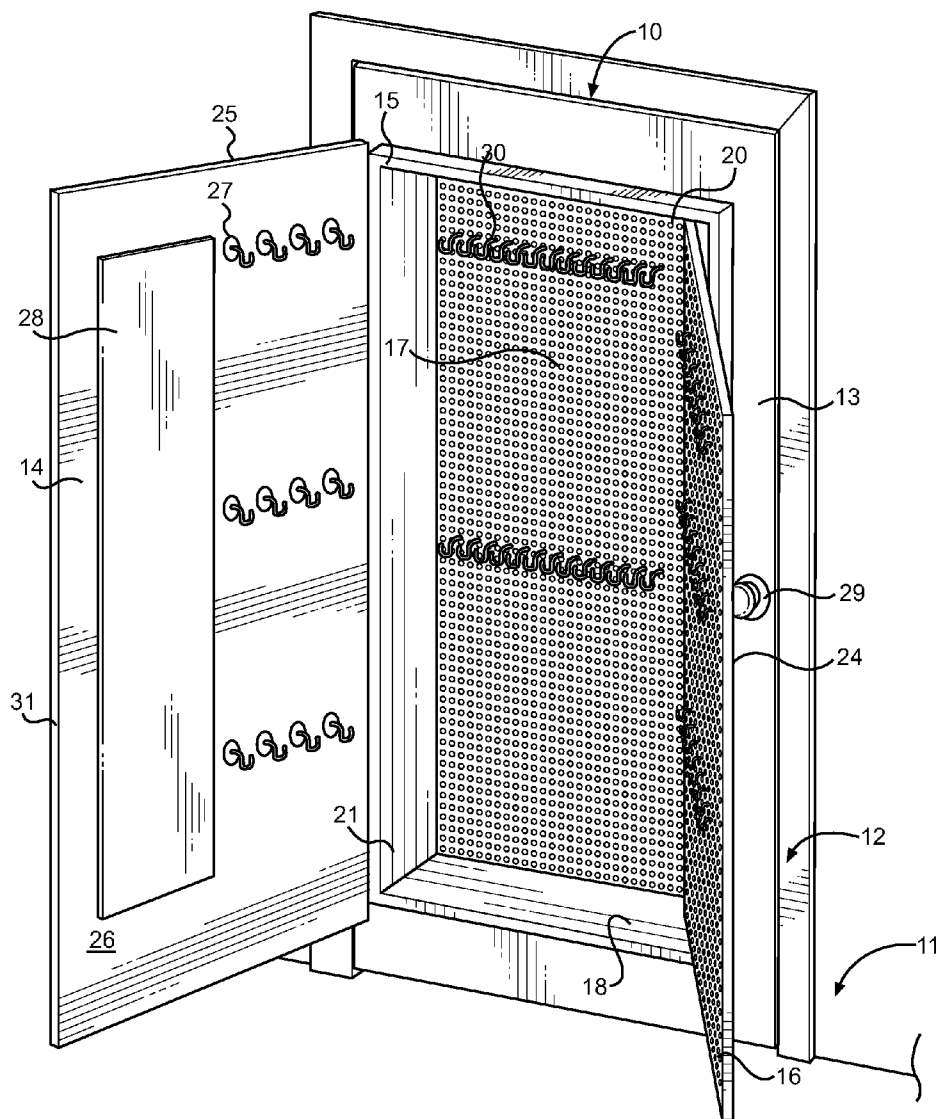




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(19) **United States**(12) **Patent Application Publication****Thomas**(10) **Pub. No.: US 2012/0223626 A1**(43) **Pub. Date: Sep. 6, 2012**(54) **FASHION ACCESSORY INTERNAL DOOR  
STORAGE CAVITY**(52) **U.S. Cl. .... 312/242**(57) **ABSTRACT**(76) **Inventor: Vicky Thomas, Midland, VA (US)**(21) **Appl. No.: 13/221,946**(22) **Filed: Aug. 31, 2011****Related U.S. Application Data**(60) **Provisional application No. 61/464,451, filed on Mar. 4, 2011.****Publication Classification**(51) **Int. Cl.**  
**A47B 46/00** (2006.01)

A storage device mounted within a door frame is disclosed for storage and organization of fashion accessories or similar articles. The device comprises a door having an internal cut-out, wherein an internal cavity is provided for storage of articles in a condensed space, which can be accessed via a second, cutout door. A full length mirror is mounted to the interior of the second door along with peg board to allow attachment of accessory hooks for hanging items. One or more hinged panels inside of the interior cavity provide separation of the internal cavity and increased surface area to allow attachment of additional hooks or attachment means. The back wall of the interior cavity also provides a location for further hooks and shelving for storage. The device may be provided within the interior of a larger door, or as a door insert adapted to be incorporated into an existing door.



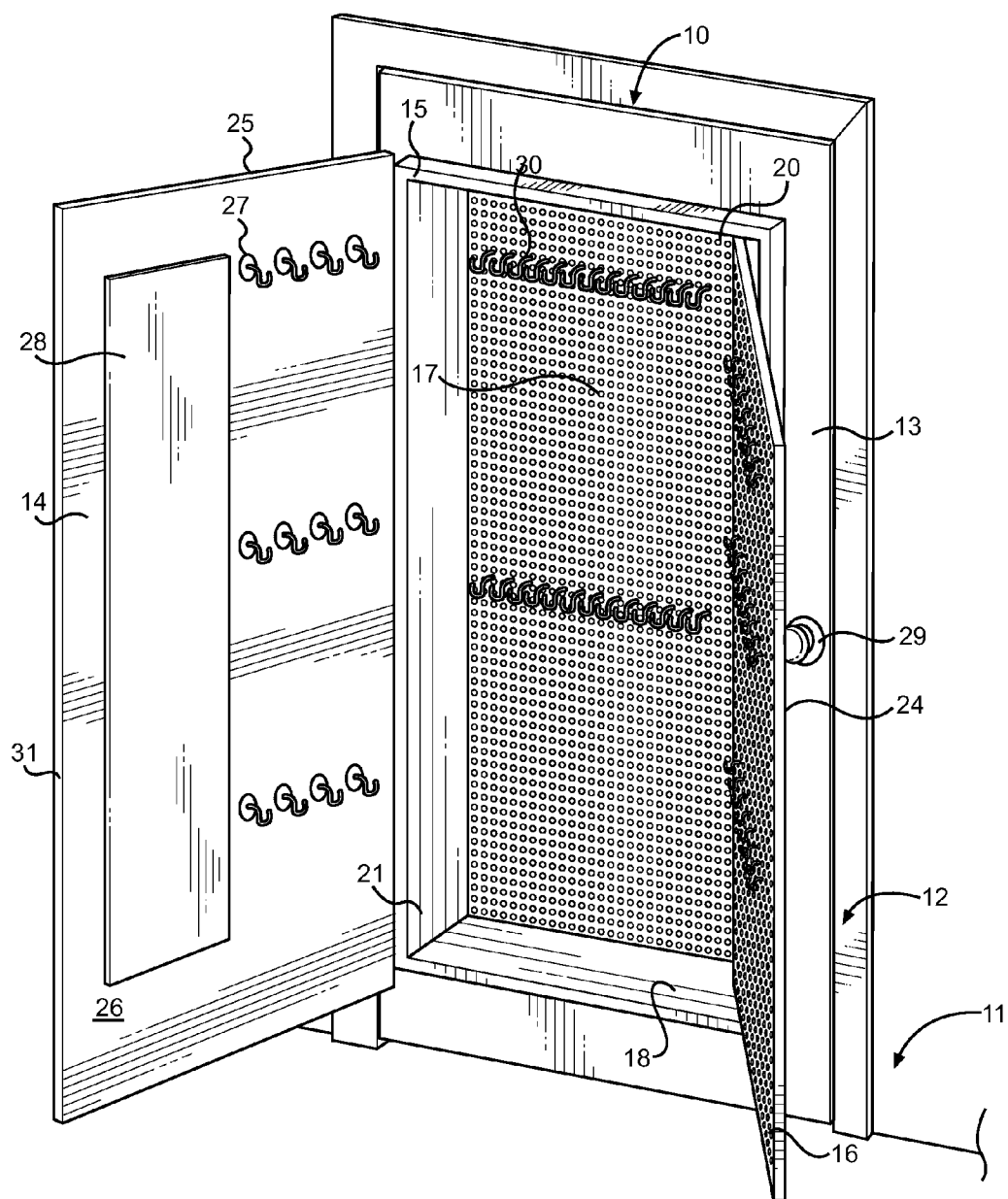


FIG. 1

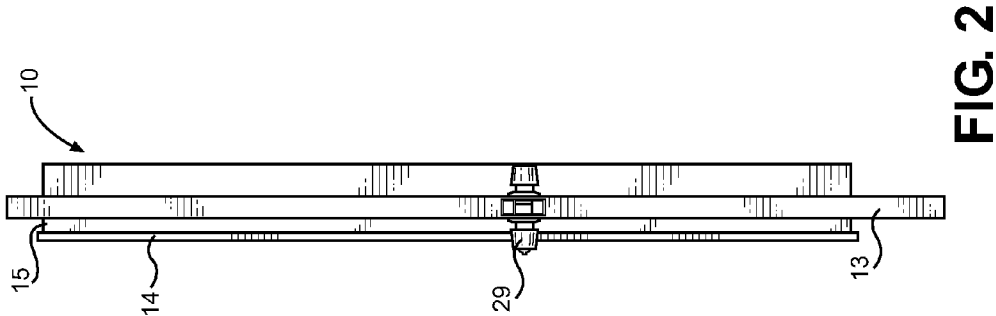


FIG. 2

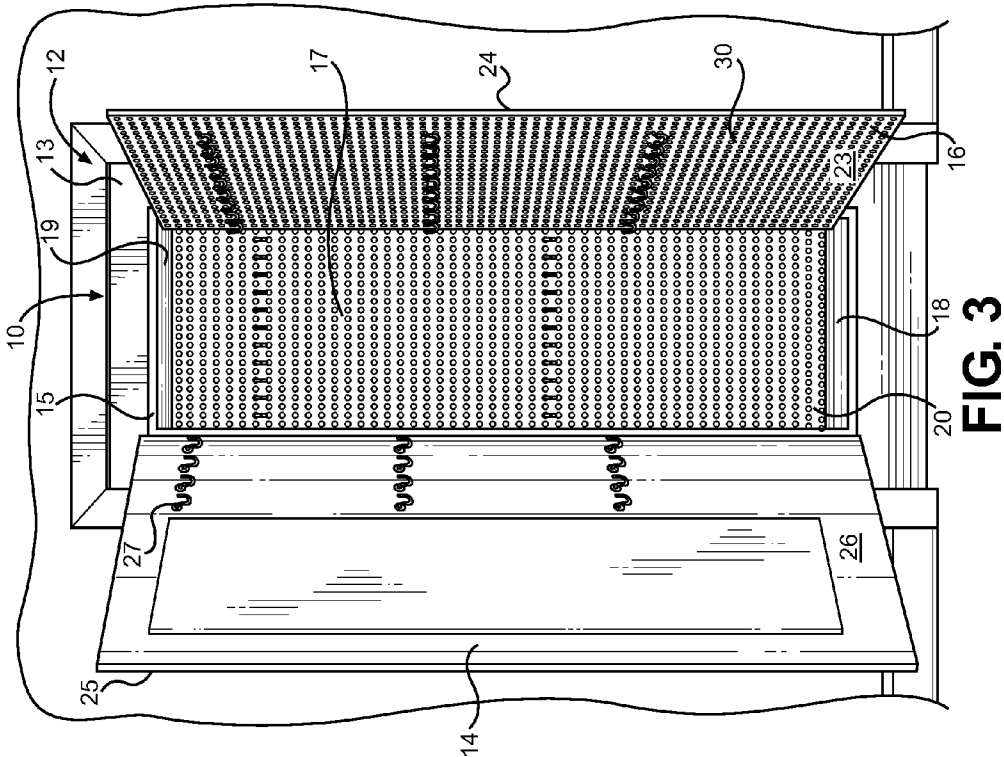


FIG. 3

## FASHION ACCESSORY INTERNAL DOOR STORAGE CAVITY

### CROSS REFERENCE TO RELATED APPLICATION

**[0001]** This application claims the benefit of U.S. Provisional Application No. 61/464,451 filed on Mar. 4, 2011, entitled “The Fashion Accessory Store Door.”

### BACKGROUND OF THE INVENTION

#### **[0002]** 1. Field of the Invention

**[0003]** The present invention relates to closets and storage areas that may be mounted and located in disguised or hidden locations. More specifically, the present invention pertains to a storage compartment that is housed within an interior door.

**[0004]** Prior to this invention there have been many varieties of doors as well as various cabinet structures. One disadvantage of closets is that they are bulky and require significant floor or wall space. Many families today are choosing to live in smaller dwellings to reduce cost outlays for housing. Such families, along with other types, have a need for improved storage space that does not occupy a large portion of the household livable area.

**[0005]** In the past, a variety of devices have been used for the purpose of storing items within a hollow compartment. Some of these devices allow for storage of items within a hollow door. Unfortunately with these devices storage is only available in a limited space within the area. A user cannot store items in multiple compartments, which may be required for separating items by category or for each family member. These devices also do not allow the user to view and compare items before taking items outside of the storage area. Previous devices further include additional handles that extend outward from the door, which creates issues with space and interferences.

**[0006]** The present invention solves these problems by providing a means for multiple layers of storage within a hollow door storage system that maximizes the space available. The present invention limits utilized space by providing a closet door that does not have an additional handle that protrudes outwardly towards the interior space of the room. The present invention also provides a means to view items before removing them from the closet space.

#### **[0007]** 2. Description of the Prior Art

**[0008]** The prior art contains a variety of devices for hollow door storage systems. These devices have familiar design and structural elements for the purposes of storing and retaining various articles. The prior art for hollow door storage systems are structured by allowing only one storage space within the interior space. These devices, however, are not optimally structured to maximize the amount of storage for the space provided, nor do they provide an improved means of organizing fashion accessories or similar articles. They similarly do not allow for viewing of articles within the storage space itself prior to removal thereof.

**[0009]** U.S. Pat. No. 6,238,030, U.S. Patent Application No. 2002/0008449 (continuation in part) and U.S. Patent Application No. 2003/0085641 (continuation in part) to Matselboba all disclose a method to make a hollow door closet, a kit to make a hollow door closet and the hollow door closet itself. The hollow door closet includes a door having a hollow interior, a volume of the hollow interior bounded at least by a backing and at least one sidewall. At least one secondary door

is mounted to the door by a hinge, further providing a boundary of the volume and including an interior wall and an exterior wall. The hollow door closet has at least one hooking device that may be mounted to the backing or to the secondary door. A layer of foam is mounted to a portion of the back wall in order to pin things to it. The one or more secondary doors are provided to provide a boundary to the hollow interior. The secondary doors each have a lock and handle, the handle extending out into the interior of the room. There is space within the interior storage area along the back wall that provides storage for articles of clothing or on one of the secondary doors. The Matselboba device does not extend rearwardly from the closet door, which significantly limits storage space, while its door entry is a door gate that opens using two doors that spread apart to gain access to the hollow interior. The present invention provides an internal cavity that protrudes from both sides of a standard door, improving overall storage space. It further provides a standard swinging door for access to the cavity interior, which provides another, uninterrupted surface along the backside of the door for hanging articles or for mounting a mirror device.

**[0010]** U.S. Pat. No. 5,163,745 to Zagata describes a door closet that includes a closet box that extends rearwardly to define a compartmented chamber for containing various articles. A modification of the invention includes fiber optic illumination operative through a switch member relative to the closet box. The closet box includes at least one shoe rack, shelves and chambers for storage. This door closet provides storage space only along the back wall of the compartment chamber. The door closet and closet box both have handles that are similar to that provided in the Matselboba device, which are less than ideal given the additional space that the handles take up within the room.

**[0011]** U.S. Pat. No. 3,822,925 to Osroff describes a utility door storage container. The door frame has inner annular surfaces receivable of a removable storage container mountable within the annular through space of the annular frame. The storage container includes structures for removably mounting a plurality of shelves and coat hanger support. The storage container composed of a light weight fire-resistant plastic. The utility door storage container provides storage space along the back wall of the container and is removable. The storage space is located only against the back wall of the storage container, which does not maximize the space within the storage container.

**[0012]** U.S. Pat. No. 6,652,049 to Tyner discloses a door having storage and display areas provided therein. The door includes a back wall, side walls, and a shelf which cooperates to define storage spaces therein. The storage spaces may be enclosed by a door included therein. The main focus for this device is a way to display the items that will be placed in the storage area. There is only one section of shelves that are provided within this device. This does not focus on the ability to maximize storage space.

**[0013]** The devices disclosed in the prior art do not address the need for maximizing the storage space that is available through a storage space within the hollow of a door. The current invention relates to a device that allows a user to access articles through one or more swinging door panels on a door and view what is selected with a mirror attached to the interior of the attached storage door. It substantially diverges in design elements from the prior art by the improved storage means and consequently it is clear that the present invention is not described by the prior art. A need therefore exists for an

improved hollow door storage system that provides access to a multitude of accessory items and that allows a user to view items prior to leaving the storage area. In this regard the instant invention substantially fulfills these needs.

#### SUMMARY OF THE INVENTION

**[0014]** In view of the foregoing disadvantages inherent in the known types of door closets now present in the prior art, the present invention provides a new means of storage and organization while minimizing utilized floor space to accomplish these goals.

**[0015]** It is therefore an object of the present invention to provide a new and improved hollow door storage system that has all of the advantages of the prior art and none of the disadvantages.

**[0016]** The primary object of the present invention is to provide a storage compartment mounted within the thickness of an existing door, wherein articles may be stored therein while reducing utilized space within a dwelling.

**[0017]** Another object of the present invention is to provide a secondary door access for the storage compartment within a larger door that houses the compartment and a fold out panel.

**[0018]** Yet another object of the present invention is to provide a new and improved hollow door storage system with multiple levels of storage, along with a fold out panel that increases usable surface area for storage of articles.

**[0019]** Still another object of the present invention is to provide a new and improved hollow door storage system with a mirror for viewing items as they are accessed.

**[0020]** Another object of the present invention is to provide a new and improved hollow door storage system that allows a user to utilize the system for the organization of fashion accessories or similar articles.

**[0021]** Other objects, features and advantages of the present invention will become apparent from the following detailed description taken in conjunction with the accompanying drawings.

#### BRIEF DESCRIPTIONS OF THE DRAWINGS

**[0022]** Although the characteristic features of this invention will be particularly pointed out in the claims, the invention itself and manner in which it may be made and used may be better understood after a review of the following description, taken in connection with the accompanying drawings wherein like numeral annotations are provided throughout.

**[0023]** FIG. 1, shown is a perspective view of a preferred embodiment of the present invention in an open position.

**[0024]** FIG. 2, shown is a side view of a preferred embodiment of the present invention in a closed position.

**[0025]** FIG. 3, shown is a front view of a preferred embodiment of the present invention in an open position.

#### DETAILED DESCRIPTION OF THE INVENTION

**[0026]** Referring now to FIGS. 1 and 3, there is shown the hollow door storage device 10 of the present invention in a fully open position. The device defines a structure that fits within an outer door frame 12 along a wall surface 11 to provide a door with an internal storage compartment mounted therein. The device is hingeably mounted to the outer door frame 12 to allow operation as a normal interior door. The device includes a door perimeter handle 29 fixedly mounted to an outer door 13 adjacent to the entrance. An interior door 14 set within the outer door 13 encloses the storage compart-

ment while not in use. The interior door 14 is hingeably mounted to an interior door frame 15 that is set within the outer door 13. The interior door has an outer 25 and interior side 26 as well as an outer 31 and inner edge 32. The interior side of the interior door 26 may have peg board 30 thereattached, along with hooks 27 for holding accessories. A mirror 28 is attached to the interior side of the interior door 26 so that a user can locate an accessory and look at it in the mirror before deciding which accessory to use.

**[0027]** The interior door 14 opens up to a panel 16 that is connected to an interior hollow storage compartment 17. The panel 16 is a hingedly attached peg board panel that is connected by a rotatable securing means along the floor 18 and ceiling 19 of the interior hollow storage compartment 17. The panel 16 swings/pivots open to show the hollow storage compartment 17 that projects rearwardly of the door frame perimeter. The interior panel 16 is peg board 30 that allows for hooks 27 to be attached therethrough for placement of hooks and accessory holders. Alternate embodiments of the device allow for further panels within the interior hollow storage compartment 17.

**[0028]** The hollow storage compartment 17 includes a floor 18, a ceiling 19, a back wall 20 and two side walls 21, 22. The space within the hollow storage compartment is bounded by the interior door 14. The back wall 20 has peg board 30 which hooks 27 can be attached for holding accessories.

**[0029]** In the preferred embodiment of the device, accessory items are placed on the hooks 27 located on the interior side of the interior door 26, both sides of the panel 23, 24 and on the back wall 20. Small items can also be placed along the floor of the hollow storage compartment 17. Once a user is done with the selection of an accessory, the panel 16 can pivot back to a flat position parallel with the wall and frame. The interior door 14 can be closed over the panel 16 and hollow storage compartment 17. The interior door 14 can be kept closed in place by a sealing means. One option to secure the interior door 14 in place is through magnets at either end of the outer edge 31 that would connect to magnets on the interior door frame 15 of the device. An alternate embodiment of the device includes shelves along the back wall 20.

**[0030]** Referring now to FIG. 2, there is shown a side view of the hollow door storage device 10 in the closed position. The outside of the hollow storage compartment 17 can be viewed from the right side of the drawing extending outward from the outer door 13. The interior door 14 can be viewed on the left side of the drawing as it extends out from the outer door 13. The door perimeter handle 29 is fixedly mounted to an outer door 13 and is shown in the forefront of the drawing. The interior door 14 does not extend outward from the outer door and beyond the door perimeter handle, thereby ensuring that space is limited to the door area and within the space behind the door.

**[0031]** In use, the present invention provides a means to store various articles and accessories within an internal cavity that is supported from a sectioned outer door. Access is provided to the cavity via an interior door, and an internal panel is hingeably attached therein to increase surface area of the cavity to provide further attachment locations for articles and accessories. The surfaces may be lined with peg board that allows any configuration of hooks or supports to be mounted thereto, or likewise sections of the surfaces may be adorned with mirror devices. The goal is to provide a user with a compact storage means for areas wherein large closets or dressers are not practical. The depth of the cavity and the

number of internal panels may be adjusted to suit a particular user's preferences, but it is preferred to keep the width of the cavity within the confines of the door perimeter handle to prevent oversized, bulky or cumbersome door closet cavities.

**[0032]** The present invention may be provided as a combined structure wherein the interior cavity is provided within a larger door, or alternatively, the device may be provided as a door insert adapted to be incorporated into an existing door and installed by a user therein. The device provides a convenient cavity that does not require excess floor space or wall space to store accessories and other items, while providing a modular design that allows the user to customize the interior setup of hooks and attachments. The interior door is a unitary structure, while the interior panel comprising of peg board material hingeably rotates outward to increase usable surface area within the cavity. The device may be manufactured as a complete door replacement, or as an insert, wherein the interior cavity is provided for placement within an existing door.

**[0033]** To this point, the instant invention has been shown and described in what is considered to be the most practical and preferred embodiments. It is recognized, however, that departures may be made within the scope of the invention and that obvious modifications will occur to a person skilled in the art. With respect to the above description then, it is to be realized that the optimum dimensional relationships for the parts of the invention, to include variations in size, materials, shape, form, function and manner of operation, assembly and use, are deemed readily apparent and obvious to one skilled in the art, and all equivalent relationships to those illustrated in the drawings and described in the specification are intended to be encompassed by the present invention.

**[0034]** Therefore, the foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention.

I claim the following:

**1)** A hollow door storage system device for hanging or storing articles, comprising:

an outer door that is hingeably attached to an outer door frame;  
 said outer door having a handle that is disposed on said outer door to facilitate opening of the same;  
 an interior door that is mounted to an interior door frame that is set into said outer door;  
 said interior door having an outer and interior side and outer and inner edge;  
 said interior door having a hollow interior, an interior volume of said hollow interior bounded by a floor, ceiling and two side walls;  
 said interior door being secured in the closed position by a sealing means;  
 at least one panel oriented attached to said floor and ceiling of said hollow interior so that said panel pivots open from a closed position to an open position;  
 peg board attached to said interior side of said interior door and said back wall, and said panel being comprising of peg board.

**2)** The device of claim 1, further comprising at least one hooking device mounted to said peg board that is located on said interior side of interior door, said back wall and said panel;

**3)** The device of claim 1, further comprising a mirror attached to said interior side of said interior door.

**4)** The device of claim 1, wherein said interior door sealing means is by magnets located along said inner edge of said interior door and said interior door frame.

**5)** The device of claim 1, wherein said panel is attached to said interior side wall by hinges.

**6)** The device of claim 1, wherein shelves are attached to said back wall.

**7)** A hollow door storage system device for hanging or storing articles, comprising:

an outer door that is attached to an outer door frame by hinges;  
 said outer door has a handle that is disposed on the outer door to facilitate opening of the same;  
 an interior door that is mounted to an interior door frame that is set into said outer door;  
 said interior door having an outer and interior side and outer and inner edge;  
 said interior door having a hollow interior, an interior volume of said hollow interior bounded by a floor, ceiling and two side walls;  
 said interior door is secured in the closed position by a sealing means;  
 at least one panel oriented transversely and attached to said side wall of said hollow interior so that said panel pivots open from a closed position;  
 peg board attached to said interior side of said interior door, said back wall and panel;  
 shelves are mounted to said back wall.

**8)** The device of claim 7, further comprising at least one hooking device mounted to said peg board that is located on said interior side of interior door, said back wall and said panel.

**9)** The device of claim 7, further comprising a mirror attached to said interior side of said interior door.

**10)** The device of claim 7, wherein said interior door sealing means is by magnets located along said inner edge of said interior door and said interior door frame.

**11)** The device of claim 7, wherein said panel is attached to said interior side wall by hinges.

**12)** A hollow door storage system device for hanging or storing articles and adapted for incorporation into an existing door, comprising:

an interior door that is mounted to an interior door frame;  
 said interior door having an outer and interior side and outer and inner edge;  
 said interior door having a hollow interior, an interior volume of said hollow interior bounded by a floor, ceiling and two side walls;  
 said interior door being secured in the closed position by a sealing means;  
 at least one panel oriented attached to said floor and ceiling of said hollow interior so that said panel pivots open from a closed position to an open position;  
 peg board attached to said interior side of said interior door and said back wall, and said panel being comprising of peg board.

**13)** The device of claim 12, further comprising at least one hooking device mounted to said peg board that is located on said interior side of interior door, said back wall and said panel;

**14)** The device of claim 12, further comprising a mirror attached to said interior side of said interior door.

**15)** The device of claim **12**, wherein said interior door sealing means is by magnets located along said inner edge of said interior door and said interior door frame.

**16)** The device of claim **12**, wherein said panel is attached to said interior side wall by hinges.

**17)** The device of claim **12**, wherein shelves are attached to said back wall.

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