

March 7, 1933.

W. T. SHRADER

1,900,420

HAT BOX

Filed Dec. 11, 1929

2 Sheets-Sheet 1.

Fig. 1.

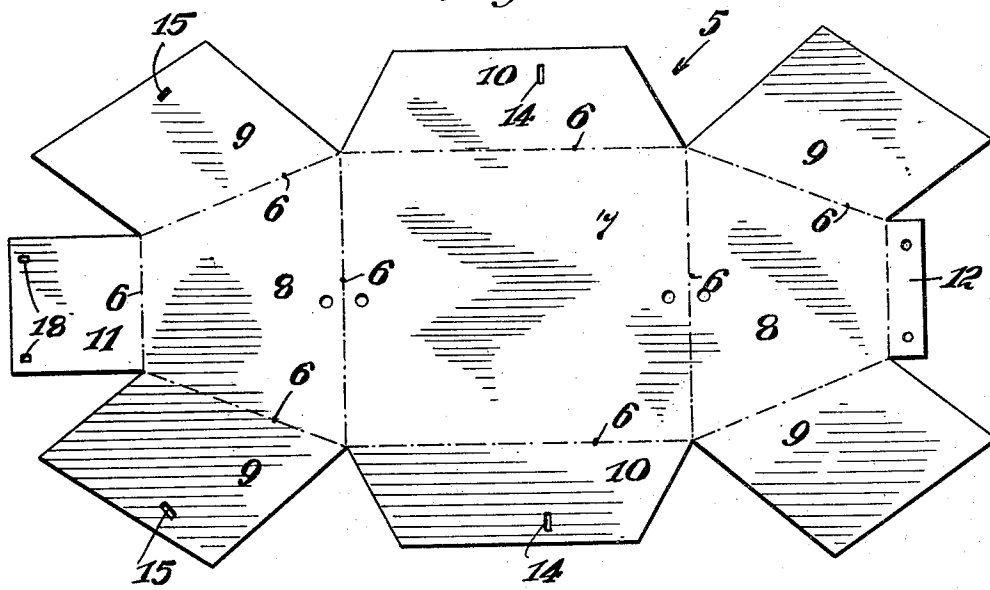
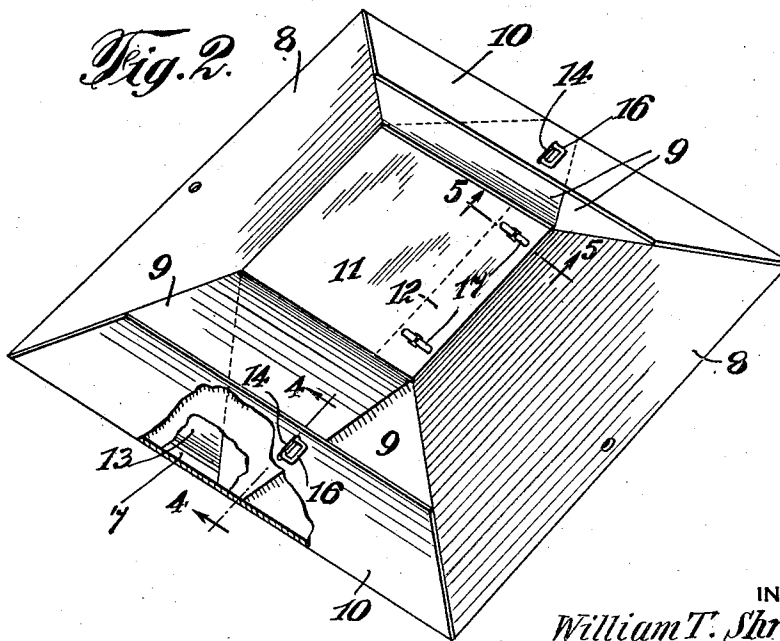


Fig. 2.



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2 Sheets-Sheet 2

Fig. 3.

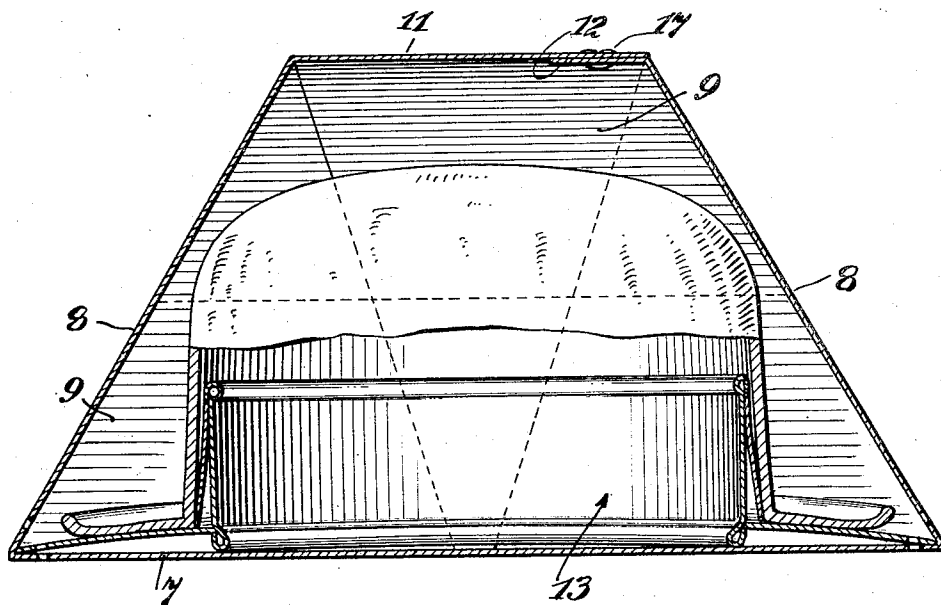


Fig. 4.

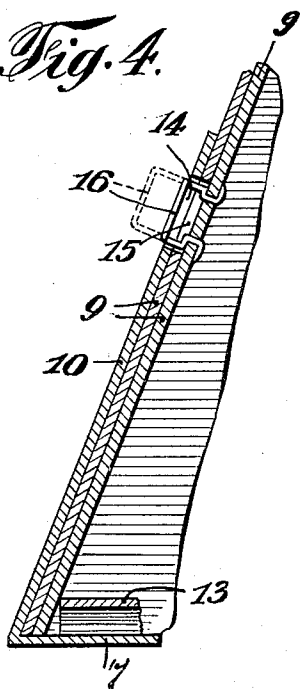


Fig. 5.

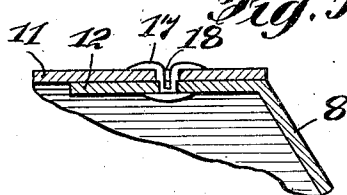
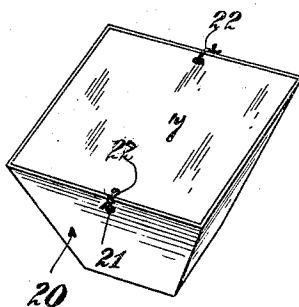


Fig. 6.



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UNITED STATES PATENT OFFICE

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HAT BOX

Application filed December 11, 1929. Serial No. 413,168.

This invention relates to hat boxes, and has for its primary object and purpose to provide a simple and inexpensive individual box or container for hats which will adequately preserve the original form or shape of the hat during transportation from the factory to the jobber or retailer.

It is a more particular object of the invention to provide a collapsible box or container for hats which may be inexpensively produced from a single sheet of comparatively heavy cardboard properly scored to provide relatively foldable parts which may be easily and quickly disposed in proper predetermined set up positions to provide a complete enclosure for the hat.

In one embodiment of the invention, the box or container is of general truncated pyramidal form, and suitable fastening means is provided for releasably securing parts of the box or container blank in their folded or closed positions to permit of the easy and quick opening of the box for the removal of the hat therefrom.

It is a further general object of the invention to provide a hat box or container of the above type which may be produced at such low cost, that it can be furnished gratis by the retailer to the customer as a convenient holder or container to protect the hat when not in actual use against possible damage or injury and prevent the collection of dust thereon.

With the above and other objects in view, the invention consists in the improved hat box or container and in the form, construction and relative arrangement of its several parts as will be hereinafter more fully described, illustrated in the accompanying drawings and subsequently incorporated in the subjoined claim.

In the drawings, wherein I have disclosed one simple and practical embodiment of the invention, and in which similar reference characters designate corresponding parts throughout the several views,—

Figure 1 is a plan view of the cardboard blank from which the box or container is formed;

Fig. 2 is a perspective view showing the

parts of the blank folded into set up relation and fastened together to provide a complete enclosure for the hat;

Fig. 3 is a vertical sectional view through the box showing a hat arranged therein;

Fig. 4 is a detail vertical sectional view taken on the line 4—4 of Fig. 2;

Fig. 5 is a similar detail sectional view taken on the line 5—5 of Fig. 2, and

Fig. 6 is a detail perspective view of the hat box enclosed in the cover.

Referring in detail to the drawings, and for the present more particularly to Fig. 1 thereof, the blank from which the box structure is formed consists of a heavy sheet of cardboard generally indicated at 5 die cut to the required predetermined form or shape and scored substantially half way through the thickness of the material along the lines indicated at 6. These score lines provide a plurality of relatively foldable parts, said parts consisting of a bottom or base section 7, the one piece side walls 8 hingedly connected with opposite edges of said bottom section, side wall sections 9 hingedly connected with opposite edges of each of the one piece side walls 8, longitudinally extending flaps 10 hingedly connected with each of the other edges of the base 7, a top wall 11 hingedly connected with the free end of one of the side walls 8, and a flap 12 hingedly connected with the free end of the other side wall.

In conjunction with the box or container forming blank above described, there is preferably used a hat supporting member generally indicated at 13 which is adapted to be arranged upon the bottom wall 7 of the box to support the hat therein out of contact with the box walls. This hat supporting member per se does not constitute an essential feature of the present invention but is more particularly described and claimed in an application for patent Serial No. 114,153 filed of even date herewith by George S. Overton.

In the use of my invention, in shipping the hats from the factory to the jobber or retailer, each hat is first arranged on a support 13 and placed upon the base or bottom wall section 7 of the box blank. The side walls 8 are then folded upwardly and inwardly and

the sections 9 hingedly connected with opposite edges of said side walls are also folded inwardly into overlapping relation upon each other. The flap 12 is folded inwardly and downwardly and the top wall section 11 is likewise folded inwardly and downwardly so that its free end overlaps said flap, the said end edge of the top wall 11 preferably lying substantially in the plane of the outer surface of the contiguous side wall 8. The flaps 10 at opposite edges of the bottom sections 7 are then folded upwardly and inwardly against the overlapping side wall sections 9. Any desired type of fastening means may be employed for the purpose of securing the parts 9 and 10 and the parts 11 and 12 in their relative folded positions. For this purpose, I have shown the flaps 10 and the outer side wall sections 9 provided with the registering openings 14 and 15 respectively, to receive a bendable wire fastening element indicated at 16. As herein shown, this fastening element is in the form of a loop having its ends permanently fixed to the inner side wall section 9 and projecting outwardly therefrom. This loop is of sufficient length so that when the other side wall section 9 and flap 10 are folded to closed position, said loop will extend through the openings 14 and 15 and project slightly beyond the outer face of the flap 10. This projecting end of the loop is then bent laterally and downwardly on the flap 10, thus securely holding the parts in folded position.

If desired, the top wall 11 may be permanently and inseparably secured to the flap 12 at the factory. However, I have shown a conventional form of sheet metal staple or fastener 17 having its headed end securely fixed to the flap 12. The top wall 11 is provided with a suitable opening indicated at 18 to receive the prongs or arms of the fastener 17. The projecting ends of these prongs are then bent laterally in opposite directions. Thus the parts 11 and 12 are detachably or separably connected so that when the box is not in use, the fastening means for the foldable parts thereof may be readily released, and the box collapsed.

From the above description and as shown in Fig. 2 of the drawings, it will be seen that when the parts of the box blank are set up to form the hat enclosure, the box structure is of a general truncated pyramidal form. The cardboard material is of sufficient thickness so as to provide the necessary rigidity in the several parts of the structure whereby said box parts will offer adequate resistance to ordinary shocks or jars or pressures to which they may be subjected in shipment. Thus serious injury to the hat contained within the box is obviated, and it will reach the retailer or jobber in the same perfect form, shape or condition as when it left the factory. The hat may be easily removed from the box simply by bending the exposed end of the fas-

tener 16 at one side of the box so it may readily pass through the openings 14 and 15, and thus permit the relative movement of the parts 9 and 10 so that these parts of the box structure can be moved into separated relation, thus completely opening one side of the box through which the hat may be withdrawn.

If desired, in lieu of the mechanical fastening means for the parts 9 and 10 of the box, I may provide the separate cover or holder 20 as shown in Fig. 6 of the drawings. This holder may be formed from a relatively thin cardboard sheet, and is of the same general truncated pyramidal shape as the hat box. This holder is entirely open at its larger end so that after the parts 9 and 10 of the box have been folded to completely close said box, the cover or holder 20 may be inserted thereover so that the several walls of the holder will closely contact with the corresponding walls of the hat box. The base wall of bottom 7 of the hat box when disposed within the holder is substantially flush with the end edges of the side walls of the holder. The several walls of the cover or holder for the box may of course, be provided upon their outer surfaces with any desired advertising matter, and the hat box may be removably retained therein either by the application of gummed paper strips across the bottom of the box and to the edges of the side walls of the holder, or by the use of a suitable detachable handle member. Thus as shown, opposite side walls of the holder or cover adjacent the open end thereof may be provided with laterally spaced grommets or eyelets indicated at 21 to receive a string 22 which passes through the walls of the box, the support for the hat and the cover 24. Thus, the box and the holder therefor may be conveniently held together when shipped.

It will of course, be understood that if desired, upon the order or request of a particular retailer, the outer surfaces of the several parts of the cardboard box may be covered with lithographed or printed paper sheets bearing appropriate advertising matter. Likewise, a cord or other suitable type of carrying handle may be attached at its ends to the top wall 11 of the box if it is intended that the box shall be furnished with the hat by the retailer to the individual purchaser.

From the foregoing description considered in connection with the accompanying drawings, the construction, manner of use and several advantages of my improved hat box will be clearly and fully understood. It will be apparent that a box for this purpose produced from a one piece blank of sheet material may be supplied at very low cost. At the same time, it furnishes a complete protection to each individual hat during transportation, thus obviating the return of damaged goods from the retailer or jobber to the

manufacturer. I have herein shown a particular form of the box blank whereby a box or container of a certain general form or shape may be produced. However, it is to be understood that in such details of form or shape of the parts of the box blank, as well as the fastening or securing means for the several parts of the box, my present invention is susceptible of embodiment in various other alternative structures. Accordingly, the privilege is reserved of resorting to all such legitimate changes therein as may be fairly embodied within the spirit and scope of the invention as claimed.

I claim:

A collapsible box or container formed from a single blank of cardboard material scored to provide relatively foldable parts, including a rectangular bottom wall, one piece tapering side walls connected at their wider ends with opposite edges of the bottom wall, one of said side walls at its free end having a foldable flap and the other of said side walls at its free end having a top for the box hingedly connected therewith, relatively foldable sections hingedly connected with opposite edges of each of said side walls, the said sections at corresponding edges of the side walls being foldable inwardly with respect thereto to extend in overlapping relation upon each other along the other edges of the bottom wall, relatively narrow flaps hingedly connected with the edges of the bottom wall and foldable upon said overlapping side wall sections, bendable fastener elements fixed to the underlying side wall sections engageable through openings in the other side wall sections and in said flaps and bendable upon the latter to releasably retain said wall sections and flaps in superimposed relation, said top section for the box overlapping upon said flap on the first named side wall of the box, and additional means for releasably fastening the free end of said top wall section to said flap.

In testimony that I claim the foregoing as my invention, I have signed my name hereto.

WILLIAM T. SHRADER.