EASY ACCESS DISPLAY FRAME SYSTEM FOR PINS AND MEDALS

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Appl. No.: 12/859,250

Filed: Aug. 18, 2010

Publication Classification

Int. Cl. A47F 3/00 (2006.01)

The invention is Display Frame System comprised of an outer unit and inner member which pivots where a female and male edge of each respectively meet. The inner member swings into the outer unit engaging the remaining edges by means of a locking mechanism. The combination of the outer unit and inner member serve to hold a display panel/board in place. Pins, medals or the like can be secured to the display panel/board. The system allows for extreme ease of accessing the pins or medals displayed as well as the ability to transport and use the assembled frame in other manners of display such as upon an easel as well as vertically or horizontally.
BACKGROUND OF THE INVENTION:

[0002] The displaying of 3 dimensional objects within a display case mounted upon the wall has traditionally fallen into 2 categories the first is of the nature often seen in retail establishment. These usually are accessible via a hinged door. The second are those which are once mounted meant to be of the permanent nature. I like those used to hold a folded flag or autographed baseballs for example.

[0003] At times picture frames have also been used to display 3 dimensional objects, but these uses are much the same as the prior mentioned permanent display cases and at times the line between a wall mounted display case and a framed display of an item have been blurred.

[0004] There exists a category of items that while three dimensional in nature are only limitedly so, and thus can be displayed in generally a more two dimensional format. Examples of such items would be military medals, sports medals, cloisonné and enamel pins. While frames and display cases for such items do already exist none allow ease of access or exchange of items displayed.

[0005] There exists a great many collectors of pins who have no way of easily displaying their pins while at the same time protecting them from dust, smoke, and other contaminants. Most often such collectors resort to mounting the pins on cork boards and the like. This neither protects them nor does it create a necessarily pleasing visual display.

[0006] Likewise, the display cases that are available are both costly and difficult to use, allowing no easy method of access which is a key consideration to collectors who often wish to trade their pins with other collectors.

[0007] No currently available display device allows for both an ease of access important to collectors who often trade and add to their collection as well as a protected method of display found in a display case or frame.

SUMMARY OF THE INVENTION

[0008] The unique design of this invention grants ease of access as well as an ideal method where by the displayed items can be removed, replaced, exchanged in mere seconds. Yet it does so while still providing an extremely stable method of display. It does this utilizing a minimal amount of material and components making it readily affordable to the public market.

[0009] The object of this invention is to provide a wall mounted display case having an internal member which fits into the outer unit, this inner member can be inserted and removed from the outer unit in a simple one step action. This inner member is then able to support the entire load of the assembled display.

[0010] Additionally, the ability to easily remove the entire frame from the wall allows the frame with its display pieces to be easily transported, and thus used in a temporarily display situation such as a trade or art show.

BRIEF DESCRIPTION OF THE DRAWINGS

[0011] FIG. 1 is a three dimensional view.

[0012] FIG. 2a is a cross-section side view of a preferred embodiment of the mounted on a wall.

[0013] FIG. 2b is a front view of a preferred embodiment.

[0014] FIG. 3a is a side view of a preferred embodiment with the male and female edges of the outer unit and inner member, engaged but prior to the pivoting and engagement of the remaining edge by the mechanism which locks the remaining edges in place.

[0015] FIG. 3b is a cross-section view of the preferred embodiment with the female and male edges of the outer unit and inner member, engaged but prior to the pivoting and engagement of the remaining edge by the mechanism which locks the remaining edges in place.

[0016] FIG. 4a is a back view of the inner member.

[0017] FIG. 4b is a back view of the outer unit without the inner unit.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT


[0019] The invention is Easy Access Display Frame System for Pins and Medals. FIG. 1 is a three dimensional view (suitable for inclusion on the front page) with the female and male edges of the outer unit and inner member engaged but hidden from view prior to the inner member pivoting into the locked position.

[0020] The inner unit composed of it's two side pieces 10, top 4 and bottom 11 within which the preferred locking mechanism of magnets 12 have been mounted, is placed into the outer unit, composed of parts 1-3, 5-9, 16 & 17. This is done by aligning the inner unit so that the male edge 19 of piece 4 is moved into the female cavity of piece 3, once engaged piece 19 severs as a pivot point 21 from which the remainder of the inner unit swings 22 into a locking position 18. Once in this position the inner unit is held in place by the locking mechanisms within the outer unit 16 and inner member 12, which in the preferred embodiment are magnets. The outer unit is composed of the frame face 1, frame edge side and bottom pieces 9, frame edge top piece 3 containing...
female edge, stop 2 creating viewing space and holding glass 5 in place. Side 17 and bottom 9 piece also contains magnets 16 used in this embodiment as the locking mechanism.

The outer unit and the inner member hold the panel/board 8 in place allowing the display of desired pieces 7, in the display area 6 as shown in FIG. 2a.

FG. 2a is a detailed cross section view showing the preferred embodiment of the invention assembled and mounted upon a wall 15 with example display items 7. It shows the outer unit with the inner member engaged and mounted upon a wall by means of a bracket 13 mounted into the wall by a screw 14. The weight of the assembled frame hanging upon the angled edge of the bracket 13 together with the angled edge 20 opposite the male edge on the top piece of the inner frame 4, holds the frame upon the wall.

FG. 2b shows a frontal view where the face of the frame 1, mounting panel/board 8 and example of pins or medals displayed.

FG. 3a shows a side view of the outer unit with the inner member placed engaging the male edge of the inner member into the female edge of the outer unit this positioning is prior to the pivoting of the inner member into the back of the outer unit where it is engaged by the locking mechanism. Visible in this view is the frame face 1, frame side 17, inner unit 10 and one of the side locking mechanism of the inner unit 12. Also shown is where the matching locking mechanism 16 is located on the inside the outer unit this as shown in FIG. 4b would not be visible from an outside view.

FG. 3b shows a side cut away view of the preferred embodiment illustrated in FIG. 2. The pivot point 21 where the male and female edges engage, the position of the inner member prior to pivoting, the arch of the inner member swinging into position and the inner member in it's final locked position.

FG. 4a shows the back view of inner member composed of the top piece 4 with the male edge 19 and angled edge 20, sides piece 10 and bottom piece 11. Also shown is the location of the magnetic locking mechanisms 12.

FG. 4b shows the back view of the outer unit. Visible are portions of the frame face 1, frame sides 17, bottom 9, stop 2 holding the glass in place and creating the viewing space 6, the top piece containing the female edge 4. Also shown is the location of the magnetic locking mechanisms 16.

What is claimed is:

1. A Vertical Display Case, comprising outer unit that forms interior cavity: an inner member which when correctly placed within the outer unit’s interior cavity becomes engaged by the mating of a female and male edge of outer unit and inner member, subsequently the remaining edges are engaged by mechanism to further secure the engagement of the inner and outer pieces, serving to lock the pieces together.

2. The inner member of claim 1, pivoting from the edge where the male and female edges meet swings both towards and away from the outer unit to allow engagement and disengagement in a one step movement.

3. The mechanism used in claim 1 to lock the outer unit and inner member together, further secures the engagement of the outer unit and the inner member, by means physical like a spring loaded ball and corresponding catch or magnetic or a combination there of. It also serves to bring the remaining edges of the inner member into the desired resting position which prevents the unintended disengagement (seperation) of the male and female mating edges of the inner member and outer unit.

4. The properly mated male and female edges of the outer unit and inner member of claim 1 creates a physical barrier which prevents disengagement of the outer unit and the inner member other then by the pivoting outward of the inner member as referred to in claim 2.

5. A system for securing a display piece or a display mounting panel within a Vertical Display Case comprising outer unit that forms interior cavity; into which the piece to be displayed is placed, then an inner member which when correctly placed within the outer unit’s interior cavity becomes engaged by the mating of a female and male edge of outer unit and the inner member, subsequently the remaining edges are engaged by mechanism to further secure the engagement. This engagement securely holds the piece to be displayed in it’s desired location.

6. In the preferred embodiment of claim 1, the mated female and male edges serve as the load bearing edge upon which the Display Case is then mounted vertically upon a wall. This is done by hanging the case from the load bearing inner edge of the inner member. The hanging of the Display Case from this inner edge serves to use the weight of the Display Case as well as the displayed piece to maintain the engagement of the male inner member and the female outer unit.

7. In the preferred embodiment of claim 1, the inner member has angled edge shown in FIG. 4a on the opposite side of the male load bearing edge. This allows for the Display Case when assembled to be mounted upon a bracket with a complimentary angled edge attached appropriately to a wall. This method of mounting the Display Case allows not only ease in removing and replacement of the displayed piece but also facilitates ease of left-right positioning as well as leveling the Case.

8. This interior cavity of claim 1 as well as the over all size of the Display Case is in no way limited to a given size either in height, width or depth.

9. The intended use of the system of claim 5 is to display a three dimensional piece or pieces within the interior cavity. The preferred manner in which this will be done is to mount pins, buttons or medals upon a board or panel that is placed within the frame as shown in FIG. 1a and then secured in place by the inner member as described in claim 5.

10. The preferred embodiment of claim 1 uses a stop along the inner edge of the outer unit against which the inner member when in place holds the display board/panel it also serves to hold the glass for the viewing area in place.

11. In the preferred embodiment the panel of claim 5 is created from penetrable substratum such as coroplast, foam core or cardboard which then can but need not be covered with fabric.

12. It could in another embodiment of claim 5 display a 2 dimensional piece.

13. In the preferred embodiment of claim 1 the an inner edge of the outer unit serves as the female edge and an outer edge of the inner member contains the male edge.

14. In another embodiment of claim 1 the an inner edge of the outer unit serves as the male edge and an outer edge of the inner member contains the female edge.

15. While the preferred manner of usage of the display case of claim 1, is that of being wall mounted it could in another embodiment be displayed freestanding or upon an easel or like base.

16. The preferred embodiment of claim 1, uses the outer unit to hold and support both the visible frame and glass.

17. Another embodiment of claim 1 uses the inner member to hold and support both the visible frame and glass with the outer unit being securing the Display Case to the wall.

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