MERCHANDISE DISPLAY DEVICE

William T. Dell and John C. Leitch, Baltimore, Md., assignors to Samuel M. Dell & Co., Inc., a corporation of Maryland
Filed Dec. 28, 1959, Ser. No. 862,104
3 Claims. (Cl. 211—49)

This invention relates to merchandise display devices, and more particularly to a display and support device suitable for holding articles adapted to be suspended. This application is a continuation-in-part of our copending application Serial No. 560,023 filed January 18, 1956, and now abandoned.

It is an object of this invention to provide an inexpensive and easily installed merchandise display device for holding articles adapted to be suspended, such as hardware and kitchen articles, and including paint brushes, brooms and the like.

It is another object of this invention to provide a merchandise display rack which is adapted to be supported in easily attachable and detachable relation to a supporting member such as an apertured panel or "Peg-Board."

It is another object of this invention to provide a merchandise display rack in accordance with the foregoing objects which may be readily collapsed for storage or shipping purposes.

In achievement of these objectives, there is provided in accordance with an embodiment of this invention a merchandise display rack formed of relatively thin rod-like metal members and including a pair of oppositely disposed laterally spaced side members having upper and lower portions which engage the holes of an apertured panel or "Peg-Board." One or more cross brace members of the same rod-like material extend between the side members and carry a plurality of forwardly extending support arms which receive the articles to be supported. The article-support arms are inclined in a downward direction toward the apertured panel or other support. A channeled metal strip member extends between the side members to receive indicia such as price information and the like. In one embodiment of the invention, the outer ends of the support arms are rounded to prevent the articles from falling off the support arms, while in a modified embodiment, the rounded portions at the outer ends of the support arms are omitted to permit the article to be supported by engagement of the end of the support arms with an aperture in the article to be supported. In one form of the invention, the support arms is pivoted at the forward portion of the device so that the arms may be pivoted upwardly into a collapsed position for shipping or storage. The pivotal connection includes an abutment portion engageable with the respective side members to prevent pivotal movement of the support arms downwardly beyond their operative position.

Further objects and advantages of the invention will become apparent from the following description taken in conjunction with the accompanying drawings in which:

FIG. 1 is a front elevation view of a merchandise display device in accordance with the invention mounted on an apertured support panel, such as a "Peg-Board;"

FIG. 2 is an end elevation view of the device of FIG. 1 with the apertured support or "Peg-Board" shown in section;

FIG. 3 is a fragmentary end elevation view of the device of FIG. 1 showing the use of a fastening means for holding the merchandise display device on the apertured support panel;

FIG. 4 is a front elevation view of a modified embodiment of the merchandise display device in which the indicia-supporting channel strip for price information or the like is mounted at the forward portion of the device;

FIG. 5 is an end elevation view of the modified device of FIG. 4 with the apertured support panel being shown in section;

FIG. 6 is a perspective view of a modified form of display device showing the device in its collapsed position;

FIG. 7 is a front elevational view of a device of FIG. 6 showing the device in its operative position upon a support panel; and

FIG. 8 is a side elevational view of the structure shown in FIG. 7.

Referring now to the drawings, and more particularly to FIGS. 1 and 2, the merchandise display device of the invention is generally indicated at 10 and is supported upon an apertured support panel generally indicated at 12 having a plurality of uniformly spaced apertures 14. Apertured support panel 12 may, for example, be of the type known to the trade under the registered trademark "Peg-Board." The merchandise display device 10 is formed of relatively thin rod-like metal members which are suitably connected together as by spot welding and includes a pair of oppositely disposed laterally spaced side members generally indicated at 15 formed of the metal rod-like material.

Each of the side members 15 includes a central portion 16 which is inclined forwardly from panel 12 from its upper to its lower end. At the upper end of central portion 16, each side member 15 is bent to provide a short horizontal portion 18 which is adapted to pass through an aperture 14 of panel 12 and which terminates in a short vertical portion 20 which engages the rear surface of panel 12. At the lower end of central portion 16, each side member 15 includes a horizontal base portion 22 substantially longer than the horizontal portion 18 and having a free end adapted to pass through an aperture 14. A rod-like cross brace member 24 extends between the lower horizontal portions 22 of the oppositely disposed side members 15 to serve as a structural reinforcement and also to limit the inward movement of the lower horizontal portions 18, thereby spacing the lower end of central portion 16 forwardly of panel 12. A pair of additional vertically spaced cross rod reinforcing members 26 and 28 are rigidly connected, as by spot welding, to the outer surface of central portions 16 of the oppositely disposed side members 15.

A plurality of article support arms generally indicated at 30 are rigidly attached to cross rods 26 and 28. Each article support arm 30 includes a vertical portion 32 which is spot-welded to the rear surface of cross rods 26 and 28 and a forwardly extending portion 34 which is bending engagement of the shoulder of the brush handle with the upper edges of the adjacent arms 30.
To support indicia such as price information and the like, a metal channel strip 38 extends between the central portion of the opposite side members 15 just above the lower cross rod 28.

As best seen in FIG. 2, the merchandise display device generally indicated at 10 is mounted on the apertured panel or "Peg-Board" 12 by passing end portions 18 and 20 at the upper end of each side member 15 through an aperture 14 and by inserting the lower horizontal portion 22 of each side member 15 through an aperture 14 and by inserting the lower horizontal portion 22 of each side member 15 through an aperture 14 until horizontal cross member 24 abuts against the forward surface of panel 12. This mounting arrangement provides a sturdy and secure support for the display device so that, if desired, fastening means such as a friction fastener generally indicated at 49 in FIG. 3 may be used to prevent unintended movement of each lower horizontal portion 22 out of its corresponding aperture 14. The friction fastener 40 is provided with an aperture adapted to receive the end of rod portion 22 and also includes portions 42 which bear with a spring action against the surface of rod portion 22 to maintain fastener 40 in position.

The modified merchandise display device shown in FIGS. 4 and 5 is generally similar to the device of FIGS. 1 and 2 just described and includes central side portions generally indicated at 46 having upper and lower end portions 48 and 50 which engage apertures 14 of panel 12. The modified display device 44 also includes cross members 52 and 54 which extend between and are welded to the central portions of the respective side members 45 and 47 and a cross rod 56 which is welded to the lower horizontal end portion 50 of each side member 46. The modified article display device 44 also includes a plurality of article support arms generally indicated at 58 each having a vertical portion 60 which is welded to the rear surface of the cross rods 52 and 54 and a forwardly extending portion 62 substantially perpendicular to vertical portion 60 which terminates at its forward edge in a short vertical portion or abutment 64. The channelled metal strip 66 for receiving price information or other indicia extends across the front of article display device 44 and is welded to the forward surfaces of the portions 64 of the plurality of support arms 58.

In FIGS. 6-8 inclusive, a modified form of the display device is disclosed which is so constructed as to permit the device to be collapsed for shipping or storage purposes. The FIGS. 6-8 embodiment includes a pair of horizontally spaced side members indicated generally at 70 having the same shape as side members 15 of the FIGS. 1-5 embodiment and including a medial portion 72, an offset upper end portion 74 and a rod portion 76 bent backwardly from the lower end of medial portion 72 at an acute angle. A first cross brace rod 78 is welded at each end to the respective rod portions 76 at a location where cross brace 78 may abut the front surface of the support panel 5 as best seen in FIG. 8. A suitable number of additional cross brace rods 80, 82 are welded at each end to the respective side members to provide the necessary degree of rigidity to the assembled structure. In addition to cross braces 78, 80 and 82 a pair of display panels 84 and 86 are welded at each end to the respective side members 70 to provide a mounting upon which display cards containing advertising material and price may be supported.

At a location between display panels 84 and 86, a pair of U-shaped clips 88 are welded to the respective side members and project forwardly from the side members to define a pivotal support for receiving a cross rod 90. Cross rod 90 projects outwardly at each end through the openings between clips 88 and the forward side of side member 72, and the projecting portion of cross rod 90 is bent backwardly to pass in front of the forward side of side member 70 as at 92. A plurality of brush supporting arms 94 are welded at spaced positions along cross rod 90 to project forwardly from the assembly when inturned ends 92 of cross rod 90 are engaged with the front side of side member 70. As best seen in FIG. 8, arms 94 when in the operative position defined by the engagement of inturned ends 92 with side member 70 project forwardly of the device in a direction substantially normal to medial portion 72 of side member 70. In this embodiment, arms 94 are located to support brushes having bores through the upper end of the brush handle, hence arms 94 are not provided with the retaining formation 36 as in the embodiment of FIG. 2.

Supporting arms 94 are welded to cross rod 90 at the lower surface of the rod, hence upon pivoting across rod 90 upwardly toward the position shown in FIG. 6, the supporting arms 94 may be swung into a position extending substantially parallel to medial portions 72 whereby the front-to-rear dimension of the assembly is substantially reduced to facilitate storage and shipment.

While the structures described above have been disclosed in combination with "Peg-Board" support panels, offset portions 20 or 74 and the location of cross rods 24 or 78 are adapted for use with other types of support panels of thickness greater than the ½ inch thickness of "Peg-Board." In the case where the support panel is already in place, the display device may be bored to receive the display device offset portions 20 and 74 and cross rods 24 or 78 being adapted for use with panels of thickness up to ½ inch.

While we have described exemplary embodiments of our invention, it will be apparent to those skilled in the art that the disclosed embodiments may be adapted to receive the displayed offset portions 20 or 74 and location of cross rods 24 or 78 and the display device in other embodiments of the invention described in this specification. Therefore, the foregoing description is to be considered exemplary rather than limiting and the true scope of our invention is that defined in the following claims.

We claim:

1. For use in combination with a support member having a plurality of vertically and horizontally aligned apertures therethrough, a merchandise display device comprising a pair of horizontally spaced side members, each of said side members formed of rod-like stock, each of said side members having an offset upper end portion insertable into an upper aperture in the support member for projection into engagement with the back surface of the support member, a lower end portion insertable into a lower aperture in said support member aligned with said upper aperture to project substantially horizontally from the front of said support member when said upper and said lower end portions are inserted in the respective apertures, a medial portion integral with and extending between said upper and said lower end portions, abutment means on the lower end portions of said members engageable with the front surface of said support member to limit the extent of entry of the lower end portions into said lower apertures to support said medial portions of said side members in a parallel downwardly and outwardly inclined relationship from the respective upper end portions, parallel reinforcing elements extending between said side elements, one of said reinforcing elements comprising a rod-like member pivotally supported at each of its ends upon the respective side members, and a body member pivotally mounted on said pivotal support projection carried by said one of said reinforcing elements and projecting outwardly from said support member in a direction substantially normal to the medial portions of said side members, and stop means on said rod-like member for preventing pivotal movement of the body member when said pivotal support projection extends normal to the medial portions of said side members, said rod-like member being pivotal from said operative position in a direction to move said projection upwardly into a substantially parallelism with said medial portions of said side members.

2. For use in combination with a support member having a plurality of vertically and horizontally aligned apertures therethrough, a merchandise display device comprising a pair of horizontally spaced like side members formed of rod-like stock, each of said side members having an offset upper end portion insertable into an upper aperture in the support member for projection into engagement with the back surface of the support member, a lower end portion insertable into a lower aperture in said support member aligned with said upper aperture to project substantially horizontally from the front of said support member when said upper and said lower end portions are inserted in the respective apertures, a medial portion integral with and extending between said upper and said lower end portions, abutment means on the lower end portions of said members engageable with the front surface of said support member to limit the extent of entry of the lower end portions into said lower apertures to support said medial portions of said side members in a parallel downwardly and outwardly inclined relationship from the respective upper end portions, parallel reinforcing elements extending between said side elements, one of said reinforcing elements comprising a rod-like member pivotally supported at each of its ends upon the respective side members, and a body member pivotally mounted on said pivotal support projection carried by said one of said reinforcing elements and projecting outwardly from said support member in a direction substantially normal to the medial portions of said side members, and stop means on said rod-like member for preventing pivotal movement of the body member when said pivotal support projection extends normal to the medial portions of said side members, said rod-like member being pivotal from said operative position in a direction to move said projection upwardly into a substantially parallelism with said medial portions of said side members.
ing a medial portion, an integral upper end portion insertable through an upper aperture in the support member for projection into engagement with the back surface of the member, an integral rod portion projecting at an acute angle from the lower end of said medial portion insertable into a lower aperture in said panel aligned with said upper aperture, a rod-like cross brace member rigidly secured to and extending horizontally between the rod portions of said side members and adapted to engage the front surface of said member to maintain the lower ends of said medial portions at a location spaced outwardly from the front surface of said member, said medial portions of said side members being inclined upwardly in parallel relationship from their respective rod members to their respective upper end portions, a second horizontally extending rod member supported at each end upon said side members for pivotal movement about its longitudinal axis, a plurality of article supporting arms fixedly mounted upon said second rod-like member, and means for limiting pivotal movement of said second member relative to said side members between a normal operative position wherein said arms project outwardly of said device in a direction normal to the medial portions of said side members and a collapsed position wherein said arms project upwardly from said second rod-like member in substantially parallel relationship to said medial portions of said side members.

3. A merchandise display device as defined in claim 2 including a pair of horizontally extending display panels mounted upon and extending between the medial portions of said side members at respective locations above and below said second rod-like member.

References Cited in the file of this patent

UNITED STATES PATENTS

D. 19,907 Morse ------------ June 17, 1890
568,199 Keeler ------------ Sept. 22, 1896
1,689,988 White ------------ Oct. 30, 1928
2,247,407 Howell ------------ July 1, 1941
2,538,958 Augenfeld ------------ Jan. 23, 1951
2,634,865 Gehrb ------------ Apr. 14, 1953
2,766,958 Levy ------------ Oct. 16, 1956
2,872,145 Goldsholl ------------ Feb. 3, 1959