United States Patent

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[54] **COLLAPSIBLE HAMPER**
11 Claims, 6 Drawing Figs.

[52] **U.S. Cl.** **150/49,** 150/50
[51] **Int. Cl.** **B65d 33/00**
[50] **Field of Search** 150/48, 49, 50, 51

[56] **References Cited**

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ABSTRACT: A collapsible hamper is disclosed wherein a collapsible and foldable frame supports a receptacle of flexible sheet material. The frame, in one presently preferred form, includes a pair of central leg portions pivotably interconnected at medial points thereon, and removable upper and lower leg portions. The upper leg portions engage the receptacle and support a cover for the receptacle. The lower leg portions are adapted to engage a support surface to support the entire hamper in an upright position.

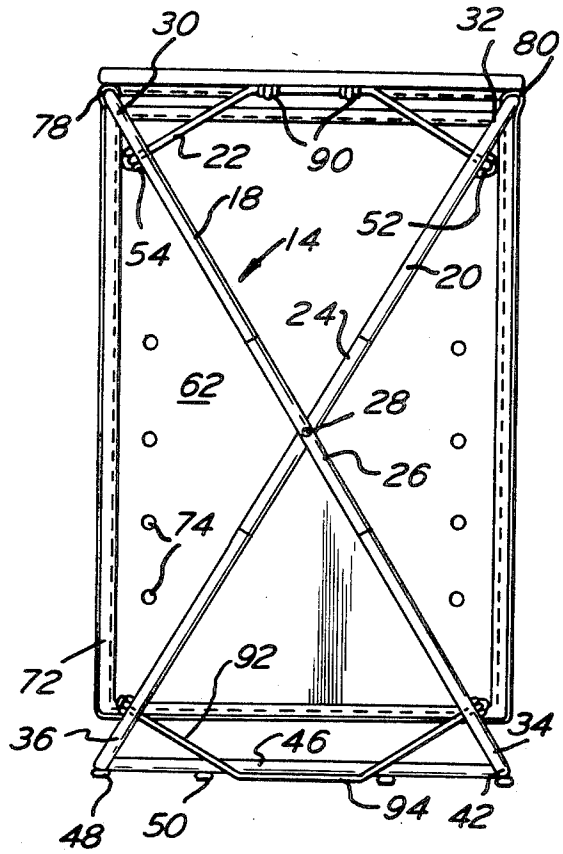


FIG. 1

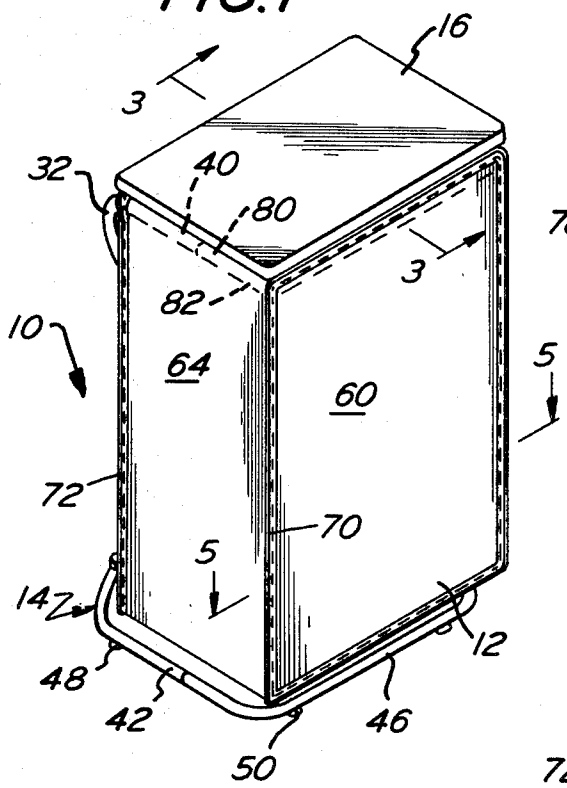
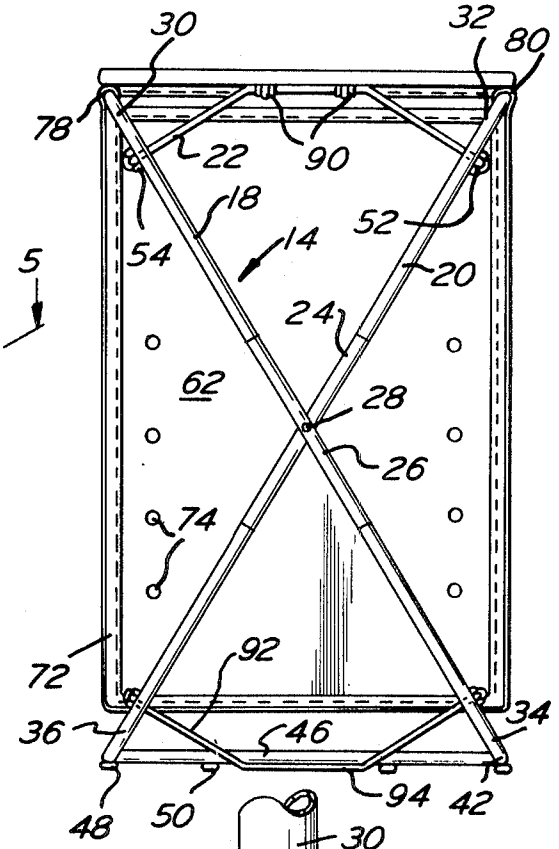


FIG. 2



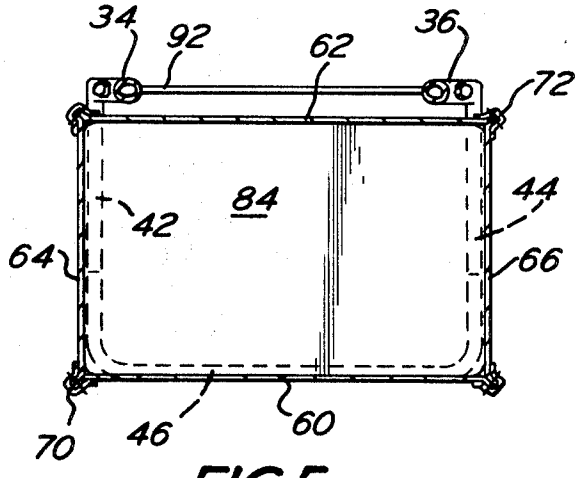


FIG. 5

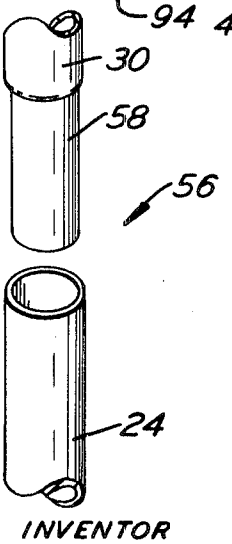


FIG. 6

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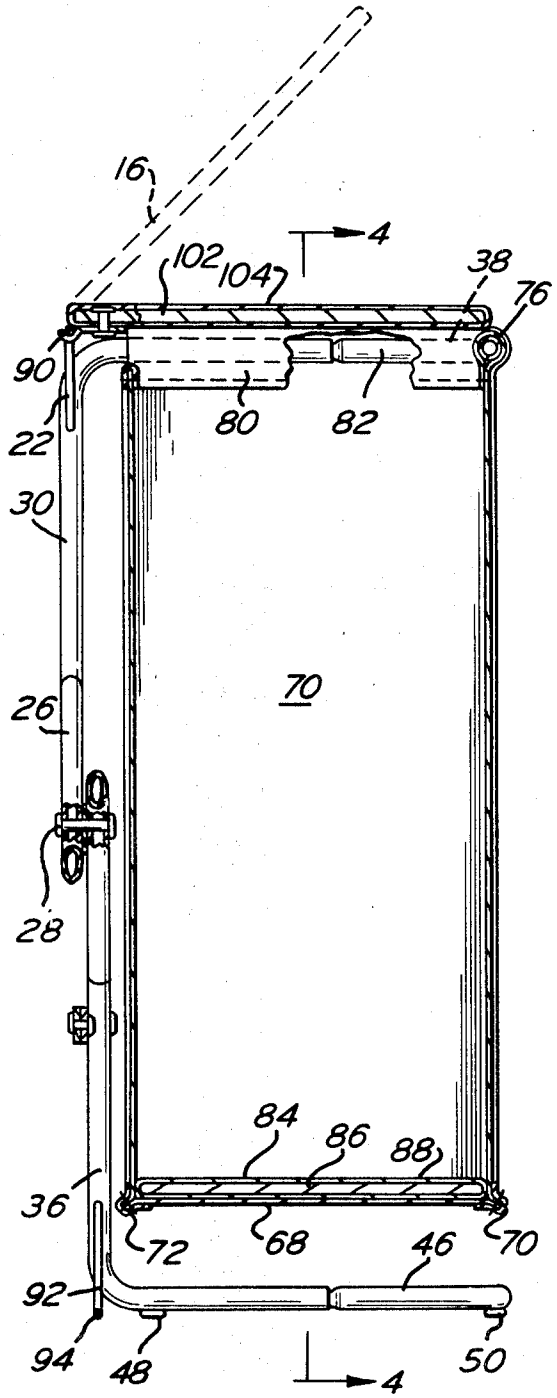

FIG. 3

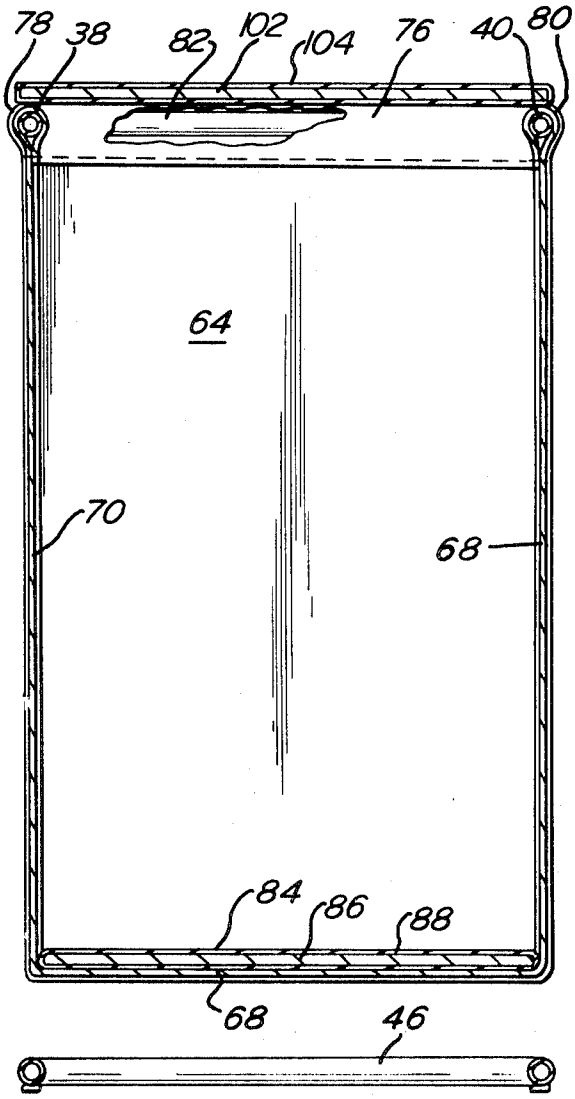

FIG. 4

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COLLAPSIBLE HAMPER

This invention relates to a collapsible hamper, and more particularly, to a laundry hamper whose various components can be collapsed, disassembled or folded to produce a compact readily portable package.

Conventional hampers in common usage take the form of rigid containers of fixed external dimension. Thus, one frequently seen form of hamper includes a hollow body member having the shape of a rectangular prism, and a hinged cover adapted to overlie an opening in the upper portion of the body member. Such a structure is relatively bulky, and its fixed external dimension preclude ease of portability. Other readily apparent shortcomings of such a structure are the necessity for manipulating the entire hamper in order to empty it, and difficulty in cleaning due to the relative inaccessibility of the lower interior portions.

It is an object of the present invention to provide a collapsible hamper whose external dimensions and capacity, in its operative configuration, approximate those of conventional rigid hampers, but which forms a compact bundle suitable for travel upon disassembly.

Thus, it is another object of this invention to provide a collapsible, readily transportable hamper, suitable for travel.

It is another object of this invention to provide a collapsible hamper comprising a receptacle of flexible sheet material, which can be disengaged from its supporting structure and transported to a desired place, such as a laundry room, to be emptied.

It is another object of this invention to provide a collapsible hamper whose construction is such that the portions of its structure which normally come in contact with soiled materials are readily cleaned.

Other objects will appear hereinafter.

The foregoing and other objects are realized, in a presently preferred form of The invention, by a hamper comprising a receptacle of flexible sheet material, supported by a collapsible frame. The frame comprises a pair of central leg portions, pivotably connected to each other at medial points thereon. Upper leg portions are removably received in the central leg portions, and support the receptacle in an operative position by engaging opposite edges thereof. Lower leg portions are removably coupled to the central leg portions, and provide a base upon which the hamper rests. A cover member for the receptacle, which may also serve as a shelf, is coupled to the frame.

For the purpose of illustrating the invention, there is shown in the drawings a form which is presently preferred; it being understood, however, that this invention is not limited to the precise arrangements and instrumentalities shown.

FIG. 1 is a perspective view showing a collapsible hamper in accordance with the invention.

FIG. 2 is a rear elevation view.

FIG. 3 is a side elevation view, in cross section, taken along the line 3—3 in FIG. 1.

FIG. 4 is an elevation view, in cross section, taken along the line 4—4 in FIG. 3.

FIG. 5 is a cross-sectional view taken along the line 5—5 in FIG. 1.

FIG. 6 is a detail view, showing a portion of the frame of the present hamper.

Referring to the drawings in detail, wherein like numerals indicate like elements, there is seen in FIG. 1 a collapsible hamper designated generally by the reference numeral **10**.

The hamper **10** includes a receptacle **12** of flexible sheet material, supported by a frame, designated generally by the reference numeral **14**. A cover **16** is provided for the receptacle **12**.

Referring now to FIG. 2, in the illustrated form of the invention, the frame **14** comprises crossed generally U-shaped legs **18, 20**, and a crossbar **22** interconnecting the legs **18, 20**.

The legs **18, 20** include central leg portions **24, 26**, pivotably interconnected at medial points thereon by a rivet **28** or the like. The legs **18, 20** also include generally L-shaped upper leg portions **30, 32** and lower leg portions **34, 36**. The upper leg portions **30, 32**, as is best seen in FIGS. **3** and **4**, include parallel distal ends **38, 40**, the purpose of which will be more fully explained later. The lower leg portions **34** and **36** include similar parallel distal ends **42, 44**. A bight portion **46** interconnects the ends **42, 44** in the illustrated embodiment.

The distal ends **42, 44** of the lower leg portions **34, 36**, and the bight portion **46** may be provided with resilient or scuff-resistant feet **48, 50** adapted to contact the surface upon which the hamper **10** rests.

Referring now to FIG. **2**, the assembled inter-relation of the various elements of the frame **14** in their operative dispositions is seen. The crossbar **22** is secured at its respective ends to the upper leg portions **30, 32**. Such securement may be accomplished by conventional means such as nuts **52, 54** or the like. In an alternative construction, not illustrated, opposite ends of the crossbar **22** are retained in juxtaposed blind openings in the upper leg portions **30, 32**.

The legs **18, 20**, it should be understood, may be fabricated of any suitable rigid tubular material, such as seamless or lock-seamed steel tubing.

Referring to FIG. **6**, there is seen a typical joint, designated generally by the reference numeral **56**, by which the various members of the frame **14** are interconnected. The upper leg portion **30** is seen to include a reduced diameter portion **58**, formed by swagging or other similar process. The outer diameter of the reduced diameter portion **58** is complemental with and adapted to frictionally engage the inner wall of the central leg portion **24**. The frictional engagement of the reduced diameter portion **58** and central leg portion **24** is such that the parts are maintained in assembled leg portion **24** is such that the parts are maintained in assembled relation, but may be selectively disassembled when desired.

Although the foregoing description of FIG. **6** makes reference to the upper leg portion **30** and central leg portion **24**, it should be understood that similar joints may be provided between the other leg portions **32, 34** and **36**, and the central leg portions **24** and **26**.

Referring now to FIGS. **1, 3, 4** and **5**, the receptacle **12** will now be described in detail.

In the presently preferred form, the receptacle **12** is constructed of sheet plastic material, such as polyethylene, polyvinyl chloride or the like. The receptacle **12** includes a front panel **60**, a rear panel **62**, juxtaposed side panels **64** and **66** and a bottom panel **68**. As illustrated, the front panel **60** and rear panel **62** are separate elements, and the side panels **64, 66** and bottom panel **68** are portions of a continuous strip of material coupled to the front panel **60** and rear panel **62** by welted seams **70, 72**. Other equivalent constructions can of course be used if desired.

The back panel **62** may be provided with ventilation openings **74** to permit free passage of air into the receptacle **12**, as is best seen in FIG. **2**.

Upper edge portions of the side panels **64** and **66** are doubled over to form a hem **76** including elongated parallel pockets **78, 80**, adapted to receive the distal ends **38, 40** of the upper leg portions **30, 32**. In the presently preferred construction a generally U-shaped bight member **82**, seen in FIGS. **3** and **4**, is sewn or otherwise retained in the portion of the hem **76** corresponding to the front panel **60**. Ends of the bight member **82** extend into the portions of the hem **76** associated with the side panels **64, 66**. The ends of the bight member **82** may be coupled to the distal ends **38, 40** when the hamper **10** is in its operative condition. Joints such as the above-described joint **56** may be used to accomplish such coupling.

It should be apparent that the parallel distal ends **38, 40** of the upper leg portions **30, 32** when in place in the pockets **78, 80** and coupled to the ends of the bight member **82**, aid in maintaining the shape of the receptacle **12** in a neat, eye-pleasing geometric form approximating a rectangular prism. To further insure proper shaping of the receptacle **12**, a rigid batten **84**, whose plan shape corresponds generally to the

dimensions of the bottom panel **68**, may be provided. As illustrated, the batten **84** comprises a rigid core **86** of heavy cardboard, chipboard, wood or the like, the outer surface of which is covered with a skin **88** of plastic film of the sort used in the receptacle **12**. Thus, the batten **84**, like the receptacle **12**, may be readily cleaned when necessary, and is not subject to soling by contact with soiled materials in the hamper **10**.

The previously mentioned cover **16** is pivotably coupled by hinges **90** or The like, seen in FIGS. **2** and **3**, to the cross bar **22**. The cover **16** may be constructed in the same manner as the batten **84**, and include a core **102** and skin **104**. When in its operative position, the cover **16** rests on the distal ends **38**, **40** of the upper leg portions **30**, **32** and the bight member **82**, and overlies the top opening of the receptacle **12**. The plan shape of the cover **16**, in a preferred form, corresponds to that of the distal ends **38**, **40** and bight member **82**.

If desired, a second cross bar **92** may be provided interconnecting leg portions **34**, **36**. The second cross bar **92**, seen in FIGS. **2**, **3** and **5**, includes a portion **94** adapted to contact the surface on which the assembled hamper **10** rests, thereby enhancing the stability of the hamper.

It should now be apparent that the entire hamper **10** can be disassembled to form a small, readily portable bundle. For example, one operative form of the invention, when disassembled, forms a package measuring **10** inches by **16** inches, and approximately 2-½ inches in height. Such a package is of course readily packed into luggage for travel purposes.

It should also be apparent that the flexible receptacle **12**, the weight of which is itself minimal, may be removed with its contents from the frame **14** for transportation to a desired unloading point, such as a laundry room. The utility of the present hamper **10** is thus greatly increased over conventional rigid hampers of fixed shape and dimension.

The present invention may be embodied in other specific forms without departing from the spirit or essential attributes thereof.

I claim:

1. A collapsible hamper comprising a receptacle of flexible sheet material, a collapsible frame for supporting said receptacle, and a cover for said receptacle coupled to said frame, said frame comprising a pair of central leg portions pivotably connected at medial points thereon, generally L-shaped upper leg portions removably coupled to said central leg portions and adapted to engage said receptacle at opposite edges thereof to support said receptacle in an operative position, and lower leg portions removably coupled to said central leg portions, said lower leg portions including floor-engaging members adapted to support said hamper in an upright position.

2. A collapsible hamper in accordance with claim **1** wherein said central leg portions and said upper and lower leg portions are tubular members, said upper and lower leg portions including reduced diameter end portions thereon adapted to be recessed in end portions of said central leg portions.

3. A collapsible hamper in accordance with claim **2** wherein said receptacle includes a hem at an upper edge portion thereof, and a bight member in said hem adapted to be coupled to said upper leg portions when said receptacle is in an operative position.

4. A collapsible hamper in accordance with claim **3** and a crossbar coupled to and extending between said upper leg portions when said frame is in an operative position, said cover being pivotably coupled to said crossbar and adapted to overlie an open upper portion of said receptacle when said receptacle is in its operative position.

5. A collapsible hamper in accordance with claim **1** wherein said receptacle includes a hem at an upper edge thereof, said upper leg portions having parallel distal ends adapted to be received in said hem.

6. A collapsible hamper in accordance with claim **5** wherein said central leg portions and said upper and lower leg portions are tubular members, said upper and lower leg portions including reduced diameter end portions thereon adapted to be received in end portions of said central leg portions.

7. A collapsible hamper in accordance with claim **6**, and a crossbar coupled to and extending between said upper leg portions when said frame is in an operative position, said cover being pivotably coupled to said crossbar and adapted to overlie an open upper portion of said receptacle when said receptacle is in its operative position.

8. A hamper comprising a frame and a receptacle of flexible sheet material supported by said frame, said receptacle comprising front and rear panels, and juxtaposed generally parallel side panels, upper edges of said front, rear and side panels defining an opening for said receptacle, a hem adjacent an upper edge portion of said receptacle, said hem being adapted to receive portions of said frame so that said receptacle is supported in an operative position by said frame, said hem being disposed above at least said side panels and said front panel, a generally U-shaped bight member disposed in said hem and having opposite ends thereof in the portions of said hem above said side panels and adapted to engage the portions of said frame received in said hem, said receptacle including a bottom panel intersecting said front, rear and side panels, and a rigid bottom insert coextensive with said bottom panel and supported thereon when said receptacle is in an operative position.

9. A collapsible hamper comprising a receptacle of flexible sheet material, and a collapsible frame for supporting said receptacle, said frame comprising a pair of U-shaped leg members pivotably interconnected at medial points thereof, said leg members including distal upper portions for engagement with said receptacle at opposite edges thereof to support said receptacle in an operative position, said leg members including lower portions adapted to support said hamper in an upright position, and a generally U-shaped bight member coupled to said receptacle adjacent an upper portion thereof for engagement with said distal upper portions of said leg members.

10. A collapsible hamper in accordance with claim **9** and a generally U-shaped bight member interconnecting the lower portions of said leg members.

11. A collapsible hamper in accordance with claim **10**, and a crossbar member interconnecting lower portions of said leg members, said crossbar member including a portion adapted to contact a surface supporting said hamper when said hamper is operatively disposed.