

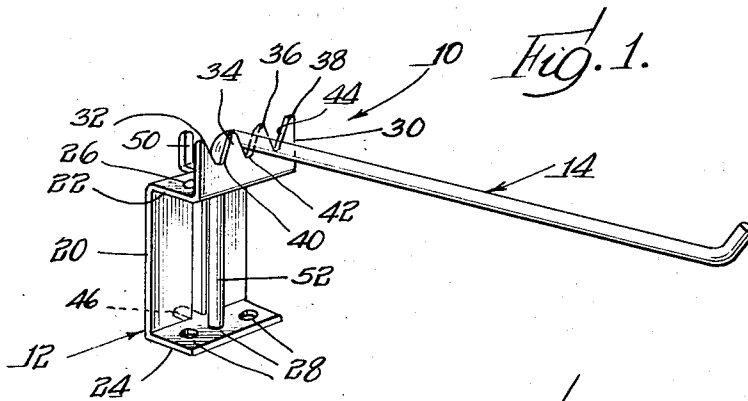
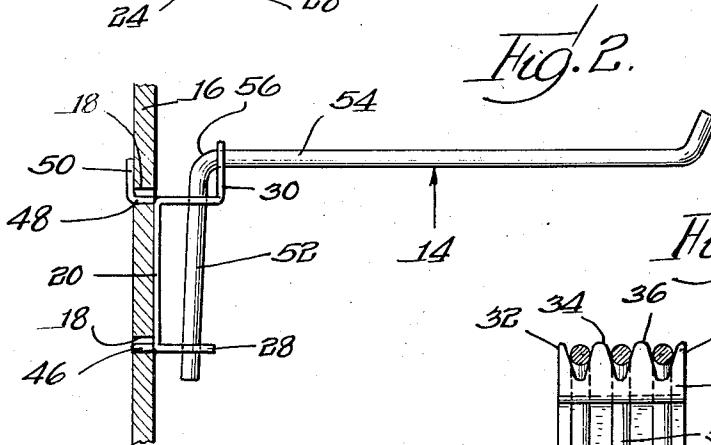
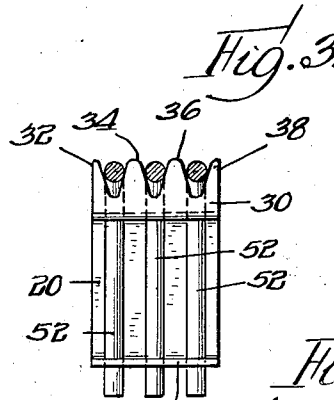
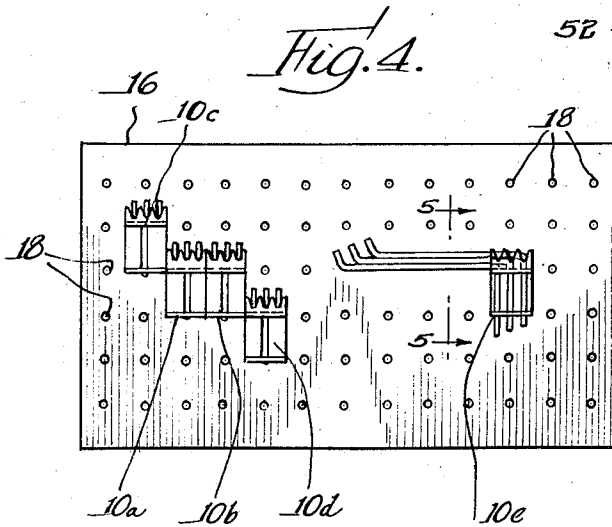
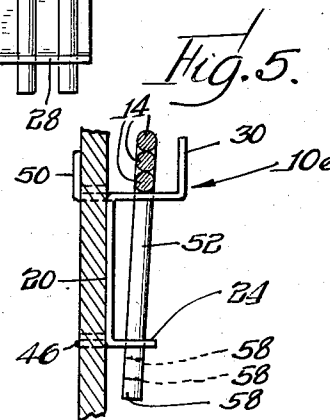
July 8, 1958

C. O. LARSON
HANGER STRUCTURE

2,842,264

Filed March 3, 1955

2 Sheets-Sheet 1



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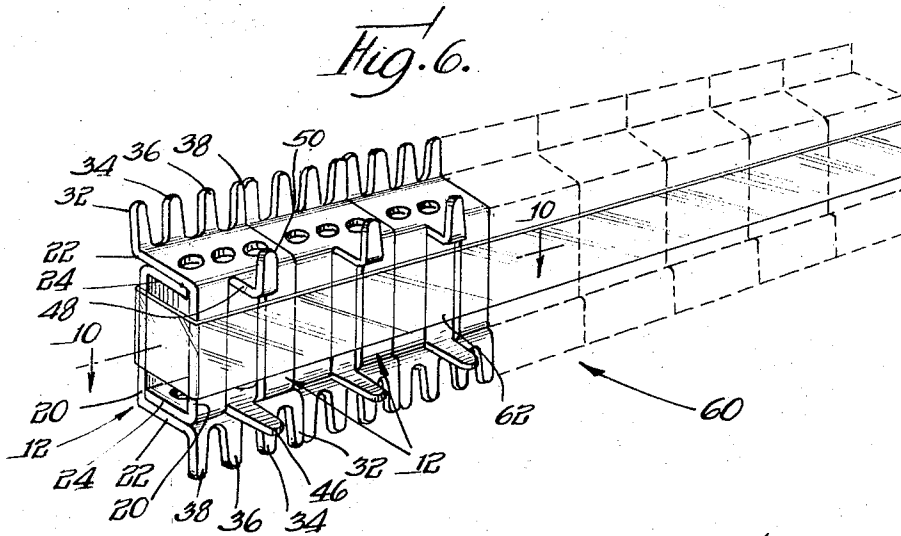
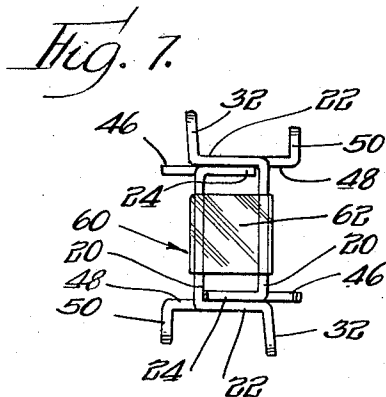
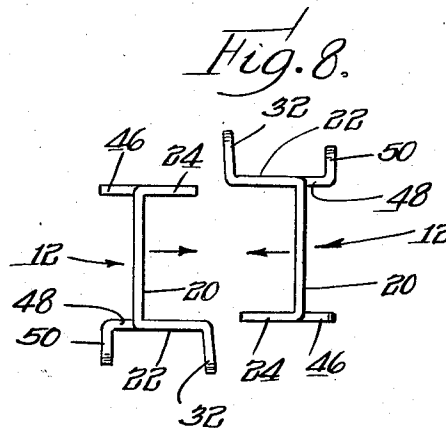
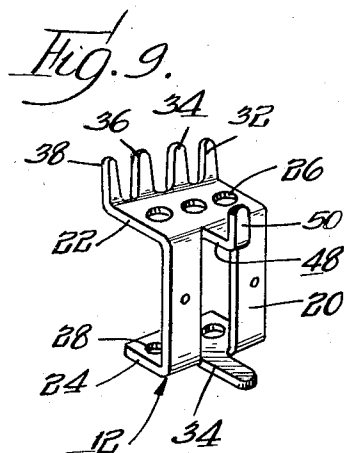
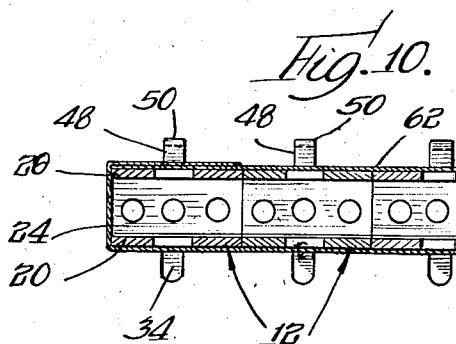
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2 Sheets-Sheet 2



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HANGER STRUCTURE

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3 Claims. (Cl. 206—65)

The present invention relates to a novel hook or hanger assembly and more particularly, to a novel hook assembly adapted to support various articles such as tools, display merchandise and the like.

An important object of the present invention is to provide a novel hook or hanger assembly which is of simple and economical construction and which may be easily mounted on peg boards or the like without utilizing auxiliary securing devices such as screws and the like.

Another object of the present invention is to provide an assembly of the above described type which includes a sheet material hanger member for mounting on the peg board, which hanger member supports one or more wire hook members.

A more specific object of the present invention is to provide a novel assembly of the above described type including a sheet material hanger member and a wire hook member which are constructed so that the hook member may be positioned and securely retained in an outwardly extending operative position and alternatively, easily folded to an inoperative position.

Still another object of the present invention is to provide a novel assembly of the above described type which is constructed so that a plurality of the assemblies may be mounted in side by side relationship on a peg board or the like with each of the assemblies including, if desired, a plurality of wire hook members, which wire hook members are equally spaced from each other.

Another object of the present invention is to provide a hanger member of the above described type which is constructed so that a plurality of the hanger members may be packaged in a simple, economical and compact manner.

Other objects and advantages of the present invention will become apparent from the following description and the accompanying drawings wherein:

Fig. 1 is a perspective view showing a novel assembly embodying the principles of this invention;

Fig. 2 is a sectional view showing the novel assembly mounted on an apertured panel or a peg board;

Fig. 3 is a sectional view showing an assembly including a plurality of wire hook members;

Fig. 4 is an elevational view showing a plurality of the novel assemblies of this invention mounted on a peg board;

Fig. 5 is an enlarged fragmentary sectional view taken along line 5—5 in Fig. 4;

Fig. 6 is a perspective view showing a package of hanger members formed in accordance with the present invention;

Fig. 7 is an end view of the package shown in Fig. 6;

Fig. 8 is an end view showing how a pair of hanger members are to be assembled together prior to packaging;

Fig. 9 is a rear perspective view of the novel hanger member of this invention; and

Fig. 10 is a fragmentary sectional view taken along line 10—10 in Fig. 6.

Referring now more specifically to the drawings where-

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in like parts are designated by the same numerals throughout the various figures, an assembly 10 embodying the principles of this invention includes a sheet material hanger member 12 and one or more wire hook members

14. The assembly is adapted to be mounted on a peg board 16 having a plurality of apertures 18 therein or any other suitable apertured panel.

The hanger member 12, which is preferably made from sheet metal, includes an upstanding or vertical web portion 20 and flanges 22 and 24 extending horizontally forwardly from upper and lower margins respectively of the web portion. The flange is provided with a plurality of equally spaced apertures 26 and the flange 24 is provided with a plurality of equally spaced apertures 28, which apertures are adapted to receive a portion of a wire hook member in the manner described below.

The flange 22 terminates in an upstanding or vertical flange portion 30 having equally spaced finger portions 32, 34, 36 and 38 separated by V-shaped notches 40, 42 and 44. These notches are also adapted to receive portions of a wire hook member. In order to provide means for connecting or mounting the hanger member 20 on the peg board, tabs or fingers 46 and 48 are struck from the vertical web portion 20 and extend rearwardly for entry into a pair of vertically aligned apertures 18 in the peg board. Furthermore, the tab 48 is formed with a hook portion 50 which is adapted to engage the back of the peg board in the manner shown to prevent the tab 48 from being inadvertently pulled out of the aperture. As will be understood, a load applied to the hook member 14 tends to pivot the hanger member 20 about the tab 48 so that the lower portion of the hanger member is held against the peg board by the load and so that the tab 46 is maintained within the aperture.

Each of the wire hook members 14 includes an attachment portion 52 which is adapted to extend through a pair of generally aligned apertures 26 and 28 in the flanges 22 and 24, and a shank portion 54 joined to the attachment portion by a curved portion 56. It should be noted that as shown best in Fig. 2, the portions 52 and 54 are disposed at an angle greater than 90° with respect to each other, or in other words, the curved portion 56 is bent through an angle less than 90° so that it has increased resistance to further undesired bending which might occur if the hook member were overloaded. It should also be noted that the apertures 28 in the flange 24 are horizontally offset slightly from the apertures 26 and that the hook member portion 52 is inclined from the vertical as shown in Fig. 2. This arrangement in combination with the wedging of the portion 54 into a selected V-shaped slot in the flange portion 30 restrains inadvertent rising of the hook member with respect to the hanger member and disassembly of the hook member. However, this arrangement still permits an operator to lift the hook member easily, if desired, by applying a lifting force to the lower end of the portion 52 or by applying the lifting force to the portion 54 adjacent the curved portion in a direction which is parallel to the portion 52.

The outer end of the shank portion 54 may be formed into any desired shape and may be shortened or lengthened, as desired. When a relatively long shank portion 54 is to be used and when a relatively heavy load is to be supported, it may be desirable to assemble a plurality of the hook members with the member 20 as shown in Figs. 3 and 4. It will be appreciated that three of the hook members may be used as shown in the drawings or alternatively, only a single hook member or a pair of hook members may be used depending on the requirements of the load to be supported. It should be noted that as shown in Fig. 4, the width of the sheet material member 20 is substantially equal to the spacing between the apertures 18 in the peg board so that a

plurality of the assemblies 10 may be mounted side by side in abutting relationship on the peg board as illustrated by the assemblies 10a and 10b in Fig. 4, or the assemblies may be mounted in abutting relationship diagonally across the peg board as illustrated by the assemblies 10c and 10d. This feature is particularly important when the assemblies are to be used to display merchandise in stores since it facilitates the arrangement of unique and attractive displays. It should also be noted that the end fingers 32 and 38 of the flange portion 30 are only about half as wide as the intermediate fingers 34 and 36 so that when a pair of assemblies is mounted on the peg board in the manner of the assemblies 10a and 10b, the abutting end fingers combine to form a finger substantially as wide as the intermediate fingers 34 and 36. Thus, not only will the hook members in each of the assemblies 10a and 10b be equally spaced from each other, but the adjacent hook members of the two assemblies will also be spaced apart the same amount.

As illustrated by the assembly 10e shown in Figs. 4 and 5, the wire hook members may be shifted from the outwardly extending operative position to a folded inoperative position. This, of course, is accomplished by raising the hook members in the manner described above and then swinging them back against the peg board. It should be noted that the portion 52 of the hook members is sufficiently long so that its lower end 58 projects a substantial distance below the flange 24. This distance is sufficient to enable it to be raised and swung to and from the extended and folded positions without disengaging the lower ends of the portions 52 from the flange 24 as the shank portions are superposed in the folded position of Fig. 5.

In Figs. 6, 7 and 10, there is shown a novel package 60 formed in accordance with this invention. The package includes a plurality of the above described hanger members 12 which are bound and secured together by a strip 62 of adhesive tape or the like. The hanger members are assembled in pairs by inverting one of the members as shown in Fig. 8 and moving the members together so that the flanges 22 and 24 of the upright member overlie and are telescopically associated with the flanges 24 and 22, respectively, of the other member. Each pair of assembled hanger members is disposed in abutting relationship with an adjacent pair of hanger members and is tightly held in this abutting relationship by the tape. With this arrangement, it will be appreciated that the package is provided with a rectangular or box-like transverse cross section so that the package is relatively strong and rigid as well as compact. It should be noted that the adhesive tape engages and holds the web portion 20 of each of the hanger members in order to prevent abutting hanger members from shifting transversely of the package relative to each other sufficiently to permit the edges of their flanges 22 and 24 to become disengaged. It should be noted that the oppositely projecting tabs or fingers 46, 48 on each hanger member project beyond the adjacent web portions and overlie the edges of the tape to prevent accidental dislodgement of the tape from the package. While the adhesive tape may be of any suitable type, it is preferably of the clear plastic type or colored plastic type so as to provide the package with a neat and pleasing appearance.

While the preferred embodiment of the present invention has been shown and described herein, it is obvious that many structural details may be changed without departing from the spirit and scope of the appended claims.

The invention is claimed as follows:

1. A support assembly for mounting on an apertured panel comprising a sheet material hanger member including an upstanding web portion, generally horizontal upper and lower flanges extending forwardly from upper

and lower margins of said web portion, said upper flange terminating in an upstanding flange portion having slot means therein, said flanges having generally aligned pairs of apertures therein, an integral tab extending rearwardly of said web portion for insertion into an aperture in the panel, and a second integral tab extending rearwardly of said web portion above said first mentioned tab for insertion through another aperture in the panel, said second mentioned tab terminating in a hook portion engageable with a rearwardly facing surface of said panel, and a plurality of wire hook members each including an upstanding attachment portion extending through aligned apertures in said flanges and an angularly disposed shank portion joined with an upper end of said attachment portion by a curved portion and removably held in said slot means, each attachment portion traversing the upper and lower flanges and constituting the sole support at the bottom flange for the wire hook member, and the free lower end of each attachment portion extending below the lower flange a distance sufficient to permit its associated wire hook member to be raised for disengaging the shank portion from the associated slot means and swung from an outwardly extending operative position to a folded inoperative position substantially parallel with the web portion and with the shank portions of adjacent hook members superposed one above the other and trapped in the inoperative position by the upstanding flange portion without disengaging the attachment portions from the lower flange.

2. In combination a panel having a plurality of equally spaced apertures therein arranged in generally horizontal and vertical rows, and a pair of support assemblies mounted on said panel and disposed substantially in abutting relationship with each other, each of said support assemblies comprising a sheet material hanger member including an upstanding web portion abutting said panel, generally horizontal upper and lower flanges extending forwardly from upper and lower margins of said web portion, said upper flange terminating in an upstanding flange portion having slot means therein, said flanges having pairs of generally aligned apertures therein, and an integral tab extending rearwardly from adjacent the lower margin of said web portion and into one of said panel apertures, and a second integral tab extending rearwardly from adjacent said upper margin of said web portion and through another of said panel apertures, said second mentioned tab terminating in a hook portion engageable with a rearwardly facing surface of said panel, and a plurality of wire hook members each including an upstanding attachment portion extending through aligned apertures in said flanges, and an angularly disposed shank portion joined with an upper end of said attachment portion by a curved portion and removably held in said slot means, each attachment portion traversing the upper and lower flanges and constituting the sole support at the bottom flange for the wire hook member, and the free lower end of each attachment portion extending below the lower flange a distance sufficient to permit its associated wire hook member to be raised for disengaging the shank portion from the associated slot means and swung from an outwardly extending operative position to a folded inoperative position substantially parallel with the web portion and with the shank portions of adjacent hook members superposed one above the other and trapped in the inoperative position by the upstanding flange portion without disengaging the attachment portions from the lower flange.

3. A package comprising a plurality of pairs of hanger members adapted to be mounted on an apertured panel, each of said hanger members including an upstanding web portion, upper and lower flanges extending laterally from upper and lower margins of said web portion, said upper flange terminating in an upstanding portion having slot means therein, said flanges having generally aligned apertures therein, said apertures in slot means being for

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supporting a hook member on said hanger member, a lower tab extending rearwardly from adjacent said lower margin of said web portion for insertion into an aperture in a panel, and a second upper tab extending rearwardly from adjacent said upper margin of said web portion for insertion through another aperture in said panel, said second tab terminating in an upstanding hook portion, the hanger members in each of said pairs being disposed in opposing relationship with one hanger member in each of said pairs being inverted with its upper and lower flanges telescoped beneath the lower and upper flanges respectively of its associated hanger member to form a box-like cross section with the upper and lower tabs of each telescoped pair of hanger members projecting outwardly beyond the adjacent web portions, said pairs of hanger members being disposed with peripheral end edges abutting the peripheral end edges of hanger members of an adjacent pair to provide an elongated assembly of pairs of hanger members, and an adhesive tape encircling said elongated assembly and holding said side edges in abutting relationship and adhesively gripping the web portion of each of said hanger members, said tape being positioned with its longitudinal edges disposed within the upper and lower tabs of each pair of telescoped hanger

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members whereby in either longitudinally inverted position of the package, the tabs will cooperate with the edges of the tape to prevent accidental dislodgement of the hanger members from the package.

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