Feb. 8, 1966 J. J. BONO 3,233,644

HAMPER

Original Filed July 30, 1962

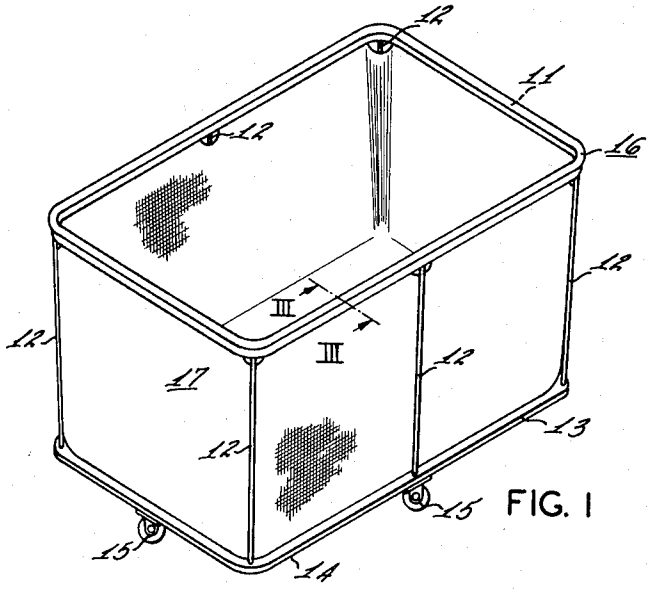

FIG. 1

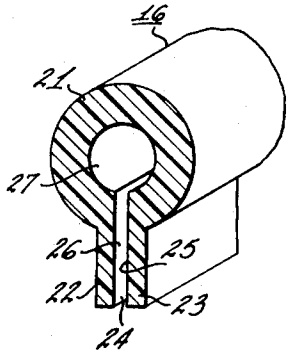

FIG. 2

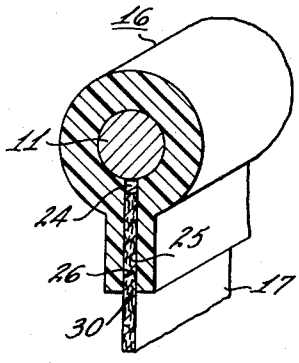

FIG. 3

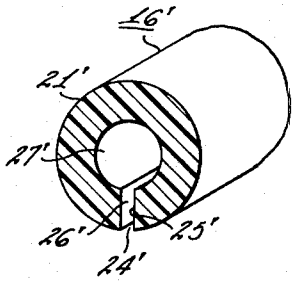

FIG. 4

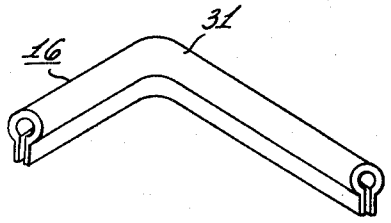

FIG. 5

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HAMPER

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Original application July 30, 1962, Ser. No. 213,406. Divided and this application Dec. 23, 1963, Ser. No. 333,272

5 Claims. (Cl. 150—51)

This application is a divisional from my copending application Serial No. 213,406, filed July 30, 1962, now abandoned.

This invention relates generally to hampers and more particularly to a unique and novel means for use in hamper construction which means function as a combination liner holder-wear preventer-bumper for hampers.

Hampers, such as the type used by commercial laundries to sort and transport clothing and by the United States Post Office to sort and transport mail, and especially parcel post, heretofore have comprised a skeleton frame mounted upon a mobile base and having, overlying the upper portion of the skeleton frame, the edge of a fabric liner. The overlying edge of the fabric liner was then laced to the body of the liner around the frame with a suitable cord which passed through a sequence of grommets disposed in hem-defining spaced relationship in and adjacent the overlying edge of the liner.

This prior construction has a number of serious disadvantages.

First, the overlaid portion of the liner is subjected to accelerated wear by engaging the material being passed into the hamper. Not infrequently and through only nominal use, the overlying portion of the liner is worn through and the entire liner must be replaced.

Secondly, in this prior construction the upper frame can be easily bent when subjected to the shock of minor collisions, either with other hampers or with permanent installations around the mailroom.

A third disadvantage of the prior construction arises from the excessive liner wear resulting from the constant rolling action of the liner on the upper frame as it is loaded and moved about.

The present invention is predicated upon my design of novel means operable in combination with a hamper liner and frame to substantially eliminate the aforesaid areas of extraordinary wear and coactive to support the hamper liner, eliminate the roll of the liner on the frame, and to protect the frame from the shock of unavoidable collision.

Accordingly, one of the primary objects of the present invention is to provide improved means for incorporation into a hamper construction which by its unique design substantially completely eliminates in an easy and economical fashion the extraordinary liner wear and frame damage heretofore a characteristic of hamper construction.

Another object of the present invention is to provide improved means for suspending a hamper liner from the upper rectangular frame of a hamper so that the liner is no longer subjected to abrasive wear by the introduction of material into and withdrawal of material from the hamper.

Still a further object of the present invention is to provide improved means for mounting a hamper liner which eliminates the wear caused by the natural rolling of the liner on the frame, which was an inherent characteristic of prior art hampers.

An even further object of the present invention is to provide means for attaching a hamper liner which further coacts with the upper rectangular frame of the hamper to protect the upper frame from the deformation

heretofore resulting even from minor collisions with other hampers or with stationary pieces about the mailroom.

These and still further objects as shall hereinafter appear are fulfilled by the present invention in a remarkably unexpected fashion as may be readily discerned from the following detailed description of an exemplary embodiment of the invention and especially when read in conjunction with the accompanying drawing in which:

FIG. 1 is an isometric view of a postal hamper embodying the present invention;

FIG. 2 is a cross sectional view of improved means embodying the present invention, shown independently of the hamper;

FIG. 3 is a fragmentary cross sectional view shown taken across line III—III of FIG. 1 showing the means of FIG. 2 in operative relationship to the hamper and the hamper liner;

FIG. 4 is a cross sectional view of another means embodying the present invention; and

FIG. 5 is an isometric view of means embodying the present invention in convenient form for use in the manufacture of hampers.

Referring to the drawing, in which like parts bear like numerals throughout the several views, several means embodying the present invention are illustrated and shall be herein described in detail. It is of course understood that these embodiments are presented to exemplify the present invention and to aid in the fuller understanding of the concepts herein involved. These embodiments are not intended as limiting upon the spirit of the present invention except to the extent that they reflect the total scope of my contribution as shall be hereinafter defined.

In FIG. 1, a representative hamper is shown and comprises an upper rectangular frame 11 carried on a plurality of support arms 12 which extend downwardly therefrom into operative association with a lower rectangular frame 13. Frame 13 is in turn carried on a suitable base 14 which is mobilized by a plurality of casters 15.

The improved means embodying the present invention are indicated by the general reference numerals 16, 16' and are disposed in circumscription about upper frame 11 and coact therewith in a manner to be hereinafter described in detail to suspend a hamper liner 17 therefrom.

Referring now to FIG. 2, means 16, shown in cross section, comprises a body portion 21 having extending therefrom a first lip portion 22 and a second lip portion 23. Lip portions 22, 23, respectively, carry surfaces 24, 25 which are presented in spaced facing relationship to each other and cooperate to define a slot 26 which extends therebetween into communication with a bore 27 defined centrally through cylindrical body portion 21. Surfaces 24, 25 are herein referred to as "liner engaging surfaces." In practice, body portion 21 is formed of a suitable elastic, resilient, shock resistant material such, for example, as neoprene, rubber and the like and is conveniently cast in cylindrical form.

Referring to FIG. 3, the embodiment of my invention as illustrated in FIG. 2 is shown employed in actual hamper construction. Thus, cylindrical body 21 is, by the resilient nature of the material from which it is formed, sprung over and about upper frame 11 so that frame 11, passing up through slot 26, lies in bore 27 and lip portions 22, 23 depend downwardly therefrom. Between lip portions 22, 23 in slot 26, the upper edge portion 30 of hamper liner 17 is inserted into engaged relationship with surfaces 24, 25. Edge portion 30, preferably, extends substantially all the way into slot 26 but does not contact upper frame 11. A suitable fabric-to-rubber adhesive, such as is presently well known in the art, may then be employed to bond liner 17 to surfaces 24, 25. Such ad-

hesives are well known to the art and need not be enumerated here.

In one practice, liner **17** will be a cotton canvas, body member **21** will be neoprene, and the adhesive can be plasticized polyvinyl chloride. Or, if desired, rivets may be passed through body **21** including surfaces **24**, **25** and liner **17** to secure the liner **17** to means **16**. A still further scheme for attaching liner **17** to body member **21** comprises inter weaving a suitable lacing through a sequence of grommets disposed in body member **21** in alignment with surfaces **24**, **25** but without obstructing slot **26**. In this instance, a like number of grommets may be disposed in liner **17** in registerable relationship with the grommets of body **21**.

Referring now to FIG. 5, a preferred form of utilizing means **16** in the construction of a hamper, such as shown in FIG. 1, is formed by casting the resilient material into a suitable die to form an L-shaped member having an elbow **31** formed therein corresponding to the curvilinear corners of upper frame **11**. When cast in this fashion, means **16** are easily snapped over the top of frame **11** at each of the four corners as shown in FIG. **1**. Thus when my invention is formed into an L-shaped body, four such members are usually sufficient to provide the complete top periphery for frame **11**.

It is, of course, understood that means **16** may if desired be cast into a single integral rectangular unit corresponding in dimensional size to the upper frame whereupon the entire unit is snapped or a combination of straight and curved members may be used over frame **11**, as shown in FIG. 1, in one operation. Because of the difficulty in casting large pieces and in assembling a plurality of smaller pieces, the four-member L-shaped construction is preferred. Because of the general symmetry of hampers of this type, a single mold design may be employed to provide pieces for each of several corners.

Another embodiment of the present invention is shown in FIG. 4 and comprises a cylindrical body **21'** having a relatively shorter slot **26'** defined therein intermediate spaced facing surfaces **24'**, **25'**. This embodiment is especially useful with the smaller postal hampers. As before, the body **21'** would be snapped into a substantially circumscribing relationship about the upper frame whereupon centrally disposed bore **27'** would secure frame **11** and the liner engaging surfaces **24'**, **25'** would depend therefrom.

From the foregoing it becomes apparent that structures have been described which fulfill all of the aforestated objects to a remarkably unexpected extent. It is of course understood that such modifications, alterations and applications as may readily occur to the artisan when confronted with this disclosure are intended within the spirit of the present invention especially as it is defined by the scope of the claims appended hereto.

Having now particularly described and ascertained the nature of my said invention and the manner in which it is to be performed, I declare that what I claim is:

1. A hamper comprising: a base; a lower frame fixed to said base; an upper frame disposed in spaced fixed relationship to said lower frame; support means operatively rigidly interconnecting said upper and lower frames to each other; a hamper liner formed of textile material; and means connecting said liner to said upper frame, said means comprising a preformed elastic, resilient body portion having bore means extending axially therethrough for receiving at least a portion of said upper frame and first and second integral lip portions extending radially from said body portion in spaced relationship to each other to define a slot in communication with said bore means; said bore means receiving said upper frame therein, and said slot receiving an upper portion of said liner in spaced depending relation to said upper frame; and means for securing said liner to said lip portions.

2. The hamper as claimed in claim **1** wherein said preformed elastic resilient body portion is formed of separate sections of L-shape.

3. The hamper as claimed in claim **1** wherein said means for securing said liner to said lip portions comprises an adhesive.

4. A hamper comprising: a base; a lower frame fixed to said base; an upper frame disposed in spaced fixed relationship to said lower frame; support means operatively rigidly interconnecting said upper and lower frames to each other; a hamper liner formed of a textile material; and means connecting said liner to said upper frame, said means comprising a preformed elastic resilient body portion having bore means extending axially therethrough for receiving at least a portion of said upper frame, said body portion further having slot means defined therein extending transversely of said bore means in substantial radial communication therewith, said bore means receiving said upper frame therein and said slot means receiving an upper portion of said liner therein in depending relationship to said upper frame, and means securing said liner in said slot means comprising an adhesive.

5. The hamper as claimed in claim **4** wherein said preformed elastic resilient body portion is formed of separate sections of L-shape.

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