Aug. 25, 1964 G. E. BYASSEE 3,145,835

COAT HANGER RECEPTACLES

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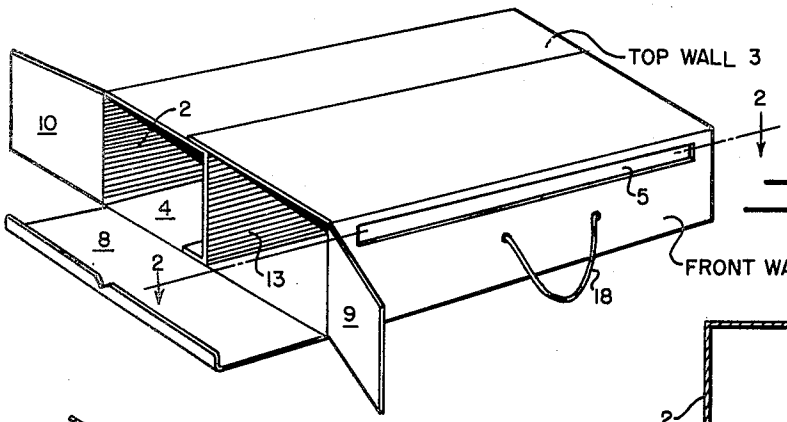


FIG. 1

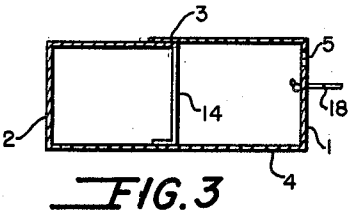


FIG. 3

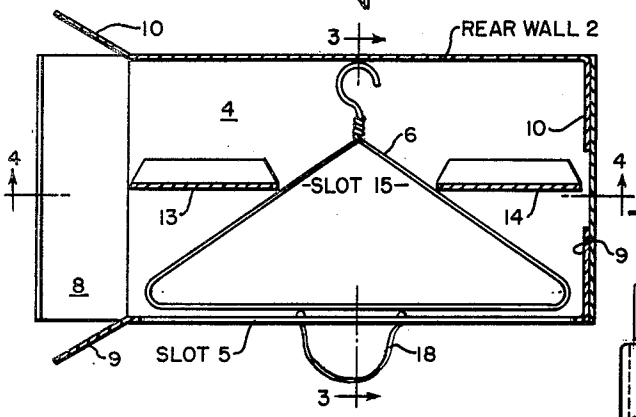


FIG. 2

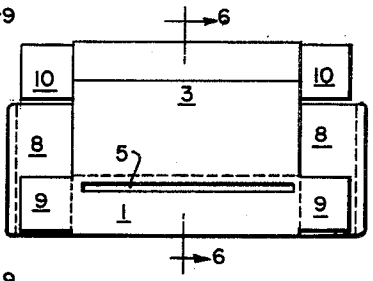


FIG. 5

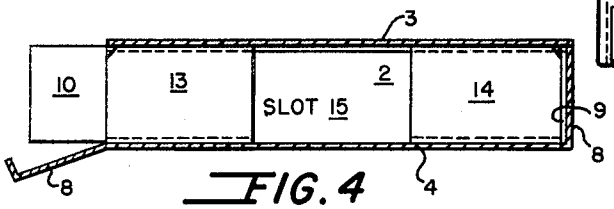


FIG. 4

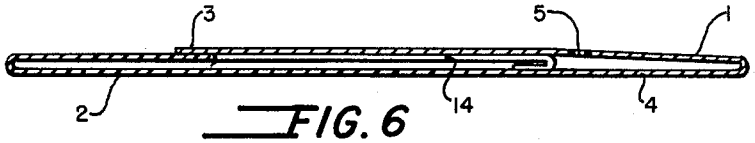


FIG. 6

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COAT HANGER RECEPTACLES

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The wire coat hanger, which is in more or less universal use, comprises a single strand of wire bent to form a body portion of somewhat triangular bow shape, having right and left shoulder sections, and a hook portion which extends upright from the top center of the bow where the shoulder sections meet. Because these hangers are in universal use, they tend to accumulate in the average household to a point where they become a nuisance. When this occurs, the householder often disposes of the accumulated hangers by placing a tangled mass of them in a garbage can, a waste cardboard box or some other receptacle. Often they are pressed into a box with sufficient force to deform some if not all of them. While the laundry and cleaning sources, from which the bulk of these hangers emanate, would like to reuse such hangers, they can't afford to receive them as a tangled and deformed mass because the cost of untangling them and of selecting those which are suitable for reuse, is greater than the cost of buying new hangers. The problem of finding a better way of handling used hangers has received attention heretofore but thus far that problem has not been satisfactorily solved.

The principal object of the present invention is to provide a satisfactory solution to the foregoing coat hanger problem. More particularly, it is to provide a coat-hanger-receiving receptacle which demotes haphazard tangled accumulations of coat hangers whether deformed or not and which promotes their accumulation in an orderly untangled way of such high order that it makes their commercial reuse economically feasible.

Another important object is to provide a coat-hanger-receiving box which effects a very substantial reduction in the cost of accumulating and reusing coat hangers.

A further object of the invention is to provide a box which compels each coat hanger to be inserted into the box in a manner insuring a neat and orderly untangled collection of relatively undeformed coat hangers and which prevents any coat hanger from being inserted into the box in any other way.

My invention contemplates the use of a box having opposed front and rear walls and opposed top and bottom walls cooperatively forming a chamber for receiving and housing a succession of coat hangers. In its preferred form, my invention resides in the concept of providing the box with means which permits each coat hanger to be horizontally inserted through the front wall of the box with its hook portion projecting rearwardly and which will not permit it to be inserted otherwise. In this way, as in all forms of my invention, the body portion of each hanger is compelled to occupy chamber space in one part of the box (say the front "half" thereof) while the hook portion thereof is compelled to occupy the centrally-disposed chamber space in the remaining part of the box (say the rear "half" thereof). These chamber spaces, in the front and rear "halves" of the box, have a common boundary, which may be viewed as containing a vertically-arranged centrally-disposed portion corresponding to the hook portion of a hanger and vertically-arranged laterally-spaced portions disposed on opposite sides of the center portion and thus corresponding to the shoulder sections of the hanger.

My invention is carried out (1) by providing the upper portion of the front wall with a horizontally-long vertically-narrow coat-hanger-receiving slot and (2) by providing the interior of said chamber with partition means

vertically-arranged along said boundary to provide (*a*) at the center portion of said boundary, an interconnecting space through which the hook portion of a coat hanger may be moved rearwardly during the hanger insertion operation and (*b*) along a side portion of said boundary, a stop to prevent the movement of the corresponding body portion of a coat hanger rearwardly into the rear chamber space. Preferably, two stops are provided, one along each side portion of said common boundary so that said front space and the center portion of said rear space cooperate to form a single space which has the horizontal outline of a coat hanger, when that hanger is arranged with its hook portion extending rearwardly, and which is accessible only through the front wall slot of the box.

My invention also contemplates constructing a box of this character so that it may be collapsed into a flat package to facilitate handling up to the point of use and then appropriately manipulated to form a box. With a collapsible box of this general character, it becomes possible *first* for a clothes cleaning or other establishment to provide a housewife with the collapsed box, *second* for such housewife to form a coat hanger receptacle at home, place it on a shelf or other suitable surface and, from time to time, insert coat hangers in the box and thus accumulate them in an orderly neat-appearing arrangement and *third* for the cleaning establishment to collect the boxes from time to time and reuse the hangers since they are neither tangled nor so deformed that they cannot be readily cleaned or sterilized, if necessary, and reused. In this way, the housewife avoids large haphazard accumulations of coat hangers and the nuisance they represent while the cleaning establishment gets the reuse of the hangers at a cost low enough to enable it to pay a small premium to the housewife returning them.

An embodiment of the invention is illustrated in the accompanying drawing wherein:

FIG. 1 is a perspective view of a coat-hanger-receiving receptacle made in accordance with my invention, this view showing the box with one end open;

FIG. 2 is a horizontal section taken along line 2—2 of FIG. 1, this view also showing one end of the box open;

FIGS. 3 and 4 are vertical sections respectively taken along lines 3—3 and 4—4 of FIG. 2;

FIG. 5 is a top plan view of the box when collapsed; and

FIG. 6 is a section taken along a line corresponding to line 6—6 of FIG. 5.

The drawing illustrates an improved box-like receptacle for coat hangers of the type having a boody portion containing left and right shoulder sections and a hook portion projecting from the body portion between said shoulder sections. This particular receptacle includes a box body; end flap means; and interior partition means.

Box Body

The body may be composed of any suitable material including metal, wood, and plastics. Preferably it is made of a material such as cardboard which is cheap enough to permit the box to be thrown away or discarded after limited use. As illustrated, the box has opposed front and rear walls 1 and 2 and top and bottom walls 3 and 4. The upper portion of the front wall 1 has a horizontally-long vertically-narrow coat-hanger-receiving slot 5 extending longitudinally between and in the direction of the opposite ends of the box. The interior of the box constitutes a main chamber, which is intended to receive and accumulate coat hangers of the type indicated at 6.

In accordance with my invention, such hangers are

horizontally inserted through the slot **5** with the hook portion of the hanger extending rearwardly so that it passes through the slot **5** first. In this way, the body of the hanger is compelled to occupy chamber space in the front half of the body while the hook portion of the hanger is compelled to occupy chamber space in the rear half of the body. The front and rear chamber spaces may be viewed as having a common boundary between them. Similarly this common boundary may be viewed as having a vertically-arranged center-portion or center-section corresponding to the hook portion of a hanger and vertically-arranged laterally-spaced side portions or sections corresponding to the shoulder sections of the hanger.

The front and rear walls **1** and **2** are hinged along their top and bottom edges to the front and rear edge portions of the top and bottom walls **3** and **4** so that all four walls may be manipulated (*a*) from a flat collapsed position, wherein one pair of adjacent walls are in flat face-to-face relationship with the other pair of adjacent walls, (*b*) to a hollow operative or box-forming position, wherein said front and rear walls **1** and **2** extend vertically and the said top and bottom walls **3** and **4** extend horizontally.

End Flap Means

The box conventionally includes flap means at each end of the box for end closing purposes. The flap means illustrated include one flap **8** which is connected to one of said four walls, preferably the bottom wall **4** as shown. When the box is collapsed, flap **8** extends endwise from the bottom wall **4** to which it is connected and along the major plane of that wall. In the box-forming position, this flap extends completely across the end opening of the box.

Preferably, the flap means also includes flap **9** for the front wall **1** and flap **10** for the rear wall **2**. Each of these additional flaps, like the larger flap **8**, extends, when the box is collapsed, endwise from the flap to which it is connected and along the major plane of such wall and, when the box is in use, across the end opening toward but not all the way to the opposed wall.

Interior Partition Means

The interior partition means functions not only to provide, along either or both side portions of the common boundary between the front and rear chamber spaces of the box, a stop preventing the body portion of a coat hanger from being moved rearwardly into the rear chamber space, but also to provide, at the center portion of said common boundary, a space inter-connecting the front and rear chamber spaces so that the hook portion of the coat hanger **6** may be moved rearwardly through the front chamber space and into the rear chamber space during a hanger insertion operation.

Normally one stop should be sufficient to prevent the coat hanger from being inserted into and completely housed within the box in any way other than the proper way. Preferably, a pair of stops, in the form of vertical partitions **13** and **14**, are provided and arranged to extend from the top wall **3** to the bottom wall **4**, one along each side portion of the common boundary between the front and rear chamber spaces.

Each of the partitions **13** and **14** is hinged to the top and bottom walls **3** and **4** for movement from one position, corresponding to the flat collapsed position of the box, to another position, corresponding to the hollow operative position of the box. In said one position, each partition extends parallel to said top and bottom walls. In said other position, each partition extends vertically across the height of the box.

The partitions **13** and **14** are laterally spaced from each other to provide, at the center portion of the common boundary between the front and rear chamber spaces, a vertically-arranged slot **15** interconnecting said front and rear chamber spaces and providing a passageway through which the hook portion of a coat hanger **6** may be moved rearwardly during the hanger insertion operation.

It will be appreciated that the partitions may be removably mounted and that, however mounted, they cooperate with the front and rear walls of the box to form a composite space composed of the front chamber space, slot **15** and that portion of the rear chamber space that corresponds to the slot **15**. This single space has an outline corresponding to the outline of a wire coat hanger.

Operation

In operation we can assume that an establishment, such as a laundry or a dry cleaner, purchases these boxes in a collapsed state and delivers them in the same state to various households. There the housewife manipulates the box to its operative position and tucks in its end flaps to hold it in that position. The box may now be placed on a closet shelf.

From time to time, the housewife may dispose of excess wire coat hangers by holding each such hanger in a horizontal position with its hook portion extending or "pointing" rearwardly and then thrusting the hanger (hook first) rearwardly through the front wall slot **5**. It is impossible to put any coat hanger into this box in any other way. As a consequence, the successive coat hangers are stacked one on top of another and are maintained in a neat orderly stack without any chance of entanglement. Furthermore, seriously deformed coat hangers cannot be readily put into the box; hence, the housewife must either straighten them or discard them some other way.

When the box is full, it can be returned to the establishment responsible for it. Here since the hangers are in an orderly and untangled mass, they may be readily cleaned and placed in reuse. Furthermore, this may be done at a cost low enough to permit the responsible establishment to pay a small premium, say of 25 or 50 cents for a box holding 50 hangers. To facilitate handling the box, its front wall **1** may be provided with a handle such as the rope handle **18** illustrated.

For the sake of clarity, I have described this box as one which has its major-face walls **3** and **4** at its top and bottom, respectively, and its perimetric walls **1** and **2** at its front and rear, respectively, and which holds a vertical stack of horizontally-arranged coat hangers. It will be understood, however, that it may be used to hold a "horizontal" stack of vertically-arranged hangers. In this latter event, the box may hang from a wall hook with its perimetric walls **1** and **2** forming its top and bottom and with its major-face walls **3** and **4** forming its front and rear walls. When the box is hung from a wall hook, its handle **18** should be offset toward major-face wall **3** so that, when a hanger is inserted, the hanger will tend to move within the box rearwardly toward the major-face wall **4**.

Having described my invention, I claim:

1. An improved box-like receptacle for coat hangers of the type having a body portion containing left and right shoulder sections and a hook portion projecting from the body portion between said shoulder sections, comprising:

(A) a box body having a spaced pair of opposed major-face walls and a spaced pair of opposed perimetric walls,

(1) said box body forming a main chamber for holding a stack of coat hangers in which each hanger may be positioned

(*a*) with its major plane more or less parallel to said major-face walls,

(*b*) with its body part occupying one portion of the main chamber space which extends along one perimetric wall in a longitudinal direction proceeding from one end of the box to the other and which is transversely spaced from the other perimetric wall of the box, and

(*c*) with its hook part occupying the mid-portion of the adjoining chamber space

which similarly extends along the other perimetric wall and which is spaced from said one perimetric wall,

(2) said main chamber space, along the boundary between said adjoining chamber spaces, having a substantially unobstructed center section and laterally spaced side sections,

(*a*) the center section of said boundary accommodating the connection between the hook and body parts of coat hangers in said main chamber space, and

(*b*) the side sections of said boundary corresponding to the shoulder sections of said hangers, and

(3) said one perimetric wall having a long relatively narrow coa-hanger-receiving slot through which said hangers may be inserted hook first

(*a*) said slot extending longitudinally between the ends of the box;

(B) partition means arranged within said main chamber along a side boundary section to provide a stop separating said adjoining chamber spaces and preventing the corresponding body portion of a hanger in said receptacle from occupying said adjoining chamber space; and

(C) flap means at each end of the box for end closing purposes.

2. The coat hanger receptacle of claim 1 wherein:

(A) the perimetric walls are front and rear walls hinged along their top and bottom edges to the front and rear edge portions of said major-face walls which are top and bottom walls, said walls being manipulatable,

(1) from a flat collapsed position, wherein one pair of adjacent walls are in flat face-to-face relationship with the other pair of walls,

(2) to a hollow open-ended operative position, wherein said front and rear walls extend vertically and said top and bottom walls extend horizontally; and

(B) said flap means include, at each end of the box, at least one flap which is connected to one of said walls and which, in said collapsed position, extends endwise from the wall to which it is connected and adjacent the major plane thereof, and, in said operative position, extends from its connected wall across the end opening of the box to the opposed wall.

3. The coat hanger receptacle of claim 2 wherein:

(A) said partition means includes a laterally-spaced pair of stops in the form of vertical partitions, one on each side of said unobstructed center portion space,

(1) each partition extending from the top wall to the bottom wall and being hinged thereto for movement

(*a*) from one posiition corresponding to said collapsed position, wherein they extend parallel to said top and bottom walls,

(*b*) to another position corresponding to said hollow operating position, wherein they extend vertically across the space between the front and rear walls.

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