Dec. 25, 1956 H. GLEITSMAN 2,775,499

COMBINATION LADDER AND RECEPTACLE

Filed March 18, 1953

FIG. 1

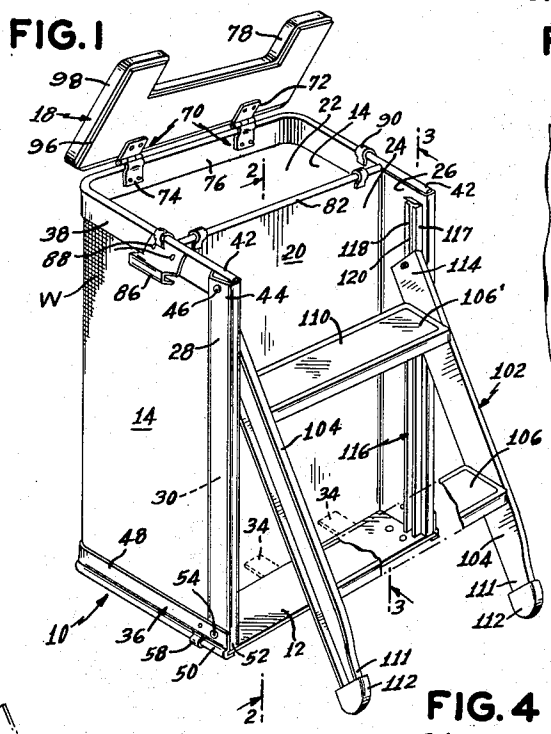


FIG. 3

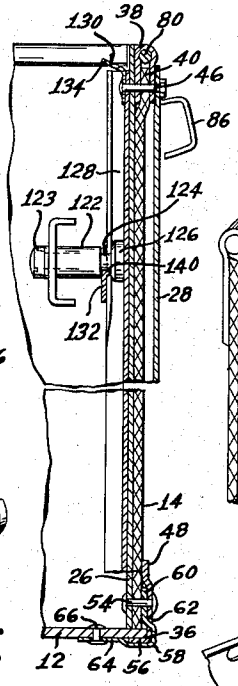


FIG. 5

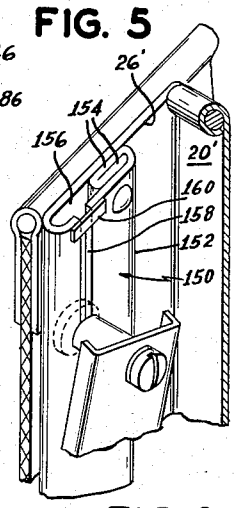


FIG. 6

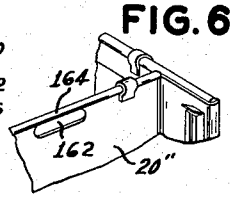


FIG. 4

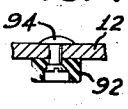
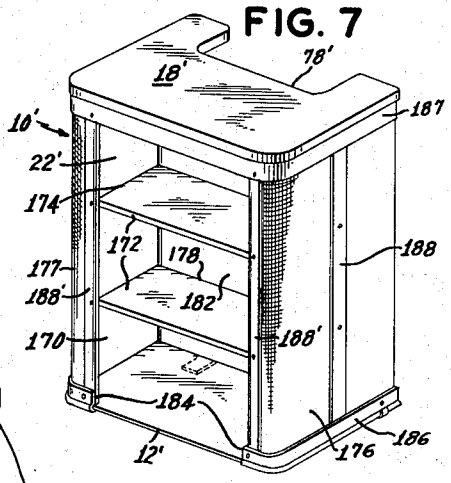


FIG. 2

FIG. 7



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COMBINATION LADDER AND RECEPTACLE

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3 Claims. (Cl. 312—235)

This invention relates generally to improvements in receptacles and, more particularly, to improvements in receptacles having a ladder combined therewith.

One object of the present invention is the provision of a receptacle having a ladder combined therewith in which the receptacle constitutes a firm support for the ladder when the latter is extended for use.

Another object of the present invention is the provision of a combination ladder and receptacle in which part of the receptacle constitutes the top step of the ladder in the use of the same.

Another object of the present invention is the provision of a combination ladder and receptacle in which the ladder is normally contained in a compartment of the receptacle when not in use and is movable outwardly thereof to extended positions for use.

Another object of the present invention is the provision of a combination ladder and receptacle of the above character in which the receptacle is provided with a plurality of compartments with one of the compartments constituting a clothes hamper compartment and another one of the compartments constituting a ladder compartment.

Yet another object of the present invention is the provision of a combination ladder and receptacle of the above character which is of generally improved construction and appearance, and which is extremely light and compact to facilitate the movement and storage of the same.

The above and other objects, features and advantages of the present invention will be more fully understood from the following description considered in connection with the accompanying illustrative drawings:

In the drawings which illustrate the best modes now contemplated by me for practising the invention:

Fig. 1 is a front perspective view of the combination ladder and receptacle showing the ladder in an extended position for use;

Fig. 2 is a sectional view taken on the line 2—2 of Fig. 1 with the receptacle cover being shown in closed position in solid lines;

Fig. 3 is a sectional view taken on the line 3—3 of Fig. 1;

Fig. 4 is a sectional view on an enlarged scale, taken on the line 4—4 of Fig. 2;

Fig. 5 is a fragmentary perspective sectional view of a portion of a modified form of combination ladder and receptacle;

Fig. 6 is a fragmentary perspective view of another modified form of combination ladder and receptacle; and

Fig. 7 is a rear perspective view of yet another modified form of combination ladder and receptacle.

Referring to the drawing in detail, and more particularly to Figs. 1 to 3 thereof, there is shown a receptacle 10 which comprises a closed bottom 12, upright laterally spaced side walls 14, a rear wall 16, and a top cover 18. The receptacle 10 may be formed of any suitable material and in the illustrated embodiment the side walls 14 and the rear wall 16 are formed at a single length of wickerwork, as indicated at W, for a purpose which will be apparent from the description which follows. Secured to an intermediate portion of the side walls 14 and the bottom wall 12 in any suitable manner is an upright partition member 20 which divides the receptacle 10 into a pair of upright compartments 22 and 24. The upright partition member 20 is preferably formed of sheet metal or the like and is provided with laterally projecting side wall portions 26 terminating in generally U-shaped end portions 28 which are adapted to be positioned over adjacent side edge portions of the side walls 14. The portions 26 and 28 are preferably in integral relation with the member 20 and marginal side edge portions 30 of the side walls 14 are adapted to be received and secured in the U-shaped portions 28. The bottom wall 12 is apertured therethrough at a pair of spaced points, as indicated at 32, for the reception therethrough of the flange portions 34 of member 20 which are bent back adjacent the outer face of said bottom wall in the manner shown in Figs. 1 and 2. The receptacle 10 is provided with a pair of vertically spaced lower and upper frame members 36 and 38, respectively, which are of generally U-shaped configuration. With reference to Fig. 3, it will be noted that the upper frame member 38 is U-shaped in cross section and straddles the upper marginal edge portion of the side walls 14 and the rear wall 16, said frame member being clamped in tight relative engagement to said marginal edge portions. The end portions 42 of the frame member 38 are secured to upper portions 44 of the U-shaped portions 28 by the fastener elements 46 whereby it will be apparent that the frame member 38 is secured to the side walls 14, the rear wall 16, and to the portions 28 of the partition member 20. The bottom frame member 36 is angle shaped in cross section and has a vertical portion 48 positioned adjacent to the side walls 14 and rear wall 16, and end portions 50 of said bottom frame member are secured to lower end portions 52 of portions 28 in any suitable manner, as by means of the fastening elements 54. The bottom frame member 36 serves to inter-connect the side walls 14 and rear wall 16 with the bottom wall 12 and also serves to structurally rigidify the receptacle 10 by the inter-connection of portions 50 with the portions 28 of the partition member 20. It is to be noted that the fastener elements 54 extend through the vertical portion 48 of the frame member 36, the side walls 14 and the portions 26 of member 20 whereby to insure a structurally rigid assembly. The frame member 36 is further provided with a longitudinally extending flange portion 56 which is disposed adjacent to lower marginal edge portions of the side walls 14 and the rear wall 16 at the outer face thereof. The bottom frame member 36 is apertured therethrough as indicated at 62 near the front of receptacle 10 for the extension therethrough of the brackets 58, each of said brackets having a vertical portion 60 which is secured to the side walls of the receptacle by means of the fastener elements 54. Portions of the brackets 58 extends through the apertures 62 of the bottom frame member 36 and the base portions 64 of said brackets are secured to the bottom wall 12 by means of the fastener elements 66. Thus the brackets 58 serve to inter-connect the side walls 14 and bottom wall 12 of the receptacle 10 to further structurally rigidify the assembly.

The compartment 22 at the rear of receptacle 10 constitutes a conventional clothes hamper having side walls 14 and a rear wall 16 formed of wickerwork W to provide for the ventilation of said clothes hamper. The top cover 18 constitutes a closure for the hamper compartment 22 and is movable from the closed position shown in solid lines in Fig. 2 to open position shown in broken lines in said figure. The pivotal movement of the cover 18 is effected by means of the plate hinges 70, one part 72 of

said hinges being secured to the cover **18** and the other pivotally connected part **74** being connected to the receptacle proper, and more particularly, to the part **76** of the upper frame member **38**. The openable cover **18** is provided with a forward cutaway portion **78** which is adapted for a purpose which will be evident from the description which follows. A longitudinally extending rod **80** is secured in position by the upper frame member **38** with said rod being disposed upwardly of the marginal edge portions **40** of the side walls **14** and rear wall **16**. The upper top edge of the member **20** is preferably constituted by a tubular formation **82** in which a longitudinally extending rod **84** is disposed similar to the rod **80** contained in the frame member **38**. Suitable carrying handles **86** are secured to the side walls **14** of the receptacle **10**, and, more particularly, said carrying handles are secured to the upper frame member **38** by means of suitable fastening elements **88**. The generally U-shaped bumpers **90**, which may be formed of any suitable material, are attached to the side walls **14** and the member **20** at upper edges thereof by frictional engagement to prevent engagement between cover **18** and frame **38** as will be readily apparent. Secured to the bottom wall **12** of the receptacle **10** are a plurality of spaced legs **92** which may be formed of any suitable material and which may be connected to said bottom wall in any desired manner, for example by means of the fastener elements **94**, shown in Fig. 4. In the illustrated embodiment of Figs. 1 through 3, the openable cover **18** is formed of a pair of confronting panels **96** and **98** which are secured together in any desired manner with the upper panel **98** being preferably covered by a smooth and readily washable material, such as plastic sheeting, or the like.

Associated with the compartment **24** and movable relative thereto, in a manner to be described in detail hereinafter, is a ladder **102** which comprises a pair of laterally spaced longitudinally extending channel members **104** having extending therebetween and secured thereto a pair of vertically spaced steps **106**, the latter being laterally offset widthwise and substantially horizontally disposed when said ladder is disposed in the extended position shown in Figs. 1 and 2. The steps **106** may take any desired form and may be secured to the members **104** in any desired manner, as by means of the fastener elements **108**. The upper faces of the steps **106** preferably have secured thereto treads **110** formed of an anti-slip material, such as rubber, plastic, and the like. The lower ends **111** of the members **104** are of reduced width and have feet **112** positioned thereover, said feet being formed of rubber or a suitable anti-slip material. The ends **114** of the members **104** are floatingly pivotally mounted in the compartment **24** in a manner to be described in detail hereinafter. The wall portions **26** of the compartment **24** have longitudinally extending vertically disposed track members **116** secured thereto, each of said track members being in the form of channel members which have the upper part **117** thereof formed with bent over portions **118** so as to define the longitudinally extending slot **120**. The ends **114** of members **104** are apertured therethrough and have pivot studs **122** secured thereto in any suitable manner, as by means of fastener elements **123**, said studs having a portion **124** of reduced diameter which is formed complementary to the slot **120**, and a portion **126** of enlarged diameter which is adapted to ride in the track slots **128** constituted by the members **116**. Thus the studs **122**, which are secured to one end of the ladder **102**, are adapted to ride in the slots **128** constituted by the members **116**, said studs constituting a pivotal mounting for the ladder **102** and are vertically movable between spaced positions, as will be described in detail hereinafter. Secured to the members **116** in any suitable manner are upper and lower stops, **130** and **132**, respectively, said upper stop having a projecting portion **134** which is adapted to co-act with portion **126** so as to prevent said portion from being fully retracted from the members **116**.

The stops **130** may be secured to the members **116** in any desired manner, and in the illustrated embodiment said stops are secured in position by means of the fastener elements **46** which also extend through frame member **38**. It is to be understood that each of the members **116** and their associated structure is structually identical and is integrated with the receptacle **10** in a structurally identical manner. The lower stop members **132** are welded or otherwise secured to the members **116** and have bent-over portions **140** which project into the slots **120** so as to co-act with the part **124** to limit the movement of the latter in a vertically downward direction. Thus the pivot studs **122** which are secured to one end of the ladder **102**, are guided for a predetermined amount of vertical movement whereby it will be apparent that the end **114** of the ladder **102** is movable between spaced vertical positions. Thus the ladder **102** is movable from a retracted position, as shown in broken lines in Fig. 2, in which said ladder is substantially contained in compartment **24** to an extended position shown in solid lines in Figs. 1 and 2 in which the lower or free end of said ladder is spaced from the receptacle **10** for support by the supporting surface S. Thus ladder **102** is mounted for movement outwardly of the compartment **24** through the open front of the receptacle **10** to extended positions in which the ends **111** of the members **104** are disposed in spaced relation with the receptacle **10** wherefore it will be apparent that when the ladder **102** is in an extended position it is supported by the receptacle **10** and the supporting surface S. In practice, the ladder is readily movable to extended positions by moving the free end of said ladder outwardly of the compartment **24** to thereby permit the pivotally mounted end of said ladder to ride to the lowered position in which the pivot studs **122** coact with the lower stops **132** in the aforedescribed manner. The ladder **102** may be readily retracted into the compartment **24** by moving the pivotally mounted end of said ladder to a raised position, as limited by the interengagement of parts **126** and stops **130**, to thereby permit the free end of said ladder to be pivoted to its retracted position in which the free end of said ladder is supported by the bottom wall **12** of compartment **24**. When the ladder **102** is in an extended position the openable cover **18** is laterally offset widthwise of top step **106'** and constitutes a top step of the ladder. Thus with the ladder in an extended position the top step thereof is constituted by the openable cover **18** which in effect provides a substantial increase in the effective height of said ladder.

With reference to Fig. 5, there is shown a slightly modified form of the present invention which is structurally similar in all respects to the receptacle **10** except in the respects now to be described in detail. In the modification shown in Fig. 5, the wall portions **26'** which are integral with the partition member **20'**, have integrated therewith the track members **150**, the latter being constituted by the doubled over portion **152**, with the latter having doubled over portions **154** disposed between portions **152** and portions **26'**. Member **150** defines a longitudinally extending vertically disposed slot **156** which is adapted for the reception of the part **126** of the stud **122** as described in detail above. The lower stop means for member **150** is constituted by the end of the slot **158** which is adapted for cooperative association with part **124** of stud **122** and the upper stop means is constituted by the part **160** which is welded or otherwise secured to outer face portions of portion **152** of the member **150**. From the above it will be apparent that the member **150** is in integral relation with the partition member **20'** and the wall **26'**, and that the pivot stud **122** coacts with the slot **156** in the same manner as described with reference to receptacle **10**. Accordingly, the member **150** functions in a similar manner as the members **116** of receptacle **10** to guide the ladder for vertical movement between spaced upper and lower positions.

With reference to Fig. 6, there is shown a slightly modified form of receptacle in which the partition member **20''** is slotted at an upper portion thereof, as indicated at **162**, whereby to provide an alternate means for carrying said receptacle. Thus the slot **162** defines a handle portion **164** which provides a convenient means for carrying the receptacle, it being understood that said carrying means may be provided either in addition to the carrying handles **86** aforedescribed or in place of said carrying handles.

With reference to Fig. 7, there is shown a receptacle **10'** which differs from the receptacle **10** in respects now to be described in detail. In the receptacle **10'**, the cover **18'** is fixed in position and is not of the openable type as the cover **18** aforedescribed. The compartment **22'** is formed similarly to compartment **22** of receptacle **10** except that compartment **22'** is open at the back of the receptacle as indicated at **170**. The compartment **22'** constitutes a storage bin which is adapted to contain a plurality of articles and is preferably provided with a plurality of vertically spaced, horizontally disposed shelves **172** which are secured in said compartment in any desired manner, for example, by securing end portions **174** of said shelves **172** to the side walls **176** and by securing the rear edges **178** to the partition member **182**. The lower frame member **186** preferably terminates at **184** at opening **170** so as not to interfere with the bottom shelf of compartment **22'** which is constituted by the bottom wall **12'**. If desired the shelves **172** may be dispensed with and the interior of compartment **22'** will be accordingly unobstructed. Furthermore, the compartment **22'** may be provided with any desired partitioning arrangement and may be provided with any desired hardware or support means to facilitate the hanging of articles in said compartment. The receptacle **10'** is provided with upright members **188** and **188'** which are secured to the side walls **176** and portions of rear wall **177**, respectively, and to the lower and upper frame members **186** and **187**, respectively, to further rigidify the assembly. Accordingly, it will be apparent that receptacle **10'** is structurally similar in all respects to receptacle **10** except that receptacle **10'** is provided with an article compartment **22'** instead of the hamper compartment **22** of receptacle **10**.

As aforenoted, cover **18** of receptacle **10** is cut away as indicated at **78**, said cut away portion providing clearance for the use of the step **106'** of the ladder as will be readily apparent, it being understood that cover **18'**, which is in fixed relation with the receptacle **10'**, is provided with a similar cut away portion **78'**.

It will be evident from the above that the receptacles **10** and **10'** constitute a firm support for the ladder **102** when the latter is extended for use as shown in Figs. 1 and 2. The covers **18** and **18'** of the receptacles **10** and **10'**, respectively, constitute the top step of the ladder in the use of the same, it being noted that said covers are laterally displaced widthwise of the steps **106** of the ladder **102** when the latter is in its extended position. The ladder **102** is normally contained in its associated compartment **24** when not in use and is readily and facilely movable outwardly of said compartment to extended positions in the aforedescribed manner. The receptacle **10** aforedescribed, is provided with a pair of compartments **22** and **24** with compartment **22** constituting a clotheshamper and with the compartment **24** constituting a ladder compartment. It will also be evident from the above description that the combination receptacle and ladder **10** is of generally improved construction and appearance, and is extremely compact whereby to facilitate the movement and storage of the same.

While I have shown and described the preferred embodiments of my invention, it will be understood that various changes may be made in the present invention without departing from the underlying idea or principles of the invention within the scope of the appended claims.

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

1. A combination ladder and receptacle, comprising a receptacle having a vertical partition member secured therein to define a pair of laterally adjacent different size compartments, the smaller of said compartments being open at one side thereof and the larger of said compartments being open at the top thereof, a movable cover for said top opening, and a ladder mounted for vertical and pivotal movement to and from a retracted position in which said ladder is disposed within said smaller compartment and to and from an extended position in which a length of said ladder is disposed outside said smaller compartment for support by a supporting surface and said receptacle, means mounting one end of said ladder to said receptacle for movement between said retracted and extended positions, said ladder in said extended position thereof having a top step vertically and horizontally spaced from said cover when the latter is disposed in covering relation with said top opening, whereby said cover constitutes a step for conjoint association with said ladder in said extended position thereof when said cover is disposed in covering relation with said top opening.

2. A combination ladder and receptacle, comprising a receptacle having a vertical partition member secured therein to define a pair of laterally adjacent different size compartments, the smaller of said compartments being open at one side thereof and the larger of said compartments being open at the top thereof, a movable cover for said top opening, and a ladder mounted for vertical and pivotal movement to and from a retracted position in which said ladder is disposed within said smaller compartment and to and from an extended position in which a length of said ladder is disposed outside said smaller compartment for support by a supporting surface and said receptacle, means mounting one end of said ladder to said receptacle for movement between said retracted and extended positions, said ladder in said extended position thereof having a top step vertically and horizontally spaced from said cover when the latter is disposed in covering relation with said top opening, whereby said cover constitutes a step for conjoint association with said ladder in said extended position thereof when said cover is disposed in covering relation with said top opening, said smaller compartment comprising opposite vertically extending side walls, and said mounting means comprising vertically extending tracks secured to said side walls, said one end of said ladder having pivot means guided for vertical movement along said tracks.

3. A combination ladder and receptacle, comprising a receptacle having a vertical partition member secured therein to define a pair of laterally adjacent different size compartments, the smaller of said compartments being open at one side thereof and the larger of said compartments being open at the top thereof, a movable cover for said top opening, and a ladder mounted for vertical and pivotal movement to and from a retracted position in which said ladder is disposed within said smaller compartment and to and from an extended position in which a length of said ladder is disposed outside said smaller compartment for support by a supporting surface and said receptacle, means mounting one end of said ladder to said receptacle for movement between said retracted and extended positions, said ladder in said extended position thereof having a top step vertically and horizontally spaced from said cover when the latter is disposed in covering relation with said top opening, whereby said cover constitutes a step for conjoint association with said ladder in said extended position thereof when said cover is disposed in covering relation with said top opening, said ladder comprising a pair of laterally spaced longitudinally extending members, and a plurality of steps secured between said members in vertically spaced relation, said steps being laterally offset widthwise and sub-

stantially horizontally disposed when said ladder is in said extended position.

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