 35 of adhesive, is affixed to the adjacent surface of panel 23 so that the tongue thus constitutes a stop fixedly held relative to the casing at that end remote from the catch or hook 30.

The inner section or box portion of the container is formed entirely from the blank A shown in Figure 8. This blank is folded along the score lines so that the panels 4 will form the sides of a box and the flaps 5 will come together and form the ends thereof, these flaps, if desired, being joined by an adhesive indicated at 36. The box is then filled with the material M to be packaged. This can consist of matches, or toothpicks, or tacks or, in fact, any articles to be dispensed in small quantities and which ordinarily would spill readily.

After the material M has been placed in the box, a retainer indicated in detail in Figure 13 is placed thereover. This retainer is in the form of an elongated strip bent transversely to provide an end tongue 37, a fold 38 at the other end, and a front tab 39 overlying the intermediate or retaining portion 40. Tongue 37 and fold 38 are spaced apart a distance substantially equal to the distance between the ends of the box and following the filling of the box this retaining member is placed upon the contents M with tongue 37 and fold 38 extending downwardly into the box at the end thereof and the tab 39 exposed. The retaining member indicated generally at C can be of any width necessary to properly hold the material M in the box.

Following the application of the retaining member C to the contents of the box, the panel 6 is bent along the lines 2 and 8 so as to lap the adjacent flap 5 and panel 9 is glued or attached thereto. Panel 10 then overlies a portion of tab 39 and of the contents M of the box. At the same time the wings 11 are folded toward each other so as to be supported substantially at right angles to the panel 10 and against the outer surfaces of the side panels 4. Thus the parts are brought to the positions shown in Figure 11. Thereafter the panel 7 is folded along the lines 2 and 16 so that panel 17 will bear against the outer faces of the adjacent wings 5 where it is glued or attached thereto, while panel 18 will overlie the adjacent portion of the retaining member C and the material M thereunder. Wings 19 are brought to position substantially at right angles to the panel 18 and will thus be supported outside of but substantially parallel with the wings 11 so that the parts are thus positioned as shown in Figure 12.

After the box has been shaped and filled as described it is inserted into one end of the casing formed by blank B in such a manner that panel 18 will slide against and past the catch 30 until the end panel 17 comes against the stop 27. At this time the edge 20 of panel 18 will have passed the free end of the catch 30 and the inner or box section will thus be completely housed within the casing with its ends substantially flush with the ends of the casing. When the box or inner section is thus inserted into the casing the retaining member C serves to cover the end of the catch 30 so that none of the contents of the box can become caught in the catch and prevent it from functioning as hereinafter explained.

The parts, when assembled as explained, have been shown in section in Figure 3, it being understood that the material M contained within the device is not illustrated in that figure. With the parts thus located and as shown in Figure 3, the free end of the catch 30 bears firmly against the outer surface of the panel 10.

When it is desired to remove some of the contents of the container, that end of the inner section or box nearest the stop 27 and which can be marked with the word "Push," is thrust into the casing or outer section. This results in the gradual withdrawal of the panel 10 from back of panel 25 and catch 30 and after panel 10 has moved outwardly a distance sufficient to expose through a gap 21 the free end of tab 39, the advancing edge 20 of panel 18 becomes seated in the crotch formed by catch 30 and panel 18, thus limiting further outward movement of the inner or box section. When said section reaches this position panel 10 is of course free to be swung outwardly as shown in Figure 1 and during this swinging movement the wings 11 and their extensions 12 travel between and are guided by the panels 4 and wings 19 until the free end portions of the extensions 12 come against panel 18 which thus forms a stop for limiting the outward swinging movement of the hopper portion formed by panel 10 and wings 11. The free ends of tab 39 can then be grasped through the recess 15 and pulled upwardly and outwardly, thereby withdrawing the retainer member C from the container and releasing the contents for gravitation forwardly within the hopper where they can readily be reached and removed as desired.

As before stated the retaining member or shield C extends across the catch 30 so that the material M is thus held away from the catch while the inner section or box is being pressed outwardly as explained. Furthermore, as has already been stated, the opening 29 can be used for the purpose of suspending the container from a nail or the like on a wall.

Importance is attached to the fact that the complete device is formed of but three pieces which can be readily shaped and folded so that the completed container thus can be produced at very low cost and is especially adapted to quantity production.

What is claimed is:

1. A dispensing container including a casing comprising a single blank and open at its ends, an integral stop at one end of the casing, a catch on one wall of the casing extending thereinto, a box section having a limited sliding movement within the casing, said box section including a front panel, integral wings thereon lapping the sides of the box section, a hopper panel, side wings thereon lapping the sides of the box section and movable between said sides and the wings on the front panel, extensions on the wings of the hopper panel movable against the front panel to limit the swinging movement of the hopper panel in one direction, said catch being positioned for engagement by one edge of the front panel when the front section is moved outwardly from the casing, thereby to limit said movement.

2. A dispensing container including a casing comprising a single blank and open at its ends, an integral stop at one end of the casing, a catch on one wall of the casing extending thereinto, a box section having a limited sliding movement within the casing, said box section including a front panel, integral wings thereon lapping the sides of the box section, a hopper panel, side wings thereon lapping the sides of the box section and movable between said sides and the wings on the front panel, extensions on the wings of the hopper panel movable against the front panel to limit the swinging movement of the hopper panel in one direction, said catch being positioned for engagement by one edge of the front panel when the front section is moved outwardly from the casing, thereby to limit said movement, a retaining strip in the box section for overlying the contents of said section, said strip being extended close to and back of the top panel and the bottom of the hopper, and means for withdrawing the strip from the box section, said means comprising a tab carried by the strip and exposed between said panels.

3. In a dispensing container the combination with a casing comprising a single blank, an integral tongue extending from one end of the casing at one side thereof and lapping and affixed to another side thereof, thereby to provide a stop, and a tongue carried by the other end of the casing and lapping and extending along the inner surface of one wall of the casing to constitute a catch, of a one-piece inner section or box including a front panel having side wings extending beyond the panel and along the sides of the box, a trough including a front panel integral with one end of the box and movable into position substantially with the front panel, wings extending from the sides of said trough panel and lapping the sides of the box, extensions on the wings of the trough panel, said wings and extensions being mounted for sliding movement between the sides of the box and the wings on the front panel and said extensions being movable against the inner surface of said front panel to limit the movement of the trough panel in one direction, said box with the trough panel closed thereagainst, being normally positioned within the casing and against the stop, the front panel of the box being positioned for movement into engagement with the catch when the box is moved relative to the casing and away from the stop a distance sufficient to release the front panel of the trough from within the casing.

4. In a dispensing container the combination with a casing comprising a single blank, an integral tongue extending from one end of the casing at one side thereof and lapping and affixed to another side thereof, thereby to provide a stop, and a tongue carried by the other end of the casing and lapping and extending along the inner surface of one wall of the casing to constitute a catch, of a one-piece inner section or box including a front panel having side wings extending beyond the panel and along the sides of the box, a trough including a front panel integral with one end of the box and movable into position substantially with the front panel, wings extending from the sides of said trough panel and lapping the sides of the box, extensions on the wings of the trough panel, said wings and extensions being mounted for sliding movement between the sides of the box and the wings on the front panel and said extensions being movable against the inner surface of said front panel to limit the movement of the trough panel in one direction, said box with the trough panel closed thereagainst, being normally positioned within the casing and against the stop, the front panel of the box being positioned for movement into engagement with the catch when the box is moved relative to the casing and away from the stop a distance sufficient to release the front panel of the trough from within the casing, and a retaining member supported longitudinally within the box and removable therefrom, said member being positioned along the inner surfaces of the front panel and the trough panel, and means for withdrawing the retaining member from the box, said means comprising a tab carried by said member and exposed between said panels where it can be gripped and withdrawn from the box when the trough panel is in outwardly extended position.

ALFONS A. BLINSTRUB.