Aug. 3, 1965 R. A. E. CALLANAN 3,198,469

HOOK MOUNTABLE IN AN APERTURED PANEL

Filed March 2, 1964

FIG. 1

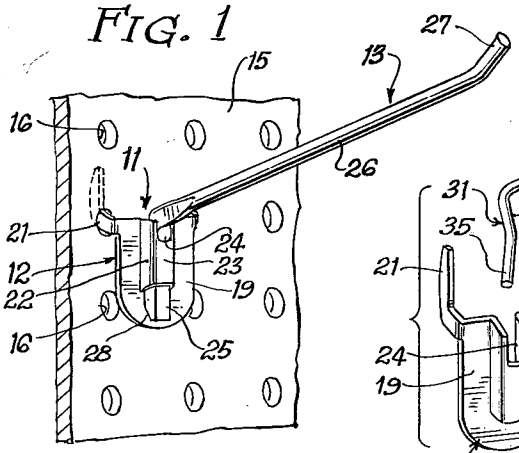


FIG. 2

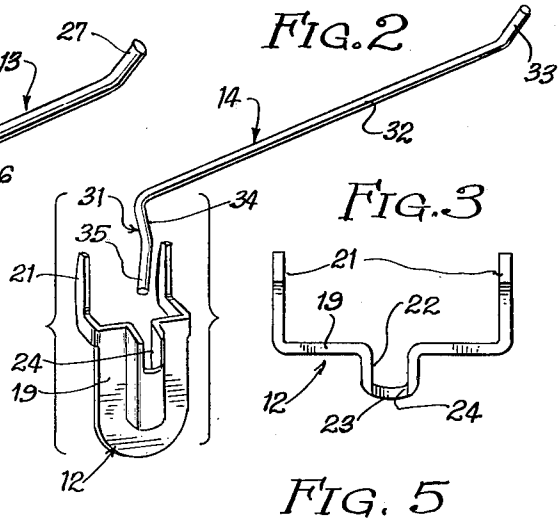


FIG. 3

FIG. 4

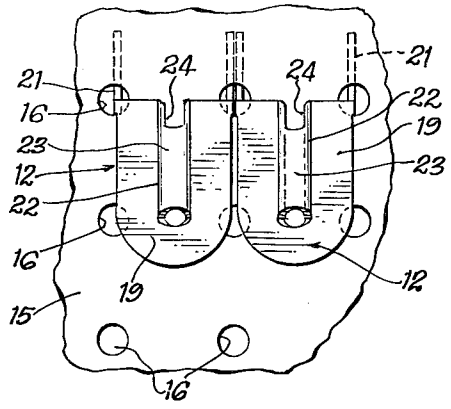


FIG. 5

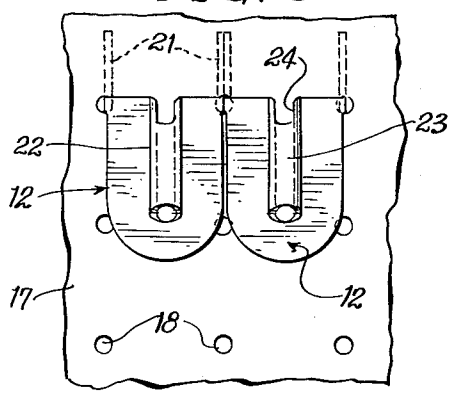
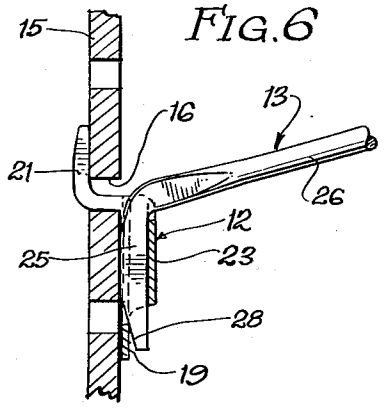


FIG. 6



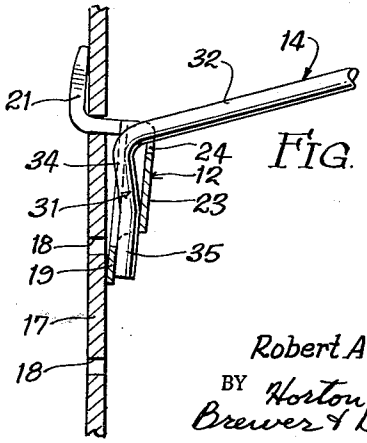


FIG. 7

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United States Patent Office 3,198,469 Patented Aug. 3, 1965

3,198,469

HOOK MOUNTABLE IN AN APERTURED PANEL

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Filed Mar. 2, 1964, Ser. No. 348,560
3 Claims. (Cl. 248—223)

This invention relates in general to display and storage racks, and more particularly to a novel hook assembly for use on standard Peg Boards or apertured panels.

The latter customarily are panels made of sheet metal or any suitable wall-board and range in thickness from about .030 to about .250 of an inch. These panels usually are perforated with round, square, or diamond-shaped apertures which are either one-eighth or one-quarter of an inch across and are spaced laterally and vertically from each other on one inch center lines. Despite this one inch center line spacing for the apertures being standard, it is customary to employ differently constructed and dimensioned hooks for each different type of panel and size and shape of apertures therein.

A principal object of this invention, therefore, is to provide a Peg Board hook assembly which is made up of two separable parts comprising a bracket that may be mounted in a substantially vertical position on any standard Peg Board, and a hook which may be either one-eighth or one-quarter of an inch diameter, with the bracket constructed to receive a substantially vertical portion of a hook of either such diameter having a substantially horizontal portion of any desired length.

In addition to providing such a universally applicable Peg Board hook, another object of the invention is to facilitate handling, packaging, storage and use thereof. While in use, the substantially vertical portion of the hook slidingly engages in the bracket, which is provided with rearwardly extending and upstanding ears for engagement in adjacent holes in the Peg Board, and the substantially horizontal portion of the hook extends forwardly from the Peg Board. Because the bracket and hook are readily separable, however, they may be packaged or stored flat, thus affording important savings in space. And this separable feature of the hook assembly also eliminates the usual requirement of vertically spacing the hooks from each other in use a minimum distance equal to the length of the hook extending forwardly of the Peg Board, since such vertical spacing between hooks in use may be as short as the vertical portion of the hook. This is important in hanging or mounting articles which do not depend far from the hook. And it also enables preloading of the hooks before they are mounted on the Peg Board. For example, a plurality of envelopes, or the like, having mounting grommets may be strung onto a hook at any convenient location and, thereafter, that hook may easily be engaged in a bracket mounted on a Peg Board, and even in a location in which the vertical dimension of the space available above the bracket is considerably less than the horizontal length of the hook.

A further object of the invention is to enable use of such hook assemblies in tandem laterally of a Peg Board to provide a double or other desired multiple hook. This is accomplished by making the bracket with rearwardly and upwardly extending mounting ears to engage laterally adjacent holes in a Peg Board, with each ear having a lateral dimension of less than half the diameter or horizontal dimension of the holes, and with a maximum width of the bracket being less than the lateral distance between the center lines of adjacent holes. The hooks supported, respectively, by such adjacently disposed brackets thus may be mounted on one inch center lines across the board.

Another object of the invention is to prevent undesirable lateral movements of the hook portion of such an assembly, and this is attained by the simple expedient of a slot in the upper edge of a vertically disposed wall forming a hook receiving portion of the mounting bracket part of the assembly.

Numerous other objects and advantages of the invention will be apparent as it is better understood from the following description, which, when taken in connection with the accompanying drawings, discloses a preferred embodiment thereof.

FIGURE 1 is a perspective view of one embodiment of the invention showing the hook assembly mounted in operative position on a portion of a Peg Board;

FIGURE 2 is an exploded perspective view of a hook assembly showing the bracket of FIGURE 1 separated from a modified form of hook;

FIGURE 3 is a top plan view of the bracket part of the hook assembly;

FIGURE 4 is a front elevational view of a portion of the Peg Board of FIGURE 1 showing two of the bracket parts of the instant hook assembly mounted in side-by-side relationship.

FIGURE 5 is a front elevational view like FIGURE 4 showing the same brackets mounted on a different type of standard Peg Board;

FIGURE 6 is a vertical sectional view through the Peg Board and one of the brackets of FIGURE 4 showing a portion of the hook of FIGURE 1 as mounted therein; and

FIGURE 7 is a vertical section view similar to FIGURE 6 taken through the Peg Board of FIGURE 5 and showing a portion of the modified hook of FIGURE 3 mounted therein.

Referring more particularly to FIGURE 1, a preferred embodiment of the invention is illustrated therein and indicated generally by reference numeral 11. This hook assembly 11 is made up of two separable parts comprising a bracket, indicated generally by reference numeral 12, and a hook, generally indicated by reference numeral 13. A modified form of hook, indicated generally by reference numeral 14, is illustrated in FIGURES 2 and 7.

The bracket 12 is adapted to receive and support either form of hook 13 or 14 on any standard Peg Board. The Peg Board illustrated in FIGURES 1, 4, and 6 is designated by reference numeral 15 and employs a plurality of horizontally extending apertures or holes 16 of one-quarter inch diameter arranged on center lines spaced horizontally and vertically one inch apart. This Peg Board 15 is approximately one-quarter inch thick and may be made from any standard wall-board or other appropriate material.

In FIGURES 5 and 7, a different type of standard Peg Board is shown which is designated by reference numeral 17 and is provided with a plurality of holes or apertures 18 that are one-eighth inch in diameter and, like the holes 16 of the Peg Board 15, are spaced from each other regularly on one inch center lines. This Peg Board 17 likewise may be made of wall-board, metal, or any other suitable material. In addition to the standard Peg Boards 15 and 17, other types of standard Peg Boards occasionally are employed, such as those made from sheets of metal with holes or apertures of square or diamond shape punched therethrough. Regardless of the specific material employed and the size of apertures therein, any such Peg Board customarily used has those holes arranged in center lines spaced one inch apart, and it is intended herein that the term "standard Peg Board" be construed as encompassing all such Peg Boards.

The bracket 12 comprises a sheet metal body portion with a main planar part 19 having a pair of rearwardly

and upwardly extending ears 21 formed integrally therewith. These ears 21 are disposed at the upper corners of the main planar part 19 and extend rearwardly for approximately one-quarter of an inch, with their end portions extending upwardly, as best shown in FIGURES 6 and 7, for engagement with the rear surface of the Peg Board when mounted thereon. Each of these ears 21 has a lateral dimension less than one-half the diameter of the smallest holes 18 with which the bracket 12 is adapted to be used. These ears 21 also define the lateral width of the bracket 12, and that dimension of the bracket is maintained at slightly less than one inch, which is the lateral distance between the center lines of adjacent holes in any of the standard Peg Boards.

The bracket 12 may be selectively positioned on any standard Peg Board by inserting the terminal portions of its ears 21 rearwardly through the appropriately positioned apertures 16 or 18 and swinging the main planar part 19 of the bracket downwardly into engagement with the forward surface of the Peg Board, as illustrated in FIGURES 1 and 4 through 7. In addition to the rearwardly extenting ears 21, each bracket 12 also is provided with a hook receiving portion 22 formed integrally with, and struck forwardly from, the main body part 19 and including a substantially vertical wall 23 spaced forwardly of the planar part 19 with a slot 24 in its upper marginal edge. The bracket 12 preferably is stamped from 18 gauge stainless steel, although any other suitable material may be employed.

The hook 13 of FIGURES 1 and 6 preferably is made from one-quarter inch galvanized wire, and comprises a substantially vertical rear portion 25 and a substantially horizontal and forwardly extending portion 26 which terminates in an upwardly inclined end 27. The configuration of those parts 26 and 27, and the angular position thereof relative to the Peg Board when mounted thereon, are fairly well standardized, and it will be readily understood that the length of the substantially horizontal portion 26 will depend upon the particular usages to which the hook is to be put.

In the modification designated by reference numeral 13, the substantially vertical portion 25 is laterally reduced, as best illustrated in FIGURE 1, and terminates in a lower end having a rearwardly and downwardly sloping rear surface 28 (FIGURE 6). The lower end of the substantially vertical portion 25 thus is angularly disposed relatively to the upper part thereof in a plane including the axis of the substantially horizontal portion 26. This configuration facilitates insertion of the hook 13 into the hook receiving portion 22 of the bracket 12. Such assembly of the hook in the bracket, when the latter is mounted on a Peg Board, is accomplished by downward movement of the hook relative to the bracket into its position of FIGURES 1 and 6. During such insertion of the hook, the laterally reduced portion thereof adjacent the juncture between the parts 25 and 26 will be disposed in the slot 24. This will effectively prevent subsequent undesirable lateral movements of the hook portion 13. At the same time, the angularly disposed surface 28 will be engaged with the forward surface of the main planar part 19 disposed below the hook receiving portion 22 of the bracket 12. This assures a frictional or wedging engagement of the hook in the bracket.

As has been explained previously, a primary object of the instant invention is to provide a bracket 12 which is not only adapted to be used with, and to support, hooks of different diameters, as well as of selected lengths. The modified form of hook 14 illustrated in FIGURES 2 and 7 preferably is made of galvanized wire one-eighth inch in diameter, and comprises a substantially vertical portion 31 at its rear end and a substantially horizontal and forwardly extending portion 32 terminating in an upwardly inclined end 33. Because of the small diameter of this hook 14 in comparison with the previously described hook 13, the substantially vertical portion 31 is given a somewhat different shape from that of the rear portion 25 of the latter so as to cooperate with the bracket 12 in substantially the same manner as does the hook 13. For this purpose, the rear or substantially vertical portion 31 comprises an upper part 34 disposed approximately at right angles to the rearwardly extending portion 32 and a lower end 35 sloping rearwardly and downwardly relative to the upper part 34. When the hook 14 is moved downwardly from its position of FIGURE 2 relative to the bracket 12 to insert the rear portion 31 into the hook receiving portion 22 of the bracket, the rear part of the substantially horizontally extending portion 32 will be engaged in the slot 24 as shown in FIGURE 7, and the lower end 35 will be frictionally engaged by, and wedged between, the forward surface of the main planar part 19 of the bracket below the hook receiving portion 22 and the rear surface of the latter by virtue of the weight of the hook 14 and any externally applied downward pressure on the substantially horizontal portion 32.

From the above description, it will now be more clearly understood how the bracket 12 may be employed in connection with a standard Peg Board for mounting thereon hooks of different thicknesses or diameters and various lengths. Although the bracket 12 may assume a somewhat different position on Peg Boards of different thicknesses, as illustrated comparatively in FIGURES 6 and 7, insertions and removals of the hooks 13 or 14 or the application of considerable downward force to the hooks will have no deleterious effects on the Peg Board, since the hooks will engage only the bracket, and not the Peg Board. The separability of the two parts of the instant hook assembly enables those parts to be packaged or stored flat, which affords a tremendous savings in space, and this construction also enables a store operator, or the like, to maintain on hand only a minimum number of parts while having available a wide selection of hooks of different lengths and diameters. The advantages of reducing vertical clearance requirements and enabling pre-loading of the hooks before they are mounted on the Peg Board also will now be more clearly apparent. For example, if the hook and bracket parts were formed integrally, a distance above the mounting holes employed in the Peg Board greater than the overall length of the hook would be required to permit insertion of the ears 22 in those holes in mounting the assembly on the Peg Board. With the instant construction, on the other hand, such vertical clearance distance need only be slightly greater than the length of the substantially vertical portions 25 or 31 of the hooks.

It is thought that the invention and many of its attendant advantages will be understood from the fore-going description, and it will be apparent that various changes may be made in the form, construction and arrangement of the parts without detracting from the spirit and scope of the invention or sacrificing all of its material advantages, the forms hereinbefore described being merely preferred embodiments thereof.

I claim:

1. A hook assembly for use on any standard apertured panel with one-eight or one-quarter inch holes on laterally spaced one inch center lines, comprising a bracket having a body portion with a main planar part, a pair of rearwardly and upwardly extending ears formed integrally with said body portion and spaced for insertion through laterally adjacent holes in a panel and each ear having a thickness less than half the diameter of said holes, a hook receiving portion formed integrally with and struck forwardly from said body portion and including a substantially vertical wall spaced forwardly of the planar part of said body portion with a slot in the upper marginal edge thereof, the width of said bracket as defined by said ears adapted to be less than the lateral distance between the center lines of adjacent ones of holes in a panel; and a hook having a substantially vertical rear portion inserted into said receiving portion to frictionally engage the lower

end thereof against said planar body portion, and a substantially horizontal forwardly extending portion engaged in said slot, said substantially vertical portion of said hook having a lower end angularly disposed relative to the upper part thereof in a plane including the axis of said substantially horizontal portion to facilitate its insertion between said vertical wall and the planar part of said body portion and to assure a wedging engagement of said hook in said bracket.

2. A hook assembly according to claim 1, wherein said substantially vertical portion of said hook is laterally reduced and terminates in a lower end having a forwardly and downwardly sloping rear surface.

3. A hook assembly according to claim 1, wherein said

substantially vertical portion of said hook comprises an upper part and a lower end, with the latter sloping rearwardly and downwardly relative to the upper part.

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