



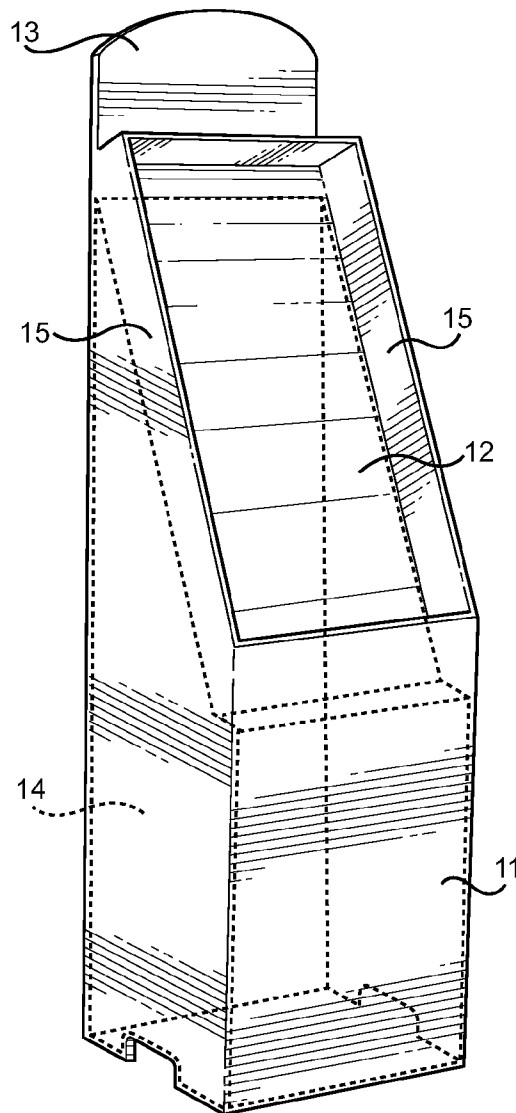
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(19) **United States**(12) **Patent Application Publication**
Heintz(10) **Pub. No.: US 2012/0248050 A1**(43) **Pub. Date: Oct. 4, 2012**(54) **REUSABLE AND STACKABLE
MERCHANDISE RACKS**(76) Inventor: **Gregory Heintz, Naples, FL (US)**(21) Appl. No.: **13/430,792**(22) Filed: **Mar. 27, 2012****Related U.S. Application Data**

(60) Provisional application No. 61/469,431, filed on Mar. 30, 2011.

Publication Classification(51) **Int. Cl.**
A47F 1/04 (2006.01)(52) **U.S. Cl. 211/59.2**(57) **ABSTRACT**

Disclosed is a stackable display stand comprising a unitary structure having an open interior volume, a forward-facing shelf or rack area, a display header and a lower foundation region. The stand is adapted to support and display a plurality of merchandise items on its shelf area and to display signs along its header for use in retail areas, wherein magazines, literature or sale items may be easily displayed for customers or passersby to visualize and purchase. The stand structure is designed to be insertable into a second stand of the same design, wherein the open interior volume allows two or more stands to be stacked on top of one another when stowed or transported, reducing consumed space. The stand is adapted to provide a sturdy, stackable replacement for currently available corrugated or collapsible stands utilized in marketplaces, convention areas or other consumer high traffic areas.



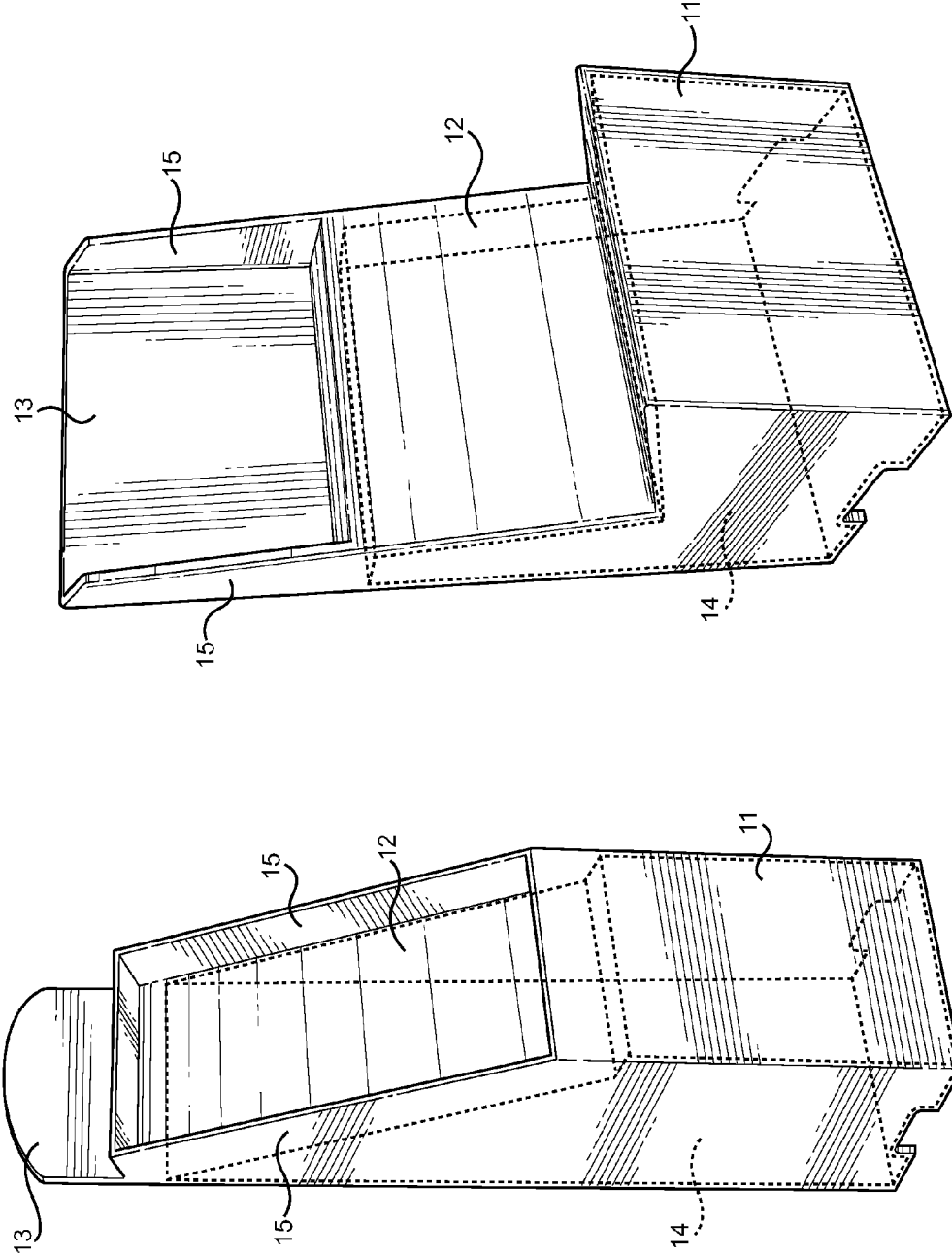


FIG. 2

FIG. 1

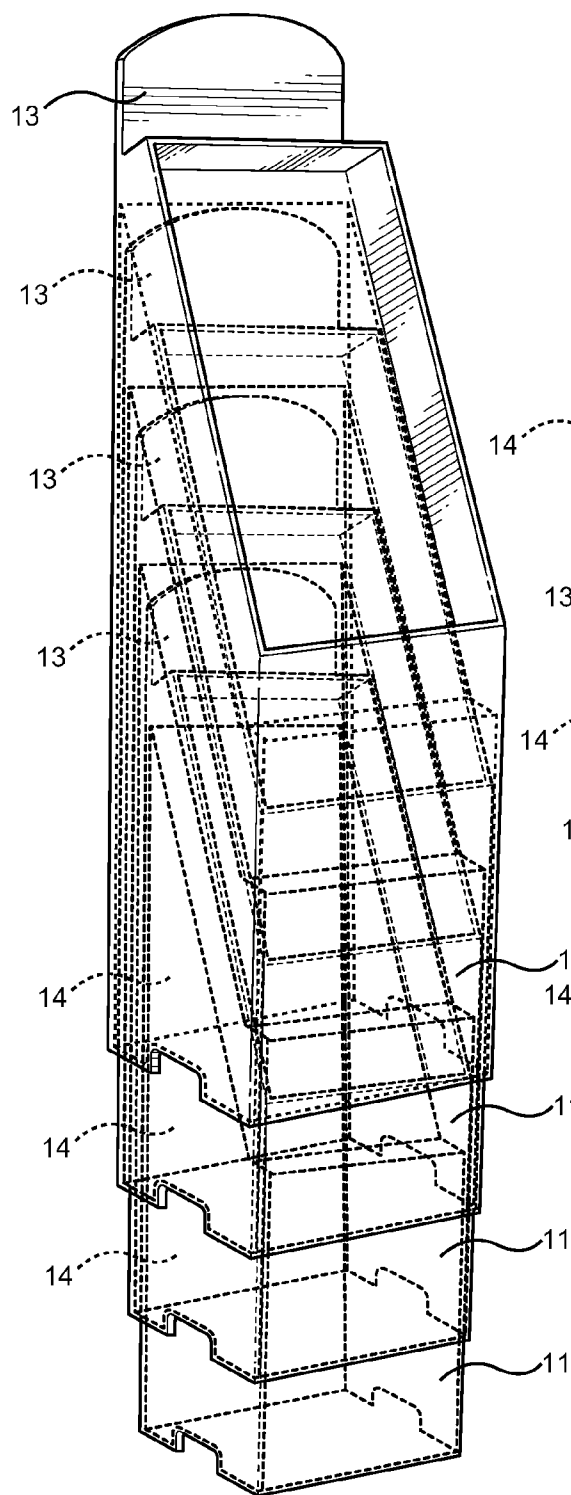


FIG. 3

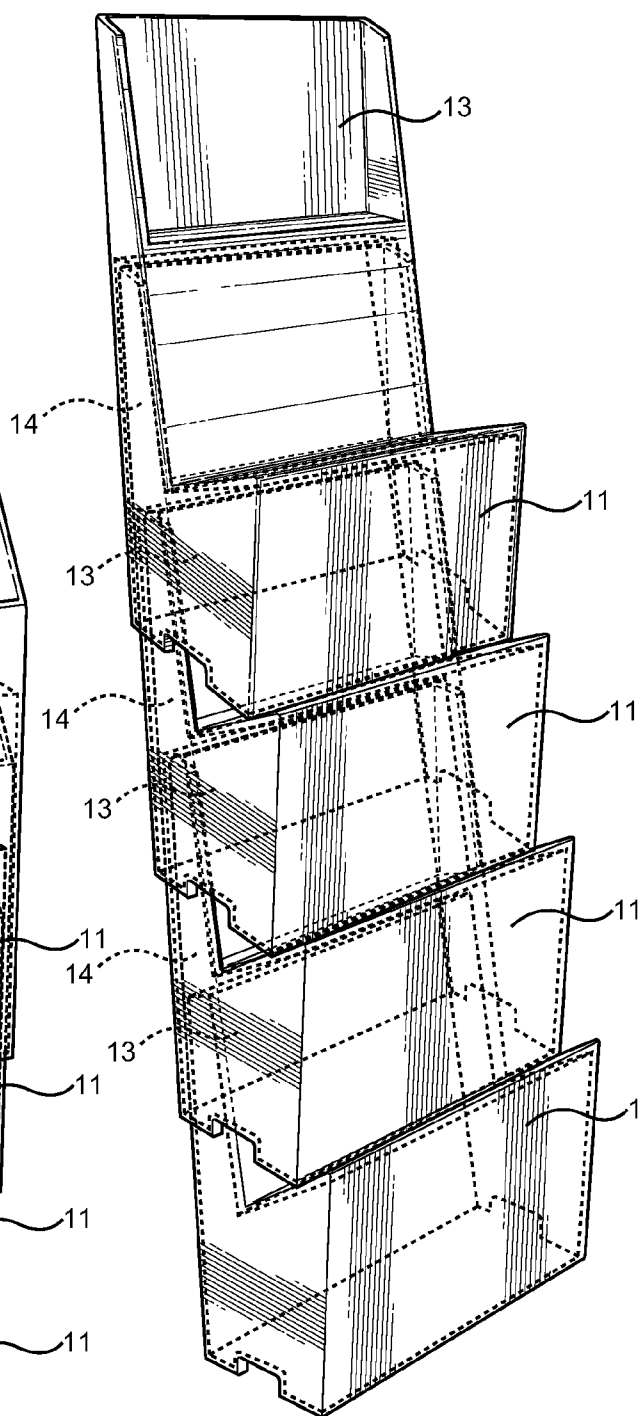


FIG. 4

REUSABLE AND STACKABLE MERCHANDISE RACKS

CROSS REFERENCE TO RELATED APPLICATION

[0001] This application claims the benefit of U.S. Provisional Application No. 61/469,431 filed on Mar. 30, 2011, entitled "Stack-A-Slant."

BACKGROUND OF THE INVENTION

[0002] 1. Field of the Invention

[0003] The present invention relates to display racks and merchandise support shelves. More specifically, the present invention pertains to a reusable, formed shelf structure that is constructed of unitary construction that can be stacked when not in use to reducing wasted space and eliminate shelf assembly when deployed.

[0004] Merchandise racks are devices utilized in retail environments to display consumer goods and other articles for distribution, such as magazines, food products or pamphlets. The present invention relates to rack systems having an independent structure, wherein the display rack is capable of standing independently of a support structure, which differentiates its type of structure from wall-mounted racks or retail shelving, wherein these items are secured to a wall, hold considerably more products and are not suited for modular placement within a retail environment. The present invention relates to an independent display rack or stand device that is moveable to any desired position for displaying a given product, such the ends of supermarket aisles, entrances to an area or any prominent customer location within a store. It is also related to a support stand for literature, flyers or informational pamphlets, which can be placed within an office or utilized in a temporary location, such as a convention or temporary kiosk. These types of racks and display stands, unlike static store fixtures or merchandise stands, are well adapted for temporarily displaying and distributing articles to a particular audience, wherein the information or articles can be placed in a particular point of interest, point of purchase, or high traffic area.

[0005] 2. Description of the Prior Art

[0006] Currently available display stands include those of varying structure and design for the purpose of creating a standalone display that attracts purchases or passerby attention. Typical display stands, also known as point of purchase displays, are generally temporary structures comprised of a folded, corrugated material that formed to create a segmented, disassemblable structure. These types of displays are useful for creating a temporary stand and one of low cost to the user. However, these devices are generally low weight-bearing and require assembly to deploy. After their use, they are generally discarded or recycled in favor of a fresh replacement sign. These temporary structures are thus cumbersome to deploy and adapted to provide a short lifespan before being discarded.

[0007] The present invention provides a sturdy structure formed of a molded or preassembled shape, wherein a display rack and display area is provided and is well adapted to support considerably heavier loads than temporary display racks. Further, the present invention is designed to be readily stackable with racks of the same design, wherein a first rack can be inserted into the open interior volume of a second rack to facilitate ease of storage and transportation. The molded,

heavier duty construction also allows a user to wash the rack after each use, in the case of supporting food products wherein spillage or leaking items may require cleaning between uses. The design of the display rack includes an open interior volume adapted to accept the upper portion of a rack of the same design, a forward-facing shelf or rack area, a display header and a lower foundation region.

[0008] Devices have been disclosed and patented in the prior art that relate to display racks and temporary supports for retail goods and magazines. These devices have familiar design elements for the purposes of supporting and displaying articles; however these devices lack structural features and stacking ability of the present invention. The most relevant display rack devices in the prior art do not describe a display device that employs an upper region adapted to conform to the inner volume of its lower region, facilitating stacking of a plurality of racks of equal design. Most devices relate to temporary, disposable display racks, or those of differing intent or design. The devices deemed most relevant to the present disclosure are herein provided.

[0009] Specifically, U.S. Pat. No. 5,443,168 to Dyment discloses a portable display comprising a front panel, a back panel, opposing side panels and a bottom panel assembly having four bottom flaps. The bottom flaps are foldable into a closed position to form a seat to mount a wheel assembly, wherein the assembly can then be easily transported by tipping the display and rolling it into a desired location. The Dyment device provides an assembly that can be constructed and deconstructed to form a plurality of support shelves, while a wheel assembly provides a means to transport the shelf assembly from one location to another. While providing a unique display shelf, the Dyment device provides no means to stack or combine when stowed after use.

[0010] U.S. Pat. No. 4,646,922 to Smith describes a merchandise display stand having a plurality of shelves that are continuously adjustable along a pair of tracks that provide vertical adjustment of each shelf therealong. The elevation of each shelf is adjustable along each track to accommodate different sized merchandise and user preferences. In a similar drawback as the Dyment device, the Smith device discloses no means for stacking a plurality of displays after use for storing or transporting purposes. The Smith device is related to a new and improved display shelf that provides inherent adjustability with regard to the shelving location to accommodate larger or smaller sized merchandise thereon.

[0011] Further, U.S. Pat. No. 4,506,790 to Muscari describes an assemblable merchandise support for displaying articles in a vertical relationship, wherein the support is comprised of a cardboard, boxboard or other similar sheet material. The support comprises a base having a vertical back panel and opposing side panels folded forward to create a support for a plurality of shelves placed therein via tab and slot joints. The Muscari device discloses the common temporary merchandise support shelf that is assembled from a sheet material to form a display having a plurality of shelves and an assembly that is easily located and discarded after use. The shelves are removable to provide a modular structure and one that can be easily assembled from inexpensive materials. The present invention, alternatively, is one of defined structure, wherein a display rack is provided having a stackable design and one that can be readily used without assembly and thereafter cleaned and reused.

[0012] Finally, U.S. Pat. No. 4,322,005 to Robertson discloses a corrugated paper display stacker having a plurality of

rotatable trays that are deployable into a horizontal position and stowable into a vertical position when not in use. A double acting torsion spring having hooks on protruding fingers are inserted into the fluting of each tray, wherein the tray can be pivoted into its two primary positions to facilitate use or storage. The weight of merchandise keeps the trays in their working position, while when unloaded the trays are rotated back to their vertical state. The Robertson device discloses a display shelf having support shelves that can be stowed into a vertical position when not in use, as opposed to the present invention, which offers a display rack design that is insertable into the base of second display rack device to allow stacking. No moving parts are included in the present invention, but rather the exemplary embodiment contemplates a formed, unitary structure that is comprised of a molded plastic or similarly designed, one-piece unit.

[0013] The present invention comprises an upright, stand-alone display rack adapted for retail use, wherein the rack can be easily transported and placed in an ideal location to attract customers and distribute articles to passersby. The rack is preferably constructed of a molded, single-piece construction that includes a shelf region, a display header, a base and an interior volume adapted to accept the shelf region and display header of a second rack of identical design. This provides a structure that is easily stackable and facilitates improved storage and transportation, while its structure promotes continual reuse for different locations or purposes. The structure and intent of the present invention is substantially divergent in design elements from the prior art, consequently it is clear that there is a need in the art for an improvement to existing temporary display rack devices. 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 merchandise displays now present in the prior art, the present invention provides a new display wherein the same can be utilized for providing convenience for the user when storing a plurality of identical displays in a stacked configuration between temporary deployments in desired locations.

[0015] It is therefore an object of the present invention to provide a new and improved display devices device that has all of the advantages of the prior art and none of the disadvantages.

[0016] It is another object of the present invention to provide a reusable merchandise display that provides an interior volume adapted to accept a second display of identical design, allowing a plurality of displays to be stacked.

[0017] Another object of the present invention is to provide a reusable merchandise display that can be easily cleaned between uses and thereafter redeployed.

[0018] Yet another object of the present invention is to provide a merchandise display that is preferably of a molded, single-piece construction that requires not setup or assembly to deploy.

[0019] Another object of the present invention is to provide a merchandise display that alternatively requires very little assembly to initially deploy, whereafter the display remains assembled and can be stacked for condensed storage or transport.

[0020] It is a final object of the present invention to disclose a merchandise display having a base, a display rack area, a display header and an open internal volume, wherein the

display rack is adapted to support a plurality of retail or informational articles thereon for display, purchase or distribution.

[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 shows a frontal perspective view of an embodiment of the present display rack in a deployed state.

[0024] FIG. 2 shows a frontal perspective view of an embodiment of the present display rack in a deployed state.

[0025] FIG. 3 shows a frontal perspective view of an embodiment of the present display rack in a stacked state.

[0026] FIG. 4 shows a frontal perspective view of an embodiment of the present display rack in a stacked state.

DETAILED DESCRIPTION OF THE INVENTION

[0027] Reference is made herein to the attached drawings. Like reference numerals are used throughout the drawings to depict like or similar elements of the display rack device. For the purposes of presenting a brief and clear description of the present invention, the preferred embodiment will be discussed as used for providing a rugged, stackable and reusable display rack device. The figures are intended for representative purposes only and should not be considered to be limiting in any respect.

[0028] Referring now to FIGS. 1 and 2, there are shown frontal perspective views of the merchandise stand of the present invention in a deployed state. The stand is a stand-alone structure that is self-supportive and adapted to retain and display a plurality of items thereon for retail or informational purposes. The stand of the present invention is one contemplated as having a singular, molded shape so as to create a rugged, ready to use stand that requires no additional steps to assemble or deploy. An alternate embodiment further contemplates minor assembly steps to form the finalized shape. In both embodiments, the primary source of novelty lies in the reusability and stackability of the stand shape, wherein the stand can be deployed for holding a wide variety of items, whereafter it can be cleaned and stored in a condensed, stackable layout so as to reduce unnecessary consumption of floor space in a particular environment.

[0029] There are several key elements to the present invention which form the stand shape and facilitate its function. Specifically, the stand comprises a base **11** that supports the upper portions of the stand and is adapted to support a given design load of merchandise while remaining stable during operation. Above the base **11** is a display rack area **12** in which merchandise, literature or any other placeable articles may be positioned for passersby to inspect and remove. Above the display rack area **12** is a display header **13**, which can be utilized to secure placards, sale signs or other eye-catching information that a retailer may utilize to draw attention to the stand. While deployed, the base is placed on a flat surface and supports the stand and merchandise placed

thereon. The base **11** is therefore required to be of sufficient width and depth to prevent tipping of the assembly. In an exemplary embodiment, the base is a rectangularly hollow member having an open interior volume **14** enclosed by a forward surface, a rear surface and two opposing lateral surfaces. The open interior reduces overall weight of the device, and further facilitates the primary advantage of the present invention: stackability.

[0030] The present invention upper portion comprises the display header **13** and display rack area **12**, which is supported by the stand base **11**. The upper portion elements are adapted to fit within the open interior volume **14** within the stand base **11** to allow a first stand to be placed on top of a second stand of identical design, wherein the two can be condensed within one another in a shortened overall height. A majority of the subordinate stand is placed within the stand thereover to efficiently condense their combined stacked height. Subsequent racks of identical design can further be added to create several stacked merchandise racks, reducing wasted space, facilitating stowage and improving simultaneous transport of more than one rack.

[0031] The present racks are adapted for multiple uses, wherein their structure allows a user to display a given set of articles, remove those articles and clean the rack before redeployment. The structure of the rack is preferably one of molded plastic or similar material, which forms a unitary structure with no separated or moving parts. The rack can be stripped of all signs and supported articles and pressure washed or hand washed between uses, if so desired. If no food products are handled, cleaning may be unnecessary or require less diligence. In an alternate form, the rack can be supplied in several pieces and require minor assembly prior to use. The walls of the base **11** may be attachable together to form the base, whereafter the display rack **12** may be assembled thereto and finally the display header may be fitted. A plurality of brackets and fasteners are used to join the elements of the rack to form its final shape. After assembly, the rack is kept together and stored in a stacked configuration as with the case of the unitary embodiment.

[0032] The display rack area **12** of the present invention may also take several forms. In its simplest form, this area **12** is an inclined region that meets an outwardly directed ledge forming a surface upon which to place an article and have it rest against the inclined region. This configuration is shown in FIG. 2. In another embodiment, and as shown in FIG. 1, the rack area **12** is an enclosed area wherein outwardly projecting sidewalls **15** prevent articles from falling from either side of the device. The outwardly directed ledge may also be enclosed to form a pocket region, which securely retains any articles placed therein, such as magazines or food products. Further still, the inclined region of the display area **12** may be tiered or stepped in order to provide several ledges upon which to place articles in a stepped fashion and in vertical relationship. Finally, the display header may be enclosed, removable or absent from the display, allowing for a modular, stackable rack system that provides flexibility and several design variants for a user to deploy.

[0033] Referring now to FIGS. 3 and 4, there are shown frontal perspective views of the present invention in a stacked state, wherein a plurality of display stands of identical design are stacked upon one another to reduce consumed space. Each stand employs an open interior volume **14** within its base **11**, within which the upper region of the stand is fitted. The upper region comprises of the display area **12** and the display header

13. The design of the open interior volume **14** is one that allows the outer contour of the stand upper region to fit therein, facilitating fitment of one stand over a majority of another stand such that the two are tightly compacted. Several stands may be stacked in alignment, whereafter they may be separated and deployed as necessary.

[0034] The design and construction of the stand may take several forms. In an exemplary embodiment, the stand is one of formed or molded plastic and of unitary construction. The thickness and material of the stand is designed to withstand a design load of merchandise, while also providing a material and thickness thereof that resists cracking, scratching or denting during use. The assembled embodiment utilizes several independent pieces of similar material that are secured together via fasteners and other hardware to form the desired shape, having equal ruggedness of the unitary embodiment.

[0035] The main goals of the present invention is to disclose a merchandise display stand of improved ruggedness and having a novel means of storage, such that several stands can be stacked and stored between uses. The stand is ideal for retail environments and is to be capable of readily presenting a product, product information or promotional item in an appealing manner to the customers and in a desired location. They provide improved point of service sales where static displays and rack fixtures may fall short. The present invention is a self-supportive stand having an inherently stackable design, and one that can be easily moved or placed in high visibility areas to grab attention to improve sales or distribution of material. The specific design details of the present invention are not intended to be limited, but rather it is desired to disclose a display stand having a base, display rack area, a display header and an open interior volume so as to facilitate stacking of identical stands.

[0036] In light of the submitted prior art and the given disclosure, it is submitted that 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.

[0037] 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:

- 1) A stackable display stand, comprising:
 - a base having a forward surface, a rear surface and two connecting lateral surfaces;
 - an upper region above said base comprising a display rack area adapted to support a plurality of articles thereon;
 - an open interior volume within said base and extending into said upper region;

said upper region exterior shape adapted to fit within said open interior volume of said base and upper region to facilitate stacking of identical stands.

2) The device of claim 1, wherein said upper region further comprises a display header above said display rack area.

3) The device of claim 1, wherein said display rack area further comprises an inclined region having an lowermost outwardly projecting ledge forming a surface upon which to place articles thereon and thereagainst.

4) The device of claim 1, wherein said display rack area further comprises outwardly projecting sidewalls along lateral sides to enclose said display rack area.

5) The device of claim 1, wherein said display rack area further comprises an inclined region having a lowermost outwardly projecting ledge and outwardly projecting sidewalls along lateral sides to enclose said display rack area and form a pocket region.

6) The device of claim 1, wherein said display rack area further comprises a plurality of ledges upon which to place articles in a stepped fashion and in a vertical relationship.

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