

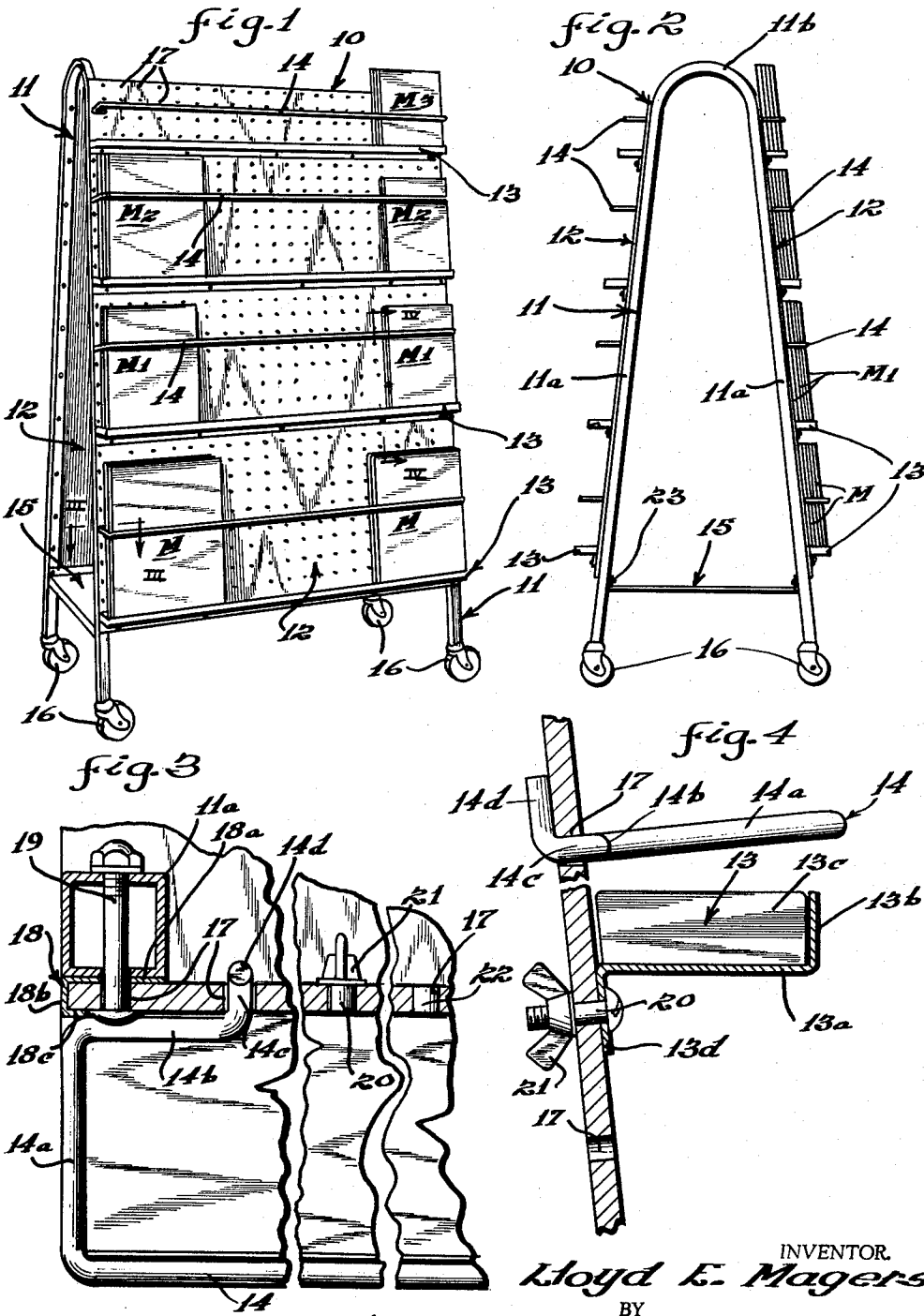
March 16, 1965

L. E. MAGERS

3,173,386

MULTIPLE PURPOSE MOBILE DISPLAY STAND

Filed July 15, 1963



INVENTOR.
Lloyd E. Magers

BY
Will Sherman, Merris Shaw Simpson
ATTORNEYS

1

3,173,386

MULTIPLE PURPOSE MOBILE DISPLAY STAND
 Lloyd E. Magers, Evanston, Ill., assignor, by mesne assignments, to Gaylord Bros., Inc., Syracuse, N.Y., a corporation of New York

Filed July 15, 1963, Ser. No. 295,128
 2 Claims. (Cl. 108-108)

This invention relates to a multiple purpose movable display stand for magazines, books, bulletins, notices, charts and the like, and specifically deals with an inexpensive, mobile, multi-faced adjustable stand which will display periodicals of all sizes in upright unobstructed positions.

A feature of the present invention is the provision of perforated backboards ("Peg-Boards") on laterally spaced inverted U-shaped end frames which detachably carry supporting shelves and retaining bars in superimposed relation across the length thereof in which are retained the periodicals, books, notices, charts, etc. to be displayed. These boards or panels have holes therethrough at regularly spaced intervals which are available to receive fasteners for the shelves and retaining bars thereby accommodating quick adjustment to fit different sized periodicals. The shelves and bars are easily removed to expose the backboard areas for receiving bulletins, notices, etc. which can be easily pinned on the boards with fasteners or hooks mounted in the holes. Such fasteners of course can be mounted between the shelves to pin up smaller notices and bulletins.

According to this invention the display stand is composed of a pair of tubular metal end frames of inverted U-shape with sloping legs converging from a widely spaced apart bottom to a narrow bight portion at the top. The end frames are aligned and laterally spaced to form a pair of legs on each side face of the stand. A pair of rigid panels composed of plywood, composition board material, or the like, span the space between the end frames and are secured along their end edges to respective pairs of legs of the end frames thereby forming oppositely facing upwardly inclined backboards for the stand. Each backboard has a myriad of holes therethrough arranged in columns and rows in regularly spaced relation. Metal shelves or troughs are detachably mounted across the faces of the backboards in superimposed relation at desired intervals by means of fasteners such as wingnuts, hooks, or the like. Each shelf cooperates with a retainer rod or bar detachably secured to the backboard above the shelf. Because of the myriad of holes through the backboard, the spacing of the shelves can be varied as desired and the relative positioning of the retainer bars to the shelves can be varied as desired for accommodating various sized periodicals without having any periodical overlapping the shelf or another periodical and without loss of space between the shelves. The angle of inclination of the backboards of course is determined by the slope of the legs of the end frames and is such as to support the periodicals on each shelf in such a position as to be fully visible at eye level of a person standing adjacent the display stand. The backboards preferably extend from spaced relation above the bottoms of the legs to the bight portions of the end frames and a convenient height for the assembly is about five feet with a convenient width of about three feet, although these dimensions can be varied as desired without departing from the principles of the invention.

To rigidify the assembly and to provide storage space for periodicals, one or more horizontal shelves are provided between the backboards. These shelves are mounted on the legs of the end frame and can also be anchored to the backboards intermediate their ends

2

thereof. One shelf is preferably provided adjacent the bottom edges of the backboards.

To impart portability to the stand the bottom ends of the legs are equipped with swivel or caster rollers.

A feature of the invention is the provision of metal channel members on the end edges of the backboard to provide a finished end edge and an elongated retainer for the entire height of each backboard.

It is then an object of this invention to provide an inexpensive multiple purpose multi-faced adjustable and mobile display stand accommodating periodicals, books, charts, etc. of different size without obstruction and holding the same to be readily visible from eye level.

Another object of this invention is to provide a portable double faced display stand with readily adjustable and removable shelves and retainer bars for supporting periodicals of different sizes without obstruction.

A specific object of this invention is to provide an inexpensive, portable, readily adjustable display stand composed of inverted U-shaped end frames with sloping legs and "Peg-Board" panels mounted on the legs and detachably carrying at selected superimposed positions across the faces thereof supporting shelves and retainer bars for periodicals and the like.

Another object of this invention is to provide a "Peg-Board" display stand with oppositely facing inclined panels detachably mounting horizontal shelves in spaced superimposed relation to display periodicals for easy reading at eye level.

Other and further objects of this invention will be apparent to those skilled in this art from the following detailed description of the annexed sheet of drawings which, by way of a preferred example only, illustrates one embodiment of the invention.

On the drawings:

FIGURE 1 is a perspective view of the mobile display stand of this invention.

FIGURE 2 is an end elevational view of the stand of FIG. 1.

FIGURE 3 is a fragmentary, and broken sectional view, generally along the line III—III of FIG. 1.

FIGURE 4 is an enlarged fragmentary and broken sectional view along the line IV—IV of FIG. 1.

As shown on the drawings:

In FIGS. 1 and 2 the reference numeral 10 designates generally an easily moved roll equipped display stand of this invention. The stand 10 is composed of two end frames 11, 11, two backboards 12, 12, a plurality of spaced superimposed horizontal shelves 13 extending across the faces of the backboards 12 and a plurality of spaced superimposed retaining rods 14 extending across the faces of the backboards above the shelves 13. A horizontal storage shelf 15 is mounted on the end frames 11 between the backboards 12 at a level adjacent the bottom of the backboards.

Each end frame 11 is a one piece metal tube preferably of square cross section and is in the form of an inverted U with sloping legs 11a converging from a widely spaced apart bottom to a narrower arcuate connecting bight portion 11b at the top thereof. The bottoms of the legs 11a have swivel mounted caster rollers or wheels 16 to impart mobility to the stand 10.

The end frames 11 are aligned and laterally spaced, with the boards 12 spanning the space therebetween and mounted along their end edges to the legs 11a. These boards 12 are preferably of "Peg-Board" types having a myriad of equally spaced rows of holes 17 therethrough and composed of composition board, plywood, sheet metal, plastic slabs, or the like construction material.

As shown in FIG. 3 the end edges of the boards 12 extend into grooves provided by metal channel strips 18 each

of which has an apertured backwall portion 18a interposed between the board 12 and the end frame leg 11a, an end wall 18b overlying the end edge of the board 12 and an intumed front flange 18c overlying the front face of the board 12 adjacent the end edge thereof. The flange 18c is much shorter than the back wall 18a. The legs 11a are apertured at spaced intervals along the length thereof as shown in FIG. 1. As shown in FIG. 3 mounting bolts such as 19 extend through holes 17 in the boards 12 through apertures in the backwalls 18a of the channel strips 18 and through the apertures of the legs at spaced intervals along the length of the legs and height of the boards. The bolts 19 securely mount the boards 12 to the end frames with boards overlying the flat front faces of the legs 11a and held in upright inclined positions sloping backward from widely spaced apart bottom edges to closer adjacent top edges.

The shelves 13 are composed of metal, molded plastic, or the like construction material. Each shelf 13 has a bottom wall 13a as shown in FIG. 4, an upturned front wall 13b, upturned end walls 13c and a downturned back flange 13d. The shelves have the same length as the backboards 12 and overlie these backboards along the length thereof in desired superimposed spaced relation. The downturned flanges 13d of the shelves are apertured to mate with some of the holes 17 in a row of holes of the "Peg-Board" 12 and mounting bolts 20 with wingnuts 21 detachably mount the shelves 13 to the front faces of the boards 12 by extending through the flanges 13d and the holes 17 in the boards 12. Wingnut equipped bolts 20 are preferably provided near the end edges of the shelves 13 and if additional supports are required for the shelves inwardly from these end edges at locations where it might be difficult to reach wingnuts between the boards 12 such, for example, as midway between the end frames 11, the flanges 13d can be provided with studs 22 to project into the holes 17 thereby providing additional support for the shelves.

The retaining bars 14, as shown in FIG. 1, span the entire length of the shelves 12 in spaced parallel relation above the shelves and, as shown in FIG. 3, have end legs 14a at the very end edges of the board 12. These end legs 14a are preferably of the same or greater length than the width of the shelves 13 so as to position the rod 14 over or beyond the front walls 13b of these shelves as shown in FIG. 4. The inner ends of the legs 14a are bent back to provide intumed portions 14b. These intumed portions 14b are of a length to span the marginal end of the board 12 up to at least the first row of holes 17 inwardly from the leg 11a and have an outturned portion 14c with an upturned end 14d projecting through a hole 17 with the upturned portion 14d bearing against the back face of the board 12 as shown in FIG. 4 to mount the bar 14 on the board.

These reverse bend arrangements at the ends of the bar 14 position the end legs 14a at least at the end edge of the backboard 12 to accommodate books, periodicals, etc. right up to the end edge of the board while at the same time making possible the detachable mounting of the bar in unobstructed holes of the board 12. To mount the bars 14 in position it is only necessary to thread the upturned ends 14d through the selected holes 17 until they clear the back of the board 12 whereupon the intumed leg portion 14b can rest on the front face of the board with the upturned portion 14d bearing against the back face of the board to securely hook the bar or rod in position.

As shown in FIG. 1 the bottom shelf 13 is mounted adjacent the bottom edge of the board 12 to support relatively large sized magazines M. The control bar or rod 14 for this bottom shelf 13 is positioned in spaced relation above the bottom shelf 13 at a level to engage the magazines M above their midpoints thereby insuring a mounting of the magazines in full upright position. The second shelf 13 is then spaced above the top of these magazines M with the control rod 14 therefor at the de-

sired level to retain smaller magazines M1 in upright position. In a similar fashion the third shelf 13 and its control rod 14 may support still smaller magazines M2 in upright position while the top shelf 13 and its control rod 14 can have the smallest magazines M3 which are free to extend above the top edge of the back panel 12. It should be appreciated, however, that the spacing of the shelves can be varied as desired and in any selected arrangement the various rows of magazines M, M1, M2, and M3 are in full view from eye level. As illustrated in FIG. 2 the magazines are mounted in superimposed stacks on each shelf with the control rods 14 embracing the stacks.

The shelf 15 between the boards 12 can be used to support back issues of magazines or surplus stock for replenishing the shelves 13. This shelf 15 is preferably composed of sheet metal with upturned flanges along the length thereof secured as by rivets 23 to the back faces of the legs 11a and if desired to the bottom edges of the boards 12 between the end frames 11.

From the above descriptions it will be understood that the multiple-purpose mobile display stand or truck of this invention is of extremely simple construction, has a wide range of adaptability and provides a maximum amount of fully visible display area. The rows of holes in the backboards of the stand not only afford support mountings for the shelves and control bars or rods, but can also receive hooks, brackets or the like to mount charts, cards, notices and three dimensional objects. If desired the shelves and control rods can be removed to expose the backboards for bulletin support usage. If desired, the stand can be shipped in knocked-down condition since it is easy to assemble the boards to the end frames, the shelves on the boards, and of course bolts can be used in place of rivets 23 to secure the shelf 15 to the end frames.

I claim as my invention:

1. A mobile display stand which comprises a pair of inverted U-shaped laterally spaced aligned tubular uprights each having the legs thereof converging toward the bight thereof, said uprights together providing a pair of legs on each of two sides of the stand, a pair of perforated panel boards, one on each side of the stand, spanning the space between the pair of uprights and each of the panel boards respectively secured at their end edges to one leg of each upright, each of said boards having a bottom edge spaced above the bottom ends of the legs and the top edge adjacent the bight portion thereby providing inclined oppositely facing back panels, a horizontal shelf disposed between the boards adjacent to the bottom edges thereof and secured to the respective legs of the end frames near the lower ends of the legs, a plurality of horizontal superimposed supporting shelves detachably mounted on each of the back panels, each of said supporting shelves having a flange depending from the lower rear edge thereof for abutting engagement with the back panel on which it is mounted, fastener means extending through said flange and through selected perforations in said back panel for removably securing each supporting shelf in a selected position on said back panel, control rods detachably mounted on each of the back panels above each of the shelves, each control rod having end leg portions overlying the end walls of the shelves, each end leg portion having an intumed portion spanning the front face of the backboard and extending to an unobstructed hole in the backboard, the ends of said intumed portions being selectively engageable in the backboard perforations to permit adjustment of the control rods thereon, and the control rods conforming to the peripheral outline of the respective shelves therebelow to cooperate with the shelves in holding periodicals or the like in upright position, and swivel wheels on the bottom ends of each of the legs accommodating movement of the stand.

2. A mobile display stand which comprises a pair of inverted U-shaped tubular end frames in laterally spaced relation each having side legs converging from a wide-

ly spaced part bottom portion to a narrow arcuate top bight portion, a horizontal shelf between the legs adjacent the bottoms of each end frame and spanning the space between the frames and secured to the legs, a pair of multi-apertured backboards forming the front faces of the stand and each backboard secured to the front face of one leg of each end frame and spanning the space therebetween, said backboards extending from a bottom level adjacent the horizontal shelf to a top level adjacent the bight portions of the end frames and sloping backward from said bottom to said top, superimposed horizontal shelves extending across the front faces of the backboards, said shelves having bottom support walls bounded by upturned flanges and a downturned back flange overlying the backboard and having apertures aligned with the apertures of the backboard, detachable fastener means extended through the downturned flanges and the apertures of the backboards uniting the shelves to the backboards, control rods overlying the shelves in spaced relation adapted to embrace magazines supported by the shelves, each control rod having end leg portions overlying the end walls of the shelves, each end leg portion having an inturned portion spanning the front face of the backboard and extending to an unobstructed hole in the backboard, the ends of said inturned portions being offset and adapted to extend through the holes in the backboard and having upturned ends on the offset portions to bear against

the back faces of the backboards, said control rods adapted to be rocked into hooked positions on the backboards at desired levels above the shelves, and caster wheels on the bottoms of the legs of the end frames imparting mobility to the stand.

References Cited by the Examiner

UNITED STATES PATENTS

1,344,402	6/20	Hunter	248—217
1,801,058	4/31	Sutcliffe	211—163
2,002,128	5/35	Reidenbaugh	211—177
2,661,993	12/53	Little	211—134
2,760,647	8/56	Saul	211—182
2,784,847	3/57	Holroyd	211—55
2,798,617	7/57	Schreiber	211—55
2,821,450	1/58	Knoll	312—111
2,930,665	3/60	Budaj	312—111
2,954,125	9/60	Husted	108—62
3,097,746	7/63	Handler et al.	108—108

FOREIGN PATENTS

1,188,396 3/59 France.

OTHER REFERENCES

25 Peg Board Working Walls, pamphlet, 9/56.

FRANK B. SHERRY, *Primary Examiner.*