

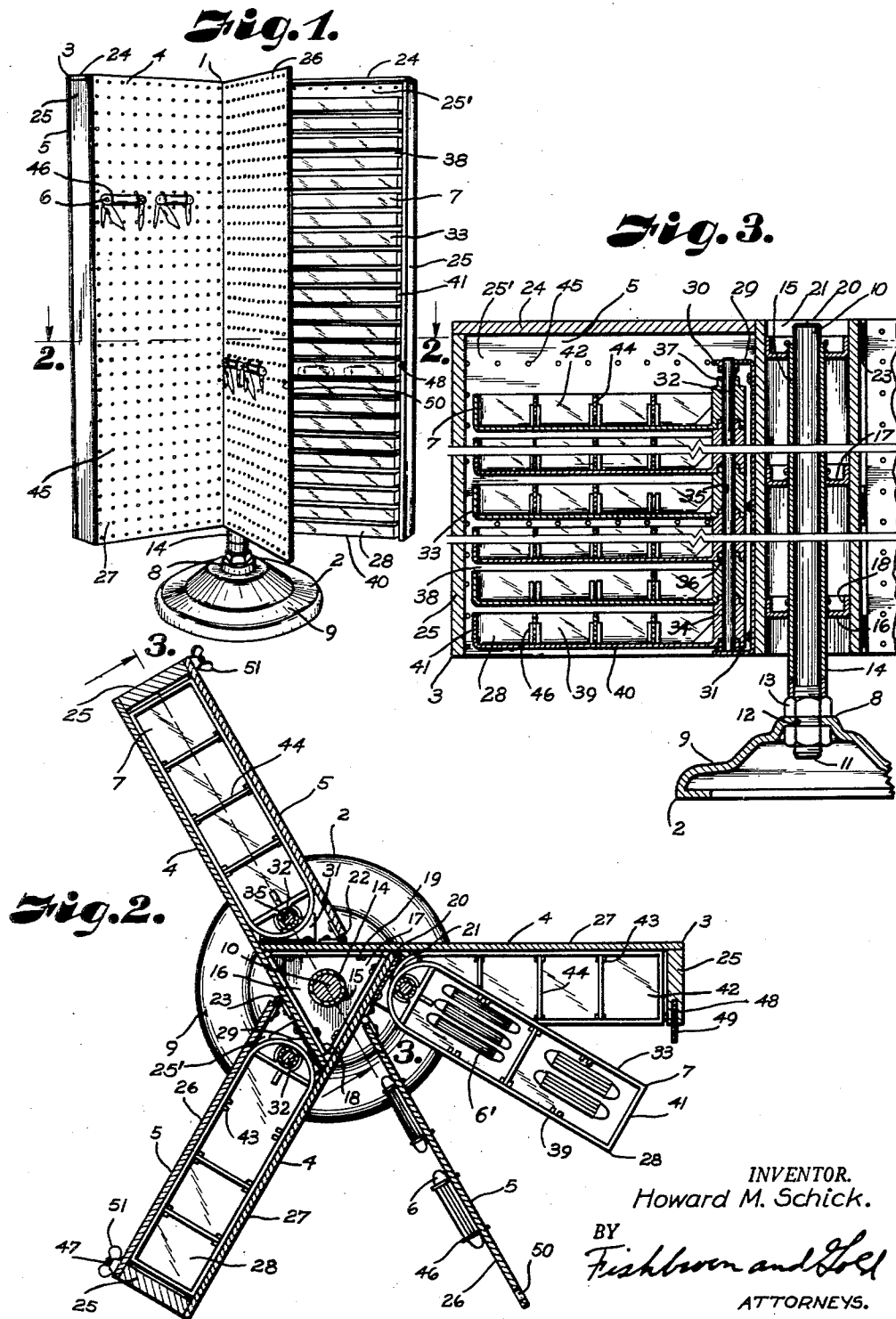
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ARTICLE DISPLAY AND STORAGE STRUCTURE

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ARTICLE DISPLAY AND STORAGE STRUCTURE

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This invention relates to structures for displaying merchandise and the like, and more particularly to a novel structure for open display of a plurality of articles with storage space for additional articles.

The principal objects of the present invention are to provide an article display and storage structure for a plurality of articles which are either secured in place or in closed areas to be substantially pilfer-proof; to provide such a display structure with one or more wings each having spaced panels with exposed surfaces for display of articles with an article storage therebetween; to provide such a display structure wherein the display area is relatively large and the floor or counter space occupied thereby is relatively small; to provide such a display wherein wings extend radially and are rotatable on a standard whereby each display panel may be viewed from one position; to provide such a display structure wherein spaced panels form sides of a storage area with the panels relatively swingable to expose a plurality of relatively swingable vertically spaced trays or compartments containing articles; and to provide an article display and storage structure that is economical to manufacture and that is efficient in use for the display and for holding articles to be dispensed therefrom.

Other objects and advantages of this invention will become apparent from the following description taken in connection with the accompanying drawings, wherein are set forth by way of illustration and examples certain embodiments of this invention:

Fig. 1 is a perspective view of an article display and storage structure embodying the features of the present invention.

Fig. 2 is a horizontal sectional view through the display and storage apparatus taken on the line 2—2, Fig. 1.

Fig. 3 is a vertical sectional view through the article and storage structure taken on the line 3—3, Fig. 2.

Referring more in detail to the drawings:

1 designates an article display and storage structure generally consisting of a support 2 on which radially extending wings 3 are swingably mounted, said wings having spaced panels 4 and 5 with opposite faces adapted to support articles 6 for display, with a storage 7 between said panels 4 and 5 for articles 6'. The storage space is substantially completely enclosed whereby the articles therein are retained in a substantially pilfer-proof storage.

The wings 3 may be hingedly mounted on a suitable support carried by a wall or the like or other swingable or rotatable mounting. In the illustrated structure, the support 2 includes a standard 8 having a base 9 adapted to rest on the floor or counter with an upright post or column 10 on the base. The post or column illustrated is a rod having a threaded lower end 11 extending through an aperture 12 in the base with nuts 13 threaded thereon and engaging the base to support the post therefrom. A rotor 14 consists of a tubular sleeve or bearing member 15 sleeved on said column 10 and rotatable thereon, said

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sleeve 15 having a plurality of vertically spaced hubs 16 secured thereto. The hubs 16 have horizontal walls 17 secured to the sleeve as by welding and extending outwardly therefrom and terminating in upstanding flanges 18 with the flanges 18 of one hub parallel to corresponding flanges of the other hubs. The number of flanges on each of the hubs corresponds to the number of wings in the display structure. In the illustrated structure, the hubs 16 have a substantially triangular periphery with the flanges 18 arranged on each of three sides. Wing panels 4 are suitably secured as by screws 19 to vertically aligned flanges 18 of each hub whereby the panels extend outwardly from the hub with the inner edge 20 of each panel 4 substantially engaging the inner face 21 of the next adjacent panel 4. The panels 4 and 5 of each wing 3 are spaced apart preferably substantially equally spaced from a radial plane with the panels 4 spaced from and parallel to said radial plane, as illustrated in Fig. 2. The inner edge portions 22 of the panels 5 are swingably mounted on hinges 23 secured to the panel 4 that forms the inner end of the storage space 7 of the respective wing in spaced relation to the panel 4 that forms the other side of said wing. The panels 5 are co-extensive in height with the panels 4 and of suitable width whereby the outer edges of the panels 4 and 5 of the respective wing are in a plane perpendicular to the radial plane of said wing. Top and end wall members 24 and 25 are fixed to the panels 4 adjacent the upper edges and outer edges respectively and extend toward the panels 5. The top and end wall members are preferably of a width whereby they are engaged by the panels 5 when said panel is substantially parallel with the respective panel 4 whereby the panels 4 and 5 and top and end walls 24 and 25 cooperate to enclose an article storage space 25' therebetween. The panel 5 is swingable whereby it may be swung until the outer face 26 thereof will engage the outer face 27 of the panel 4 of the next wing.

Storage members 28 are arranged in the storage space 25' of each wing between the panels 4 and 5 and preferably are swingably mounted relative thereto. In the illustrated structure, brackets 29 are secured to the panels 4 at the inner ends of each storage area and have outwardly extending top and bottom flanges 30 and 31 supporting an upright post 32 in each wing 3 with a plurality of vertically spaced trays or containers 33 pivotally mounted on said post. In the illustrated structure, each tray has a hub portion 34 at one end with a bore 35 extending therethrough whereby the post or pin 32 extends through the bore to rotatably mount the trays. The lower portion of each hub has a counterbore 36 and the upper portion of each tray has an extension 37 that extends into said counterbore to add to the support for the trays, the hub portions being slightly longer than the height of the trays whereby the trays are spaced as at 38. The compartmental portion of the trays extends from the hub portions with side, bottom and end walls 39, 40 and 41 respectively arranged to provide open top compartments or bins 42 for receiving articles of merchandise. The side walls preferably have inwardly extending spaced lugs 43 for receiving transverse partitions 44 therebetween for dividing the trays into additional compartments. The trays are each open top, and the spacing 38 very small whereby said spacing is less than the thickness of an article stored in the trays to prevent an article from being removed therefrom when the trays are positioned one over the other.

The panels 4 and 5 are preferably of the type having a plurality of spaced apertures 45, or what is sometimes referred to as "peg boards" whereby the articles of merchandise 6 such as knives or the like may be secured to the boards by suitable fasteners 46 such as wires or the

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like that may be tied on the inside of the board to prevent removal of the article on display. The articles may be displayed on the outer faces 26 and 27 of both boards 5 and 4.

The trays 33 are normally positioned one over the other with one side wall 39 engaging the inner surface of the panel 4 of the respective wing with the inner surface of the panel 5 engaging the opposite side of the trays, with the panels 4 and 5 secured one to the other by suitable fastening device 47. In the illustrated structure, a bolt 48 is secured to the respective end wall 25 and has a threaded end 49 extending through an aperture 50 in the associated panel 5 whereby said threaded end will extend through the aperture and a wing nut 51 applied to the bolt to hold the panels in tray-retaining position. Such a fastener will retard entry to the trays; however, padlocks or other fasteners may be used whereby only authorized personnel could release the panels one from the other. The trays 33 are preferably formed of transparent plastic whereby some view of the merchandise stored in the tray is visible from the sides of the trays but inaccessible until the tray is moved from its tiered relation. A person may view the merchandise displayed on the panels and may swing the panels about the vertical axis of the standard to view all of the displayed articles, but it would be difficult to obtain an article from the structure without being noticed by others in the vicinity. When a person desires to purchase an article, he selects the article from the display on the boards and then the sales clerk will release the panel 5 from the associated panel 4 and swing said panel 5 to provide access to the storage space. Each tray 33 is independently swingable whereby it may be swung from the tier to provide access to the articles contained therein. The selected article is removed, and the tray returned to its tiered position. The panel 5 is swung back and again secured relative to the panel 4.

This structure provides a storage for a very large number of different small articles and a large display area therefor and yet uses a relatively small area of the floor or counter. Furthermore, the display is substantially pilfer-proof.

What I claim and desire to secure by Letters Patent is:

1. An article display structure comprising, an upright support, laterally spaced upright normally parallel panels, means mounting one of said panels on said support, an upright wall fixed relative to said one panel and extending therefrom adjacent said support, means hingedly mounting said other panel on said wall for swinging movement toward and away from said one panel, an upright post between said panels and supported adjacent said wall in fixed relation thereto, a plurality of open top containers in a vertical tier between said panels with each container individually swingable on said post, said containers having a width substantially corresponding to the spacing between the parallel panels, said open top containers having a vertical relationship positioned one over the other whereby the upper container prevents access to the next lower container until said other panel is swung away from said one panel and one of said containers is swung on the

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upright post outwardly away from said one panel, and means securing the free ends of the parallel panels one to the other to hold the containers against relative swinging movement.

2. An article display structure comprising, a base, an upright standard on said base, a multi-sided rotor rotatably mounted on the standard, an upright panel secured to each of the sides of said rotor and extending outwardly therefrom, second panels parallel to and spaced laterally from each of said first-named panels, means hingedly mounting said second panels for swinging movement toward and away from the first-named panels, an upright post between said parallel panels and supported adjacent said rotor in fixed relation thereto, a plurality of open top containers in a vertical tier between said parallel panels with each container individually swingable on said post, said containers having a width substantially corresponding to the spacing between said parallel panels, said open top containers having a vertical relationship positioned one over the other whereby the upper container prevents access to the lower container, and means securing the free ends of said parallel panels one to the other to hold the containers against relative swinging movement.

3. An article display structure comprising, a base, an upright standard on said base, a multi-sided rotor rotatably mounted on the standard, an upright panel fixed to each of the sides of said rotor and extending outwardly therefrom with one vertical edge of each panel adjacent the next panel whereby said panels are in fixed angular relationship to said next panel, second panels spaced laterally from each of said first-named panels with each of said second panels parallel to a first-named panel to form a wing therewith, means on each first-named panel hingedly mounting a second panel for swinging movement toward and away from the next first-named panel, an upright post between said parallel first and second panels of a wing and supported adjacent said rotor in fixed relation thereto, a plurality of open top containers in a vertical tier between said parallel panels with each container individually swingable on said post, said containers having a width substantially corresponding to the spacing between said parallel panels, said open top containers having a vertical relationship positioned one over the other whereby the upper container prevents access to the lower container, and means securing the free ends of said parallel panels one to the other to hold the containers against relative swinging movement.

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