

March 8, 1927.

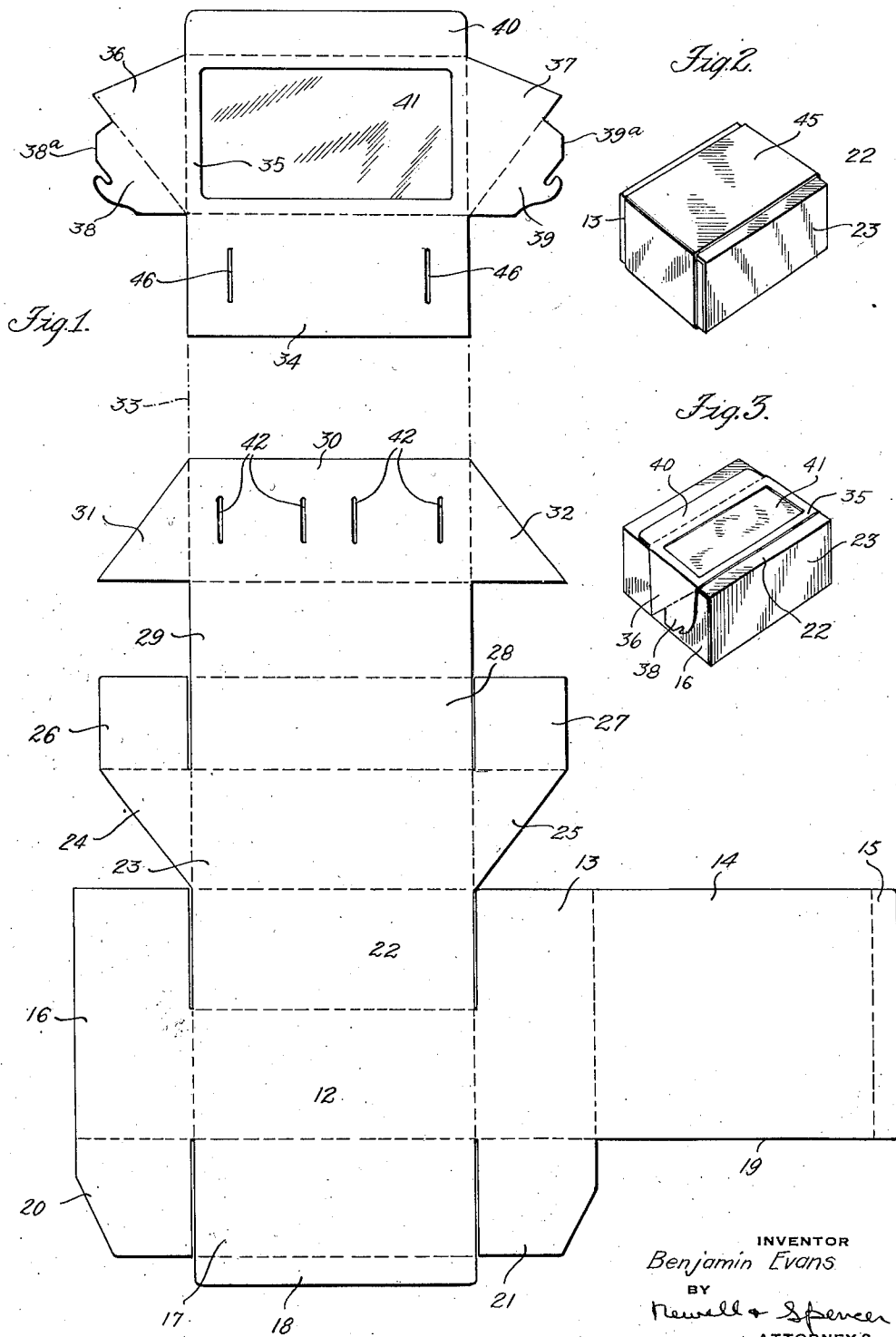
1,620,197

B. EVANS

DISPLAY CARTON

Filed June 2, 1924

3 Sheets-Sheet 1



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Fig. 4.

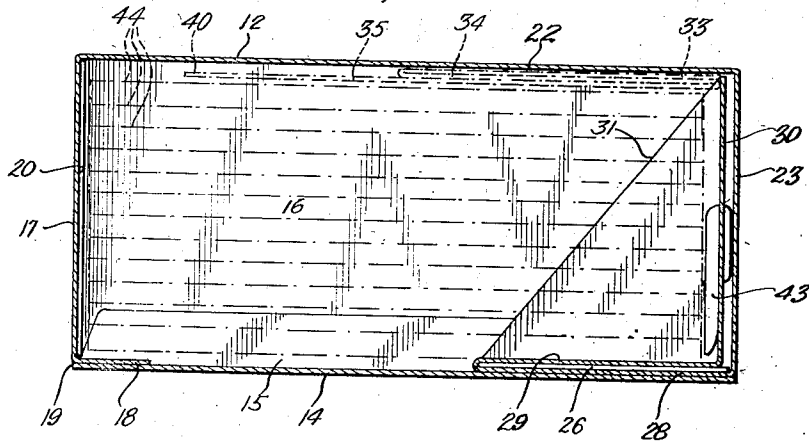


Fig. 4.^a

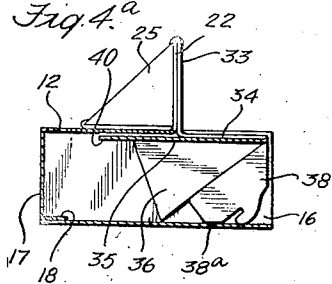


Fig. 6

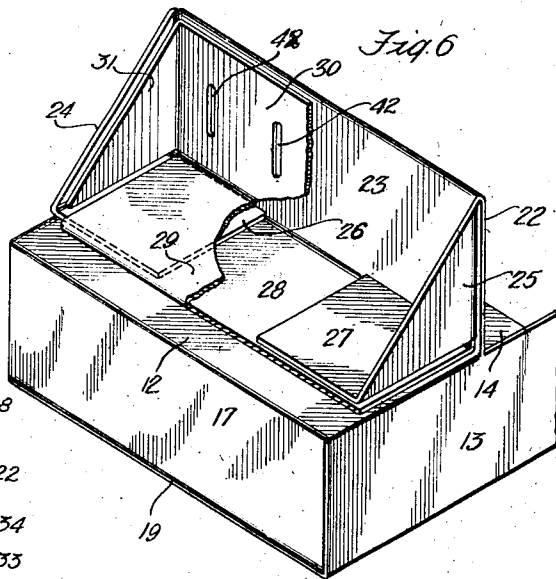
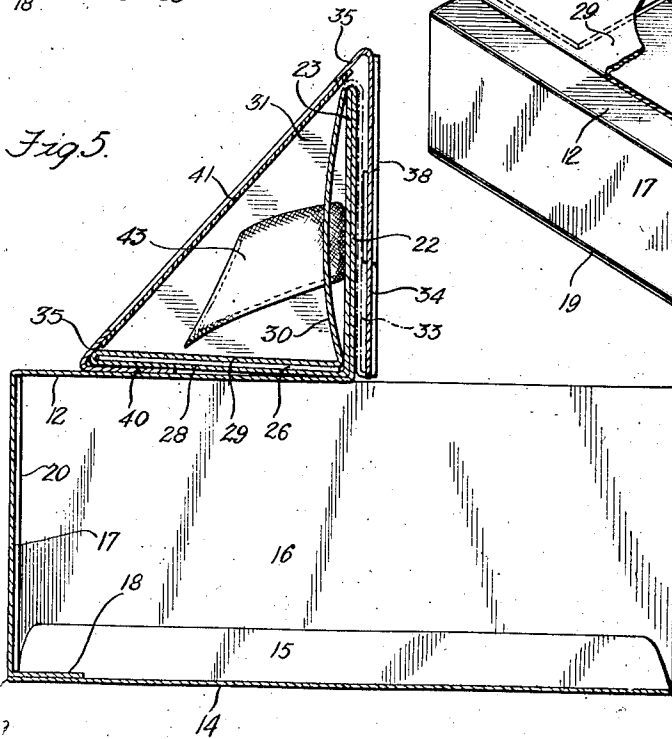


Fig. 5.



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Fig. 8.

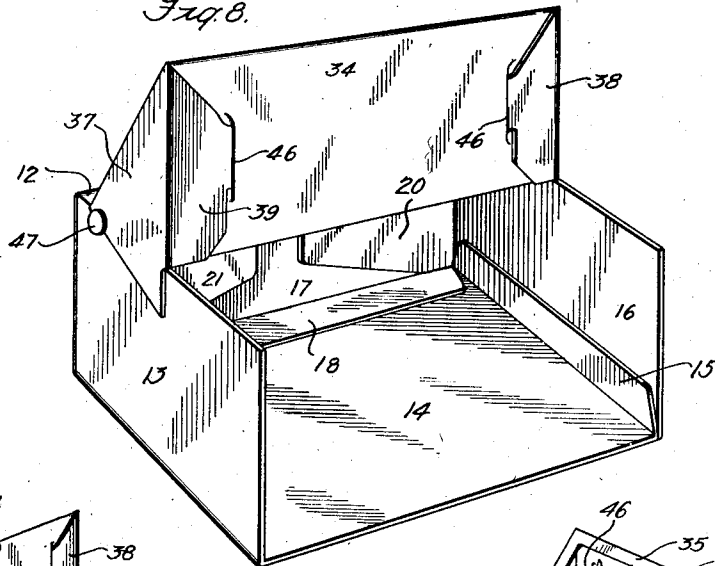


Fig. 7.

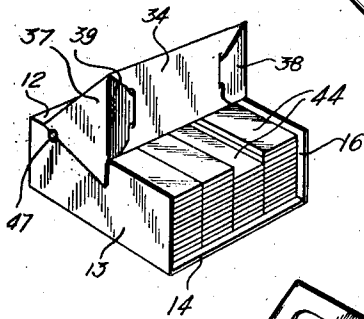


Fig. 10.

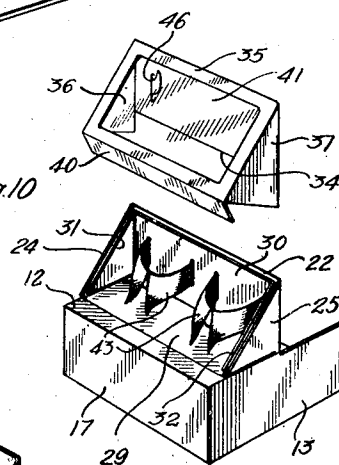
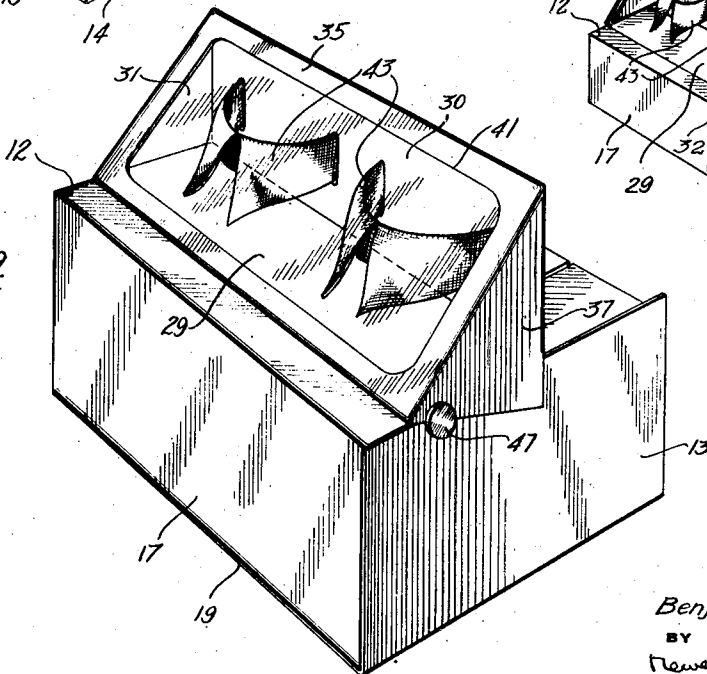


Fig. 9.



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UNITED STATES PATENT OFFICE.

BENJAMIN EVANS, OF ALBANY, NEW YORK, ASSIGNOR TO FORT ORANGE PAPER COMPANY, OF CASTLETON-ON-HUDSON, NEW YORK, A CORPORATION OF NEW YORK.

DISPLAY CARTON.

Application filed June 2, 1924. Serial No. 717,245.

My invention relates to boxes and more particularly to boxes which may be used as containers for merchandise from the time it leaves the manufacturer until the time the contents reach the hands of the customer in the retail store.

One object of the invention is to provide a novel and improved box which constitutes an efficient article container during shipment or storage, and which may be adjusted to provide a highly attractive display of articles of the type contained in the box.

Another object is to provide a combined display and article containing box which any unskilled person can easily change from its condition when it arrives filled with merchandise into the condition in which it displays the sample merchandise.

Another object is to provide a box adapted to be packed at the factory both with merchandise to be sold and with merchandise for display so that the storekeeper need only open the box in order to have it instantly ready for use on his counter.

Another object is to provide a box of this type with means for displaying sample articles of the type contained within the box while protecting such samples from becoming shop-worn or being stolen.

I accomplish the foregoing and other objects in the preferred construction illustrated in the accompanying drawings, in which—

Figure 1 shows blanks which may be folded to produce the novel box; and a protecting hood for the merchandise display rack;

Fig. 2 is a perspective on a reduced scale showing the box ready for shipment filled with merchandise;

Fig. 3 is a similar perspective of the box with the outside wrapper removed;

Fig. 4 is a longitudinal vertical section through the box with the parts in the position occupied during shipment, one possible position of the protecting hood being indicated in broken lines;

Fig. 4^a is a section on a smaller scale similar to Fig. 4 showing the box ready to be packed;

Fig. 5 is a section similar to Fig. 4 with the box opened and the sample merchandise on display and the hood in place;

Fig. 6 is a perspective front view of the box open, without the hood, with parts broken away to show constructional details;

Fig. 7 is a perspective on a reduced scale showing the box used for display as it appears from the rear or from behind the counter;

Fig. 8 is a perspective similar to Fig. 7 but with the box empty to show its construction;

Fig. 9 is a perspective showing the customer's or front view of the box shown in Fig. 7, the display protecting hood being in place; and

Fig. 10 is a view on a reduced scale similar to Fig. 9, but with the display protecting hood raised.

The particular box selected for illustration is designed to contain soft collars and preferably, but not necessarily, is made of box board. The box consists in general of a body or containing portion, a display rack, and a hood to protect the merchandise in the rack. While the entire structure may be made from a single blank in a manner to be described, I prefer for economy of material to make the container and rack in one piece, and the hood a separate piece. In the box and rack blank shown in Fig. 1, the front part 12 of the top of the box may be considered the central element to which other portions of the box are attached. The broken lines in Fig. 1 indicate scoring in the box board blank to assist in folding. A right hand side wall 13 extends to one side of the top wall 12 and has a further extension 14 adapted to form the bottom wall of the box and a flap 15 which may be secured to the left hand edge of left hand side wall 16, as by gluing, or the flap 15 may be provided with tabs to tuck through the edge of side wall 16. Below the portion 12 in Fig. 1 is indicated the front wall 17 having a flap 18, which is attached to the edge 19 of the bottom 14 when the blank is folded. To complete the enclosure at the front end of the box wings 20 and 21 are provided, being shown attached to walls 16 and 13 respectively, but obviously they might equally well be attached to opposite edges of front wall 17. The same is true of the flap 15 which could as well be integral with side wall 16 as with the bottom 14. The rear half 22 of the top wall of the box is cut away from side walls 13 and 16 for a purpose to be described. To close the rear end of the box for shipment, the portion 23 extends from the rear

edge of top wall 22 and is provided with side flaps 24 and 25 having extensions 26 and 27, the latter being unnecessary in carrying out the purely enclosing function of the box but serving as elements in the display rack in a manner to be described. The parts 22 to 32 inclusive constitute the display rack which is supported upon the front portion 12 of the top wall or cover of the box when open as shown in Fig 5, and nests within the rear of the box when closed, as shown in Fig. 4.

The box and rack blank just described shown at the bottom of Figure 1 and the hood blank shown at the top of Figure 1 are ordinarily shipped flat and unfolded from the box manufacturer to the manufacturer of the merchandise which is to be packed in and sold from the box. The merchandise manufacturer makes up the boxes as required by folding up the blanks. The blank is laid face down on a flat surface, the side walls 13 and 16 are bent up to a vertical position, the bottom wall 14 is folded to a horizontal position, and the flap 15 suitably attached within the outer edge of left hand side wall 16. The flaps 20 and 21 are then folded at right angles to their respective side walls and front wall 17 is then folded in place and retained by suitably securing flap 18 within bottom wall 14. The box as thus constructed is then turned over and the remainder of the blank is folded to form the display rack which will occupy the position shown in Figures 5 and 6. The rear top wall 22 is folded to a vertical position, the rear end 23 is next bent through 180° to extend vertically downward in front of the part 22, and the side flaps 24 and 25 are bent forwardly into the vertical planes of side walls 13 and 16, while extensions 26 and 27 fit above the portion 28, which rests upon the top front wall 12 (Figure 6). The portion 29 is then bent 180° to overlie extensions 26, 27, and portion 28, thus forming a base portion for the rack. In order to move portion 29 into this position, it is necessary to bend the back wall 30 of the display rack into a vertical position and to fold flaps 31 and 32 forwardly so that they fit within and are held in place by flaps 24 and 25.

If the nature of the merchandise to be shipped in and displayed by the box permits it to be compressed without damage, the samples for display are then fixed in the display rack. In the case selected for illustration, in which soft collars are to be displayed, slots 42 are cut in the back wall 30 of the display rack and sample collars 43 are passed through the slots so as to occupy the position shown in Figures 5, 9, and 10. In this instance the dimensions of the box are suitable for the display of two collars side by side, but it is obvious that the in-

vention is not restricted to the display of any particular number of collars or other articles since the number of samples displayed is purely a question of choice in selecting the dimensions of the box. When the box and rack are made from one blank and the protecting hood from a separate blank, the box and rack as thus folded in their open position are ready to be packed with the merchandise for shipment. When this consists of soft collars contained within the usual long shallow packages 44, one or two collars in each package, the number of individual packages required to fill the box are inserted from the rear. The box is usually designed to contain what is found to be the desirable assortment of sizes which, for the convenience of the retail salesman, may be packed in vertical rows. For example, the smallest size articles may comprise the bottom layer of packages, while the largest sizes make up the top layer. The number of styles of article contained within the box will ordinarily correspond with the number of samples in the display rack. When, as in the present case, two styles of collar are shown in the display rack, the two left hand rows of packages 44 (Fig. 7) contain the same style collar as that displayed directly over and in front of said rows, while the two right-hand rows contain a different style such as displayed in a similar position relative to said right hand rows. Thus, a customer seeing a collar of the style which he desires to purchase, merely points to the desired collar and the salesman, without hunting, picks out the necessary size.

When the box has been thus packed, the display rack with its collars is tipped to the rear so that the portion 22 of the top wall is in its enclosing position. The rack is then further swung about the rear edge of the top wall as an axis, which may conveniently be accomplished by gripping the front edge of portions 28 and 29 with the thumb and forefinger, the swinging movement being continued until the rack occupies its closed position shown in Figure 4. In this position the part 28 rests upon the bottom wall 14, the front edge of the parts 28, 29, sliding in between the bottom layer of packages 44 and said bottom wall of the box, while the flaps 24, 31, and 25, 32, slide in between the side walls and the packages so that the rack may be said to nest within the rear end of the box. Owing to the elasticity of the box material, the display rack occupies practically no useful space. In other words the box need not be made any larger in order to contain both a certain number of packages and the display rack than would be necessary in case the display rack were omitted. It is to be noted that the moving of the display rack from open to closed

position automatically compresses the display articles 43 into the relatively flat position shown in Fig. 4, in which they likewise necessitate substantially no lengthening of the box, and furthermore are kept from injury during shipment and in readiness for immediate display when required.

In the construction in which the protecting hood is a separate piece, it may be conveniently shipped by having its body portion 35 placed across the top of the closed box with flaps 36 and 37 lying against the opposite side walls of the box as shown in Figure 3. The box and hood may then be held together and protected during shipment by the application of a band 45 which completely encircles the box.

The box is now ready for storage or shipment and may be kept in this condition indefinitely, since a consideration of the details of construction will show that it is practically dust-proof. When the contents of the box are needed to go on sale, the band 45 is removed, the hood lifted off from the top of the box which is placed on the counter with its front end 17 facing the customers. The box is then opened by moving the display rack from the closed position shown in Fig. 4 to the display position shown in Fig. 6. The protecting hood is then applied by bending down its back 34 behind portion 22 of the display rack. In this position the surface 35 of the hood naturally falls into place in front of the sample articles. The flap 40 is tucked under bottom wall 28 of the rack (Fig. 5) and the flaps 36 and 37 are folded down to the position shown in Figs. 7 to 10. The tabs 38 and 39 are folded around behind portion 34 and tucked into slots 46 to hold the hood in place. The part 35 is cut away until it merely serves as a frame to hold the transparent window 41, through which the sample articles may be viewed. In some cases the resiliency of the box board or other material of which the box and rack are composed, will be so great, that the rack would not remain fixed in its open or article-displaying position unless positively held. In that case any desired means for holding the rack in such position may be employed, but preferably I use gummed seals 47 to secure the front corners of flaps 36 and 37 to the side walls of the box.

I particularly emphasize the dust-proof nature of my construction when made as thus described. Such dust as can possibly get into the inside of the display rack when covered with the protecting hood must filter between tightly fitting vertical walls and work its way vertically upward for a considerable distance. It has been found that the amount of dust so filtering in will be negligible during the normal time required to sell the contents of the box. In other

words, the sample articles will remain fresh and attractive as long as there are any articles left to sell.

One of the greatest economies inherent in my construction results from the fact that the material, such as box board, from which the box and display rack are made, need be finished only on one side. When, as is usually the case, it is desired to print some form of advertising matter on the portions of the box which may be seen by the public, such printed matter may also be applied only to the finished side of the blank. The construction is such that the finished side of the blank will be the only side apparent to the customer; that is, in any view other than a rear view the finished side only of the blank is visible. Likewise, the material for the protecting hood need be finished on only one side and may or may not carry advertising or decorative printing as desired.

In certain cases, as where the blank is not finished or coated on either side or where material other than box board is used to construct the box, it is possible to embody all three parts of the box, namely, the containing portion, display rack, and protecting hood, in a single integral blank. This construction is shown in Fig. 1 and as shown, may be brought about by including a portion 33 between the back wall 30 of the display rack and the rear cover 34 of the protecting hood.

The folding operation is identical with that previously described in the case of the two-piece blank with the exception that the part 33, shown in broken lines in Figure 5, is folded down to overlie wall 22 of the rack, after which the rear wall 34 is bent to its vertical position and window 41 is dropped over the front of the rack as in the case of the two-piece blank construction. In adjusting the single blank construction for shipment, window 41 is first swung around clockwise as seen in Figure 5, until it hangs in a vertical position with flap 40 at the bottom, and side flaps 36 and 37 tucked within the box side walls 13 and 16 respectively. The rack is then tipped rearwardly about the dividing line between the front and rear portions 12 and 22 of the top wall until it is in the position shown in Figure 4^a, in which position the edges 38^a and 39^a of flaps 38 and 39 respectively rest against the bottom wall 14 of the box and support the rack while the packages 44 are being put into the box. When the box has been filled, the display rack is then rotated further into the position shown in Fig. 4, in which position it is ready for shipment. With this construction the entire unit is in one piece and self-contained, and the use of a band 45 around the outside of the box is optional. The one-piece construction, however, does not possess the advantage that

the stock from which the box is made need be coated and printed on only one side, for that surface of the blank forming the portion of the box and rack which is visible to a customer is the surface of the blank opposite the surface which is visible in the protecting hood. On the other hand, this construction is simpler to operate and there is nothing to get lost during shipment, so that the choice between the unitary blank and the two-part blank hinges upon the choice of material, and the design and printed matter which are to be incorporated on the box.

The appearance of the box when closed or open is identical regardless of the number of parts making up the blank. The protecting hood is sufficiently dust-proof in either case, and the operating features are the same. With my construction, the customer can see, but cannot thumb over or steal the sample merchandise. Moreover, it is difficult for him to help himself, since he cannot tell where to reach for an article of the desired size inasmuch as this information appears only on the rear end of packages 44 which are entirely out of sight from the customer's viewpoint. This same feature permits the salesman to select the desired style and size article with substantially no lost time whatever, and thus insures satisfactory service to the customer and satisfaction to the merchant in that the customer must purchase the goods in order to take them away. While I have described the invention in detail as applied to boxes for the packing and display of soft collars, I would have it understood that I consider the box applicable to many other types of merchandise and I do not limit myself to the particular construction best adapted for soft collars. For example, other articles of merchandise may not require slots 42 as means for supporting them for display. Proper supporting means for practically any type of merchandise will readily be suggested to those skilled in the art, and I have therefore described but one of the possible specific embodiments of my invention.

What I claim is:

1. A box-board blank having one side finished, foldable into a box to enclose merchandise, one of the walls of the box being adapted to fold back upon an adjacent wall overlapping a considerable portion of said wall, thereby opening one end of the

box, the portion of said overlapped wall adjacent the first fold being in turn foldable outwardly into an upright position to give access to the contents of the box, the foldable walls forming a rack and being provided with means for attaching merchandise to the sides of the rack directed away from the open end of the box, the finished side only of the blank being visible from the front of the box.

2. A box comprising six walls adapted to enclose merchandise, one of the walls being adapted to fold back upon an adjacent wall, the portion of the double wall thus produced adjacent the fold being in turn outwardly foldable to an upright position to give access to the contents of the box, the folded walls forming a rack and being provided with means for attaching merchandise to the side of the rack directed away from the open end of the box.

3. A box comprising top, bottom, side and end walls normally arranged completely to enclose merchandise, one of the end walls being foldable back upon a portion of the top wall which is foldable to an upright position to give access to the contents from the top and rear, said end wall having an extension adapted when the box is open to rest upon the forward portion of the top wall and being foldable back upon itself to form a horizontal base portion and an upright back portion of a rack to display merchandise.

4. A box comprising top, bottom, side and end walls arranged to enclose merchandise, the rear end wall being foldable back upon the rear portion of the top wall to open the box, and having an extension adapted to lie flat upon the front portion of the top wall when the box is open, said extension being adapted to lie flat upon the rear portion of the bottom wall when the box is closed.

5. A box having a rear wall provided with an extension, which rear wall, together with the extension, is adapted to serve as a display rack when the box is open, said rack being adapted to display merchandise on the side toward the front wall and said rack being adapted to nest within the box when closed whereby substantially the entire bottom of the box may be filled with merchandise.

Signed at Castleton-on-Hudson, N. Y., this 17th day of May, 1924.

BENJAMIN EVANS.