

[54] **SHELF DETACHABLY SECURED TO AN APERTURED BOARD TO FORM A DISPLAY UNIT**

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[58] Field of Search.....168/152; 211/88, 90; 248/223, 248/249

[56] **References Cited**

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[57] **ABSTRACT**

A shelf or tray detachably secured to a conventional apertured board, such as a pegboard, to form a display unit. The shelf or tray is secured by means of a pair of wire brackets having hooking segments or hooking members, which brackets are detachably secured to the shelf or tray and the hooking segments are detachably peg-hooked into the openings in the apertured board so as to engage the apertured board to prevent lateral movement and sway of the brackets and also prevent inadvertent disassembly.

3 Claims, 4 Drawing Figures

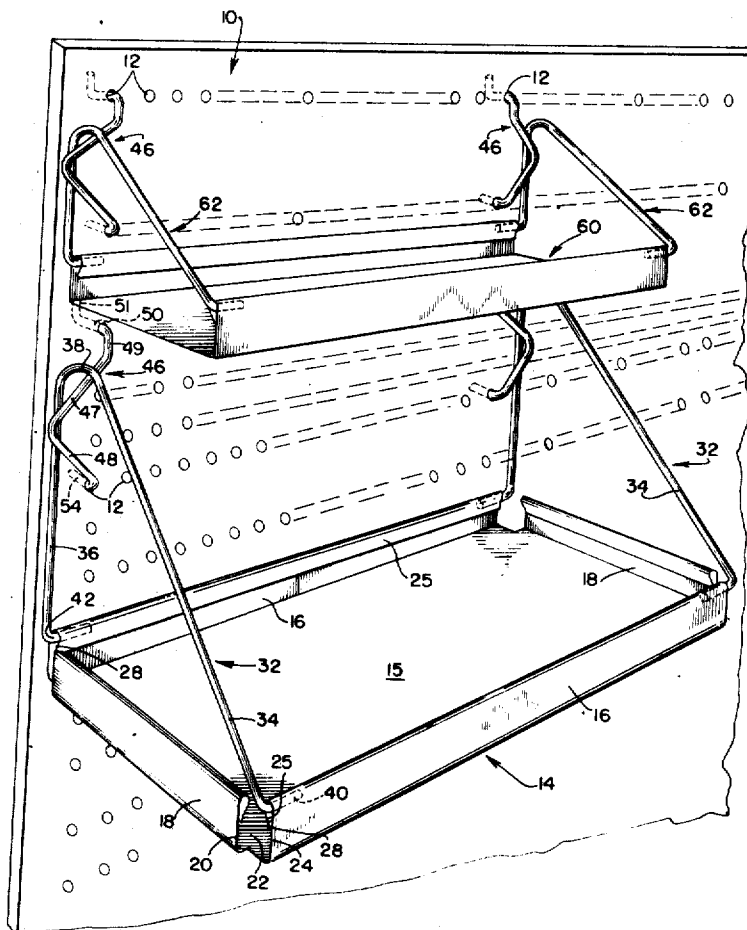
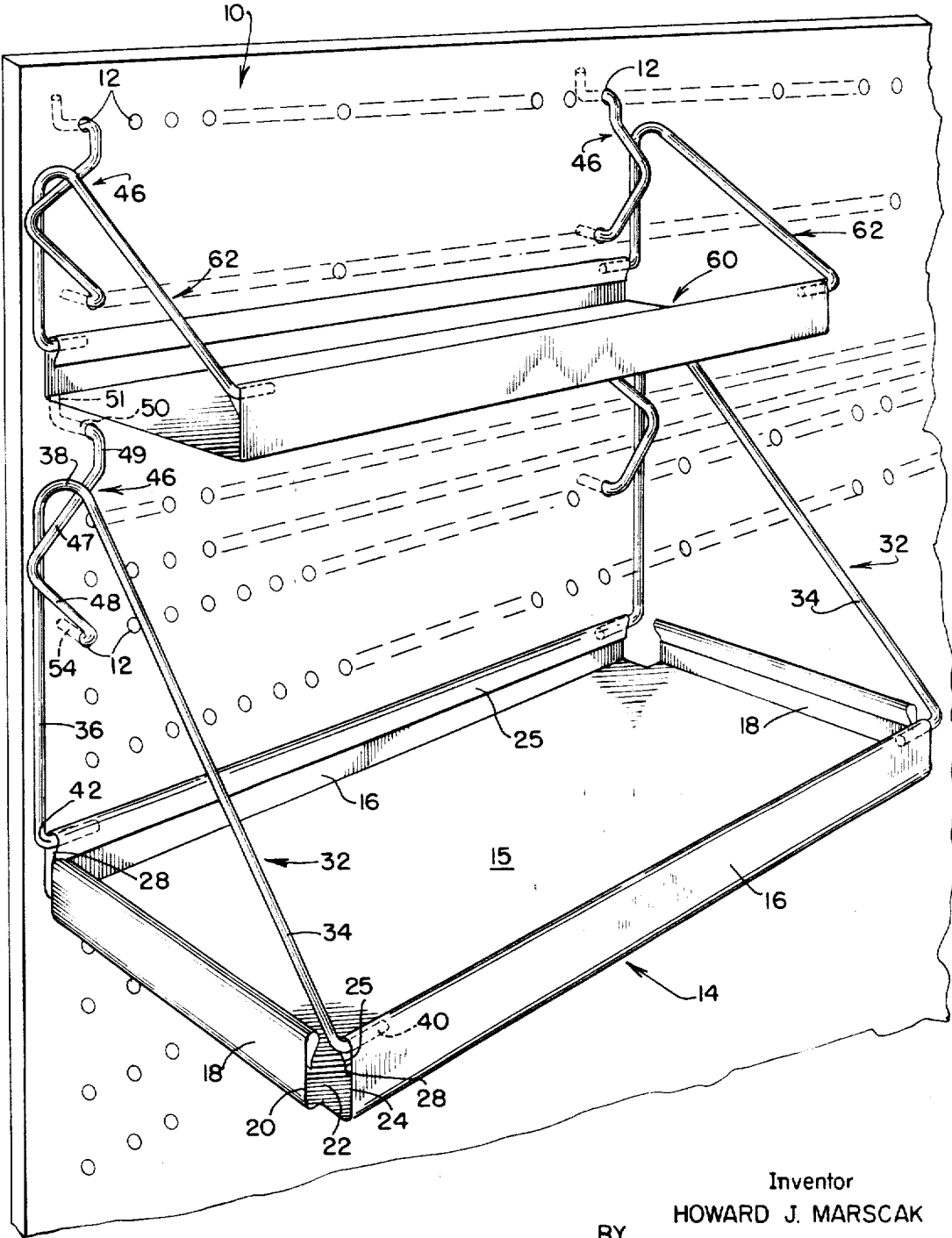


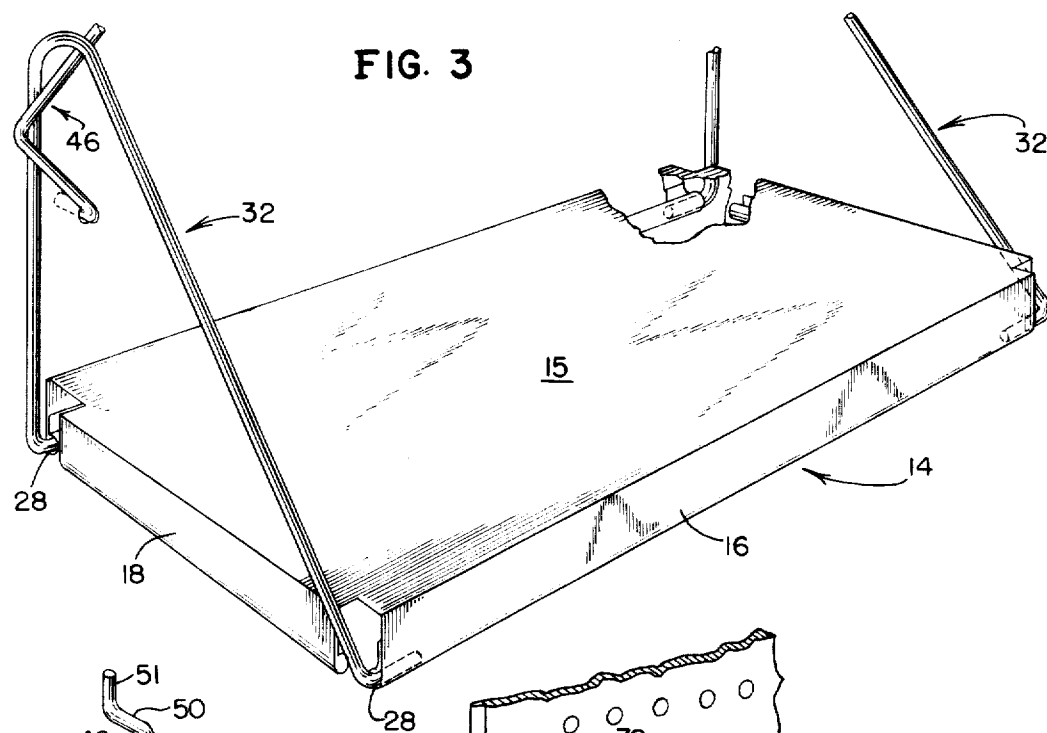
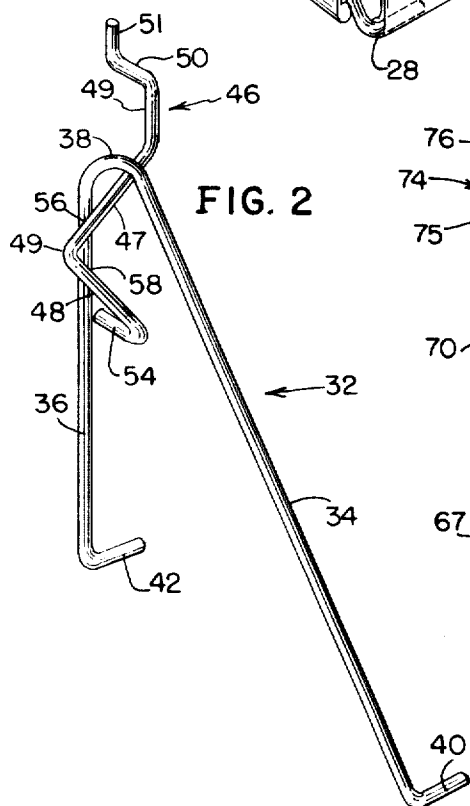
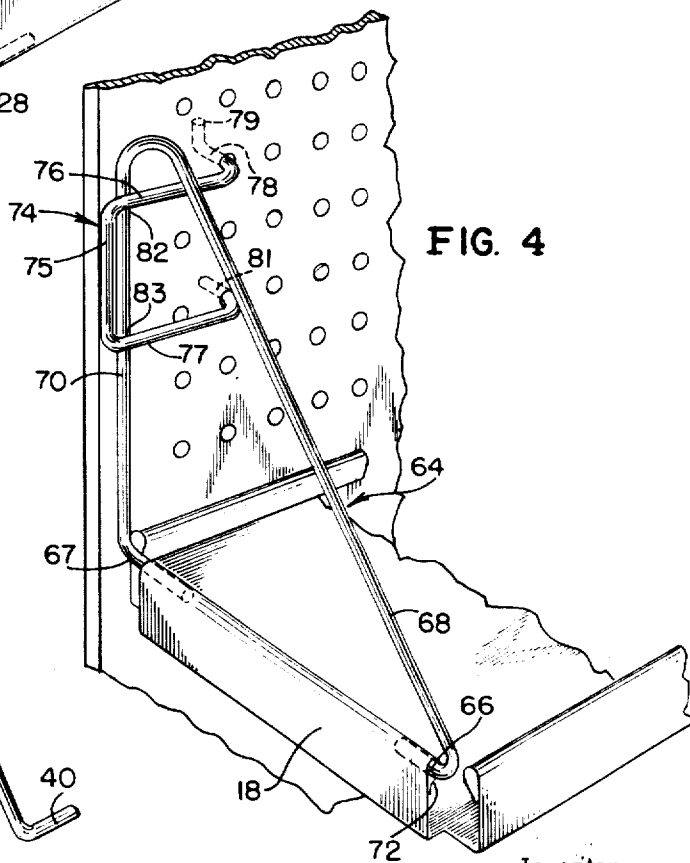
FIG. 1



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SHELF DETACHABLY SECURED TO AN APERTURED BOARD TO FORM A DISPLAY UNIT

BRIEF SUMMARY OF THE INVENTION

One of the objects of this invention is to provide a shelf or tray with detachable brackets having hooking segments or hooking members which may be shipped in a knocked-down condition to occupy a minimum of shipping space in a carton or the like, but which can be readily and quickly assembled to connect or mount on a conventional apertured board such as a pegboard.

Another object of this invention is to provide one or more shelves with wire brackets and hooking segments or hooking members whereby the shelves may be readily mounted on a conventional apertured board to form a display unit, and wherein the hooking members engage the apertured board to prevent lateral movement and sway of the brackets and also prevent inadvertent disassembly.

Another object of this invention is to provide components which can be shipped in a knocked-down condition and can be readily and easily assembled and mounted on an apertured board to form a display unit, and which may be readily disassembled.

Other objects will become apparent as this description progresses.

BRIEF DESCRIPTION OF THE DRAWINGS

In the drawings:

FIG. 1 is a perspective view of two trays or shelves with their wire brackets in assembled relation and with the brackets and hooking segments or hooking members hooked into a conventional apertured board to form a display unit.

FIG. 2 is a perspective view of one of the wire brackets with the hooking segment brazed thereto.

FIG. 3 is a partial view with the tray inverted from that shown in FIG. 1, and

FIG. 4 is a view of a modification in which the brackets are secured to the sides of the tray and also showing a modified hooking segment.

Referring to FIGS. 1, 2 and 3, the conventional apertured board, more particularly known in the trade as a pegboard, is indicated by the numeral 10. The conventional spaced apertures throughout the board are indicated by the numeral 12. The apertured board is used as the upright backing member for forming the display unit of this invention. Such boards are readily available on the market and are very convenient for use.

FIG. 1 shows a display unit formed with two shelves or trays, although it will be understood that a display unit may be formed with any number of such shelves. As shown, the lower shelf is of a greater width than the upper shelf and has side walls to add rigidity to the wide bottom surface, which are omitted from the upper less wide shelf. The display unit may be formed by one or more of such shelves or by a combination of same, dependent upon the particular requirements.

The lower shelf is formed of a tray generally indicated at 14, having a bottom 15, upstanding front and rear walls 16, and upstanding side walls 18, the edges 20 of which are spaced as at 22 from the adjacent edges 24 of the front and rear walls 16. The front and rear walls 16 have flanges 25 bent inwardly and downwardly to form an open hem, the opposite ends of which form end sockets 28 for receiving the inwardly turned ends of the two side brackets, each generally indicated by the numeral 32.

The brackets 32 are formed of wire and are shaped to form two sides of a substantially right triangle having a hypotenuse 34 and a side 36 with the connecting portion 38 rounded. The bottom end 40 of the hypotenuse is turned inwardly at right angles to the axis of the hypotenuse and the bottom end 42 of the side 36 is similarly turned. The ends 40 and 42 of the brackets are received in the opposite end sockets 28 of the front and rear walls 16, as seen in FIG. 1. When thus received the brackets 32 will be supported in upright position on the

opposite sides of the tray. The tray is then in a position to be mounted on the apertured board.

The hooking segment or hooking member generally designated by the numeral 46, one form of which is shown in FIGS. 1-3, is made of wire and is shaped to form two sides 47 and 48, approximately at an angle of 84° with the connecting portion 49 on a radius. Both sides 47 and 48 are on the same plane. Extending upwardly from the side 47 is an extension 49 which continues in an outward bend 50 substantially at right angles and terminates in an upward bend or tail 51. The bend 50 and tail 51 form an L-shape. Extending outwardly from the other side 48 of the hooking segment is an end 54 bent at substantially right angles to the side 48. The hooking member is welded or brazed as at 56 and 58 to the side 36 of the bracket. The side 47 of the hooking segment extends diagonally under the connecting portion 38 of the bracket, with the turned bottom end 54 vertically aligned with the upper end 51.

The turned end 54 of the hooking segment 46 when in the apertured board will provide an anti-sway feature and a stabilizing effect and with the incline of the bracket will provide a rigid assembly. A portion of the hooking segment 46 extends outwardly of the bracket with the upper portion of the side 47 extending inwardly of the bracket. The axis of the side 36 of the bracket is inclined slightly inwardly from the vertical adjacent the bottom of the side 36.

In securing the hooking member 46 to the apertured board 10, the upper hooked end 51 is inserted first into an aperture 12 and then the lower end 54 is inserted into a lower aperture 12 which is in vertical alinement with the upper aperture. This supports the shelf or tray in a suspended position, as shown at the bottom of FIG. 1, and locks and prevents the assembled unit from swaying from side to side and also prevents inadvertent assembly.

The upper tray, generally designated by the numeral 60, is similar to the lower tray 14, except that it is of less width than the lower tray and eliminates the side walls of the tray as it does not require the extra support to prevent sagging. The brackets and hooking segments used with the upper tray are identical to those used with the lower tray, except for the size, and are similarly mounted and therefore will not be redescribed. The upper wire brackets 62 will serve to form the sides of the upper tray to retain the displayed products.

FIG. 3 shows a shelf or tray inverted from that previously shown, that is, the bottom 15 of the tray becomes the top of the tray with the front and rear walls 16 depending from the top. It is supported similarly to that previously described.

FIG. 4 shows a modification in which the brackets, as well as the hooking segments are slightly modified. The bracket 64 has ends 66 and 67 which are turned inwardly in the same plane as the hypotenuse 68 and side 70 and fit into the end sockets 72 in the side walls 18 of the tray or shelf. The modified hooking member, generally indicated at 74, has a generally U-shaped body comprising a side 75, top 76 and bottom 77 on the same plane. Extending from the top at right angles thereto is an extension 78 which terminates in an upward bend or tail 79. Extending from the bottom 77 at right angles thereto is an end 81. The upper extension 78 and tail 79, as well as the lower end 81 are inserted into the apertured openings in the board. The hooking segment is brazed to the side 70 of the bracket as at 82 and 83. The modified hooking segment is the preferred hooking segment and may also be used with the brackets shown in FIGS. 1, 2 and 3. It serves the same function as that ascribed to hooking segment 46.

What is claimed is:

1. A shelf for use with a board having spaced apertures, said invention comprising a shelf member having sockets adjacent each of the opposite sides of the shelf, a suspension bracket for each of said opposite sides of the shelf, each suspension bracket shaped to form two sides of a substantially right triangle having an inwardly turned end at the free end of each of said sides of the bracket, said inwardly turned ends adapted for ready insertion into said sockets to be received and retained in said sockets whereby said shelf is detachably

3

secured to said brackets, each said bracket extending upwardly of said shelf, a hooking member permanently associated with each said bracket, said hooking member having spaced upper and lower ends extending inwardly of each bracket for engaging the apertures in said board to support the said bracket and shelf adjacent said board, with the lower end of the hooking member extending below the top of the suspension bracket, said brackets supporting said shelf in a suspended position.

4

2. A structure as set forth in claim 1 in which the spaced upper and lower ends of the hooking member are vertically aligned.

5 3. A structure as set forth in claim 1 in which the hooking member has a generally U-shaped body which is secured to the vertical side of the bracket with the upper and lower ends vertically aligned.

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