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H. DERMAN

2,276,374

COLLAPSIBLE DRAWER

Filed July 14, 1939

Fig. 1.

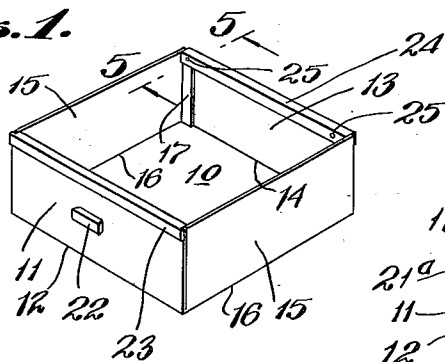


Fig. 2.

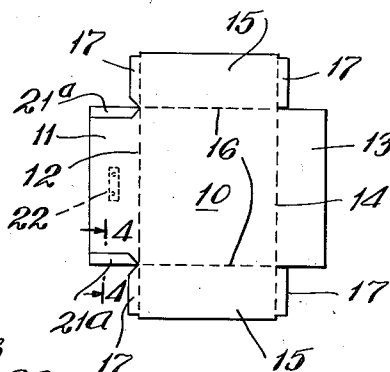


Fig. 3.

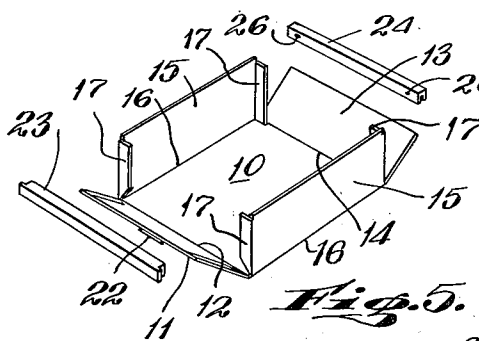


Fig. 4.

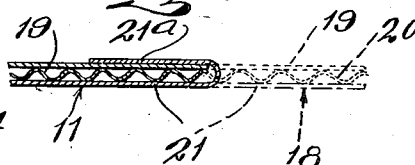


Fig. 5.

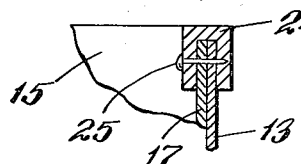


Fig. 6.

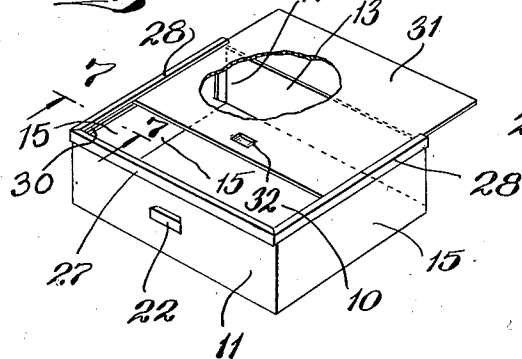
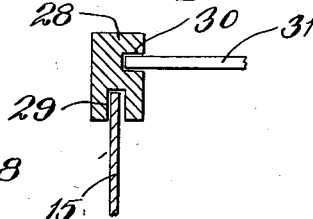


Fig. 7.



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COLLAPSIBLE DRAWER

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Application July 14, 1939, Serial No. 284,420

3 Claims. (Cl. 229—32)

This invention relates to drawers for use in conjunction with collapsible cabinets or chests of drawers in accordance with the teachings of a companion application filed of equal date herewith, later to be identified by Serial No. 284,421, filed July 14, 1939; and the object of the invention is to provide a drawer which is formed from a blank of paper board, such as cardboard, corrugated board, and the like, which is cut, scored and folded to form bottom, side, front and rear wall members, with means forming a neat and finished corner intersection between the front wall and the side walls to present a neat appearance at the front of the drawer when arranged in a cabinet and projecting slightly therefrom; a further object being to provide rails or reinforcing channel strips at the upper edges of predetermined walls of the drawer for supporting the drawer in set up condition and for giving strength and rigidity to the walls of the drawer; a further object being to provide reinforcing and coupling strips at the upper edges of the device grooved for the reception of a sliding closure member for forming a completely closed compartment within the drawer or other device thus adapting the device for use also as a storage container for various types and kinds of articles upon the shelf of a closet or within a larger drawer of an ordinary dresser as commonly employed in the home; and with these and other objects in view, the invention consists in a device of the class and for the purpose specified which is simple in construction, efficient in use, and which is constructed as hereinafter described and claimed.

The invention is fully disclosed in the following specification, of which the accompanying drawing forms a part, in which the separate parts of my invention are designated by suitable reference characters in each of the views, and in which:

Fig. 1 is a perspective view of a drawer made according to my invention.

Fig. 2 is a plan view of a blank from which the drawer shown in Fig. 1 is formed.

Fig. 3 is an exploded view illustrating the drawer parts in a partially assembled position.

Fig. 4 is a partial section on the line 4—4 of Fig. 2.

Fig. 5 is a partial section on the line 5—5 of Fig. 1, showing the means for securing reinforcing strips in position.

Fig. 6 is a view similar to Fig. 1 showing another adaptation of the invention; and

Fig. 7 is a partial section on the line 7—7 of Fig. 6.

down chests of drawers as is taught in my companion application hereinbefore referred to, I have conceived a simple and economical form of collapsible or knockdown drawer construction, facilitating compact folding and packing of a plurality of drawers with the other knockdown parts of the cabinet or chest, in forming a relatively thin package as compared with a fully assembled chest or cabinet.

In the accompanying drawing I have shown in Figs. 1 to 5 inclusive, one method of constructing drawers of the type and kind under consideration, which consists in forming a blank, such as seen in Fig. 2, from a sheet of fibre or corrugated board, the latter being preferably employed, which sheet is treated, faced or otherwise characterized on one surface in forming particularly the outer surfaces of the front, back and side walls of the resulting drawer. The blank is cut and scored from a predetermined sheet to form a central rectangular portion 10 forming the bottom of the resulting drawer, a front wall part 11, foldable as at 12, a rear wall part 13, foldable as at 14, and two side wall parts 15, which are foldable as at 16.

In the construction shown, the side wall parts have at their forward and rear ends, foldable corner reinforcing flaps 17 which are adapted to extend onto the inner surfaces of the front and rear wall parts 11 and 13. The side edges of the front wall parts are finished in order to produce a neat and finished appearance at the front corners of the drawer where they would be exposed at the front of the chest or cabinet, by simply providing extending foldable flange portions as indicated in dotted lines at 18, in Fig. 4 of the drawing, and removing the inner layer 19, and the corrugation 20 from the flange portion, leaving the remaining outer layer or sheet 21 with the outer characterized surface thereon. This sheet 21 is then folded inwardly upon the inner surface of the front wall 11 and cemented or glued thereto as is shown in full lines in Fig. 4 of the drawing and also clearly illustrated at 21a in Fig. 2 of the drawing. It will thus be said that the outer sheet as at 21 only is foldable upon and secured to the surface of the inner sheet 19.

These inwardly folded parts 21 are relatively thin, and will not cause the front wall 21 to bulge or extend beyond the forward edges of the side walls 15. To the contrary a snug and finished appearance will be formed at these corners. Secured centrally to the outer surface of the front wall 11 is a wooden or other knob or block 22

In the construction of collapsible or knock-

forming a finger piece or handle member facilitating the operation of the drawer.

In folding the blank to form the resulting drawer, the side wall parts 15 are first folded upwardly with the flanges 17 extending inwardly in the manner illustrated in Fig. 3, after which the front and rear walls 11 and 13 are folded upwardly upon the flange 17, after which front and rear channel strips 23 and 24 are arranged upon the upper edges of the walls 11 and 13. The channels of the strips are sufficient to receive the upper portions of the flanges 17 as is clearly seen for illustrative purposes in Fig. 5 of the drawing. Tacks, or other securing devices, 25, are passed through the strips 23, 24, at the ends thereof so as to enter the flanges 17, as well as the wall portions 11, 13, to retain the drawer in the assembled position. Holes 26 may be provided on the inner surfaces of the strips 23 and 24, note the strip 24 in Fig. 5, for facilitating the insertion of the tacks and properly locating the same as will be apparent. The strips 23 and 24 give rigidity and stability to the resulting drawer, especially in taking the thrust upon the front wall in moving the drawer inwardly and outwardly in a cabinet or chest; whereas the rear strip 24 will compensate for any thrust upon the inner wall of the drawer in limiting inward movement thereof as will be apparent.

In collapsing the blank for the collapsed arrangement of a plurality of drawers in connection with associated parts of a collapsed chest or cabinet, either the walls 15 or the walls 11, 13, may be folded inwardly upon the bottom wall 16, to reduce the size of the flat blank to the degree desired.

In Figs. 6 and 7 of the drawing I have shown a slight modification of the structure shown in the other figures, and in that the blank is of the same general structure as shown in Fig. 2, like references will indicate like parts; that is to say, 10 represents the bottom wall, 11, 13, the front and back walls, 15, the side walls. In this construction, however, I have substituted for the strips 23, 24, a front strip 27, and two similar side strips 28; all of these strips being of the same cross-sectional form, having a bottom channel 29 for the reception of the upper edges of the walls 11, 15, note in this connection Fig. 7 of the drawing, and grooved on the inner edges thereof as seen at 30 at points above the upper ends of the walls of the cabinet to receive a sliding door or closure 31, which is shown as movable forwardly and backwardly over the top of the drawer or resulting container in closing and opening the compartment therein. The closure 31 is formed from a sheet of heavy cardboard or fibre board and is preferably depressed adjacent its forward edge to form a finger receiving portion 32 facilitating the movement of the closure 31 into open position. It will be apparent that the upper edge of the rear wall 13 is not provided with a strip, although, if desired, a short strip may be provided, especially in a more expensive construction. With this construction, it will also be preferred that the flange 17a be integral with the side edges of the back wall 13, rather than with the rear ends of the side walls, as in Fig. 2, especially when the top strip on the rear wall 13 is not employed.

This type of construction in addition to forming a collapsible or knockdown drawer for chests or cabinets, will also produce a suitable unitary device, which may be used for the storage of various types and kinds of apparel, upon the shelves of a usual built-in closet in the home: or as a

separate container or case in the drawer of a piece of furniture for the independent storage of articles of apparel within the drawer, to prevent displacement therein, for example, in forming handkerchief boxes, stocking boxes, jewelry boxes, etc.; and many other receptacles of this type and kind. In fact, a device of this type and kind may be used upon the top of a dresser for the storage of predetermined articles, forming more or less a utility container. In this connection it will be understood that the upper or outer surfaces of the closure 31 may be characterized to correspond with the characterization of the outer surfaces of the wall parts 11, 13, and 15, or if desired, may be contrasting thereto, depending entirely upon the ornamental effects desired. It will also be understood that any suitable hand gripping means may be provided at 32 for the operation of the sliding closure.

By reason of the construction employed, it will be apparent that a drawer or similar article may be very economically constructed, especially in the use of material of the particular type and kind set forth, thus facilitating the construction of a collapsible chest of drawers, with a large number of these collapsible drawers, at a very reasonable price. Further, a construction of this type, of a single container as is taught in Fig. 6, enables said devices to be sold at a very economical selling price. In fact, the structure of these devices is so reasonable that a series of them can be acquired for one dollar or less.

It will, of course, be apparent that my invention is by no means limited to the proportion of the respective wall parts as herein shown and described, as these parts may be modified or varied to suit various uses to which the resulting devices are applied. The present disclosure is simply by way of illustrating certain adaptations of my invention.

Having fully described my invention what I claim as new and desire to secure by Letters Patent, is:

1. A knockdown drawer of the class described comprising a single blank of sheet material scored and folded to form bottom, front, rear and side wall parts having their upper edges in a common plane when in drawer assemblage, integral means at the ends of two opposed wall parts extending onto the surfaces of adjacent angularly extending wall parts, said integral means having their upper edges in a common plane with the upper edges of the last named wall parts, channeled rails arranged upon the upper edges of and extending the full length of said last mentioned wall parts only and the integral means co-acting therewith to clip said means and walls within the channels of the rails, and said rails forming the sole means of maintaining the wall parts in set-up drawer-forming condition.

2. A knockdown drawer of the class described comprising a single blank of sheet material scored and folded to form bottom, front, rear and side wall parts having their upper edges in a common plane when in drawer assemblage, integral means at the ends of two opposed wall parts extending onto the surfaces of adjacent angularly extending wall parts, said integral means having their upper edges in a common plane with the upper edges of the last named wall parts, channeled rails arranged upon the upper edges of and extending the full length of said last mentioned wall parts only and the integral means co-acting therewith to clip said means and walls within the channels of the rails, said rails forming the

sole means of maintaining the wall parts in set-up drawer-forming condition, and means forming a finished edge at the side edges of the front wall part in producing a neat and finished appearance at the front corner portions of the resulting drawer.

3. A knockdown drawer of the class described comprising a single blank of sheet material scored and folded to form bottom, front, rear and side wall parts having their upper edges in a common plane when in drawer assemblage, integral means at the ends of two opposed wall parts extending onto the surfaces of adjacent angularly extending wall parts, said integral means having their upper edges in a common plane with the upper edges of the last named wall parts, channeled

5 rails arranged upon the upper edges of said last mentioned wall parts and the integral means co-acting therewith to clip said means and walls within the channels of the rails, said rails forming the sole means of maintaining the wall parts in set-up drawer-forming condition, means forming a finished edge at the side edges of the front wall part in producing a neat and finished appearance at the front corner portions of the resulting drawer, said front wall comprising corrugated board having inner and outer surface sheets, and said last named means comprising extending portions at the ends of the outer sheet folded inwardly upon the inner surface of the inner sheet and secured thereto.

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