Jan. 5, 1960 L. H. BEST ET AL 2,919,812

DISPLAY STANDS

Filed April 2, 1956 2 Sheets-Sheet 1

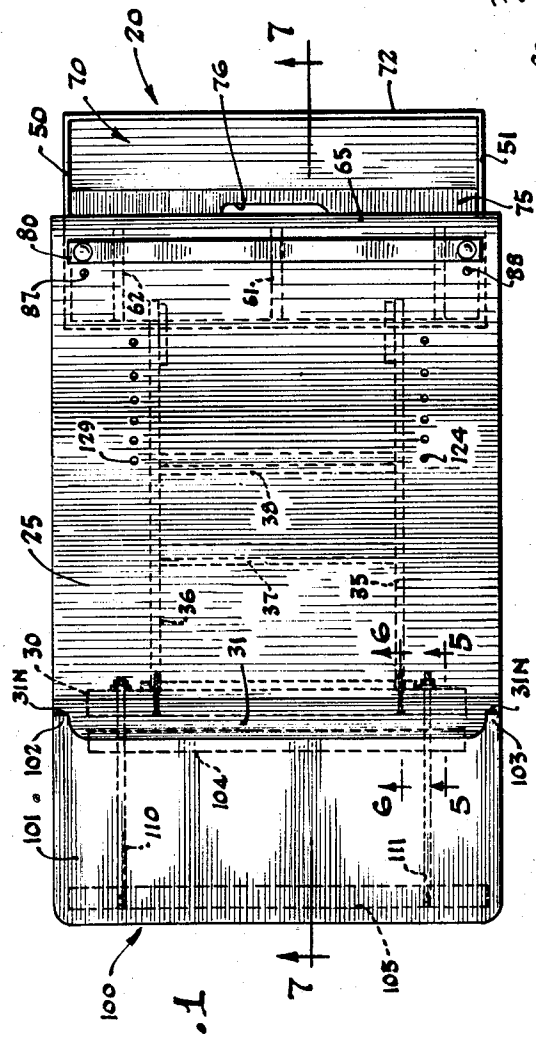


Fig. 1

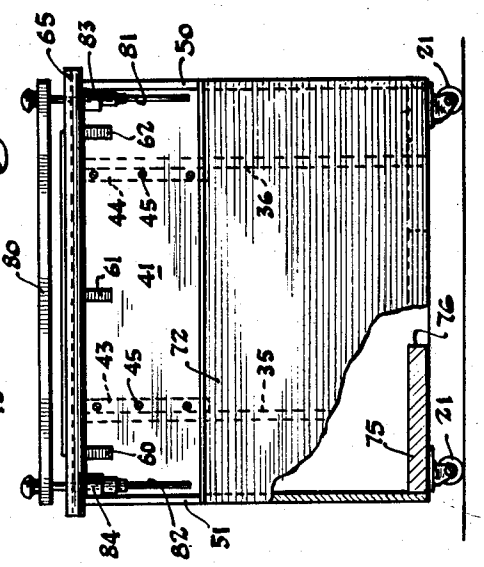


Fig. 3

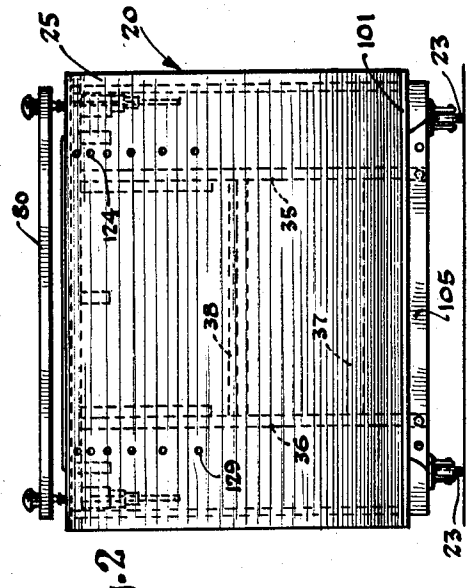


Fig. 2

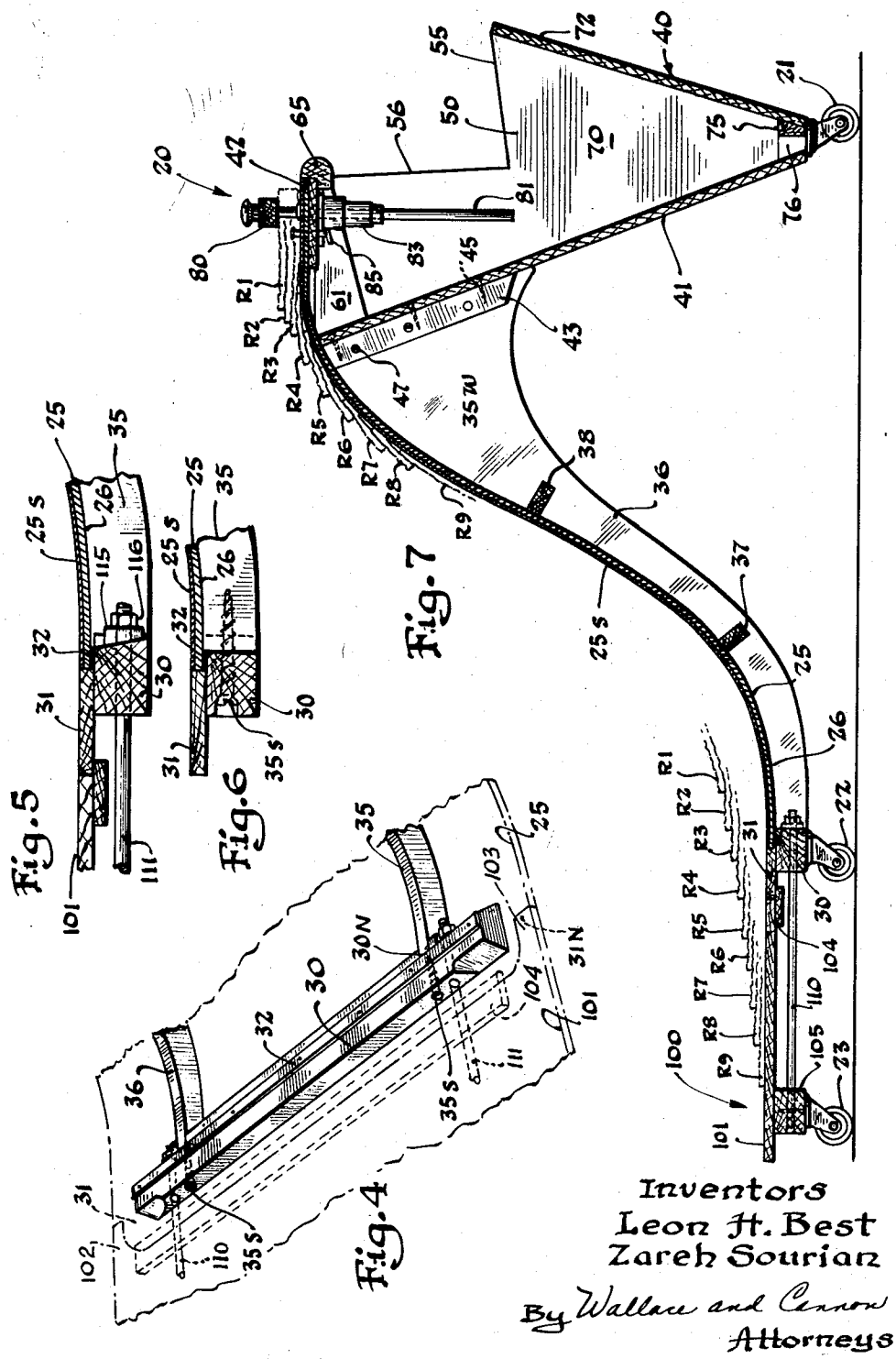
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2,919,812

DISPLAY STANDS

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5 Claims. (Cl. 211—45)

This invention relates to display stands or so-called display racks for displaying samples of rugs or the like.

In displaying samples of rugs or the like conveniently for examination, this has been accomplished by supporting the samples on a stand such that one sample overlies the next in a stack, and in comparing designs and colors it has been necessary to leaf through the samples and fold back edges in order that one sample can be compared to another.

The primary object of the present invention is to so construct a stand for displaying rug samples or the like, that lower edges of the samples are cascaded in a progressive manner whereby the lower edge of each sample is exposed substantially to enable comparisons to be made at a glance.

Stated in other words, the primary object of the present invention is to enable rug samples to be compared at a glance without the necessity of lifting each sample or leafing through the stack of samples to compare one sample to another. Rug samples or like samples usually are furnished in standard length for display purposes, and in attaining the above objects, resort is had under the present invention to an S-shaped display panel having a curvature which inherently produces a fan fold of the lower edges of the samples. The panel is so arranged that the supporting surface slopes gradually upwardly from a lower end of the panel that is spaced relatively close to the floor of the sample room, so that the upper end of the panel is substantially above floor level. Another object of the present invention is to adequately support the upper end of the panel by a base of novel structure, and to support the panel in the portions intermediate the ends thereof and impart to the panel the desired curvature by ribs that are complemental to the shape of the panel, these ribs being widened or thickened in the portions beneath the upper extent of the panel where the weight of the rug samples is greatest.

As was mentioned, rug samples or like samples that are to be displayed generally are furnished in standard or uniform dimensions. In those instances where samples of relatively short length are furnished, resort may be had in accordance with the present invention alone to the S-shaped panel. This panel at the upper end is provided with retainer means for holding aligned the upper ends of the rug samples on the stand, and the curvature of the panel inherently produces the desired fan-fold effect at the bottom of the stand. The bottom of the stand is somewhat extensive in a forward direction. This displays the ends of the samples conveniently in a horizontal plane, and such is a further object of the present invention.

There are instances where it may be desired to display a relatively large number of over-sized samples. Under such circumstances, the stand of the present invention is adapted at the lower end of the S-shaped panel to removably mount a forward, horizontal extension. Samples having the same dimensions as the samples that are held to the stand by the aforesaid retaining means may then be supported at their lower end portions on the extension and arranged so that the ends are cascaded to again enable comparisons to be made at a glance.

Those of the samples having end portions on the extension of the stand are fastened at their upper ends to fastening means on the S-shaped panel that are arranged progressively below the aforesaid retaining means, and the accomplishment of this manner of displaying rug samples constitutes a further object of the present invention.

A further object of the present invention is to afford a pocket at the back of a display stand which is afforded by base structure used to support the upper end of the stand above floor level, and to locate this pocket so that overhanging ends of samples at the rear of the stand will be disposed in the pocket.

Other and further objects of the present invention will be apparent from the following description and claims and are illustrated in the accompanying drawings which, by way of illustration, show a preferred embodiment of the present invention and the principles thereof and what we now consider to be the best mode in which we have contemplated applying those principles. Other embodiments of the invention embodying the same or equivalent principles may be used and structural changes may be made as desired by those skilled in the art without departing from the present invention and the purview of the appended claims.

In the drawings:

Fig. 1 is a top plan view of the display stand of the present invention including the extension;

Fig. 2 is a front elevation of the display stand shown in Fig. 1;

Fig. 3 is a rear elevation of the display stand shown in Fig. 1;

Fig. 4 is a fragmentary perspective on an enlarged scale showing the way in which the extension is removably fastened to the lower end of the S-shaped display panel;

Figs. 5 and 6 are detailed sectional views taken substantially on the lines 5—5 and 6—6 of Fig. 1; and

Fig. 7 is a sectional view taken substantially on the line 7—7 of Fig. 1.

The present invention is illustrated in the drawings, Figs. 1, 2, 3 and 7 as embodied in a display stand 20, which in the present instance is adapted primarily for floor support, and in order that the stand may be moved about the display room, casters 21, Fig. 3, are provided at the rear of the stand on base structure that will be described hereinbelow, other casters 22, Fig. 2, are provided at the lower or bottom end of the display panel, and in those instances where an extension is used, casters 23, Fig. 7, are provided at the forward end of the extension.

Under the present invention, certain of the rug samples are supported on a substantially S-shaped panel 25 of readily bendable sheet material such as quarter inch plywood or the like. The arrangement is such that the lower end portion 26, Fig. 7, of the panel 25 is supported just above floor level by the casters 22. In the present instance, the casters 22 are attached to a cross bar 30, Fig. 7, that is fastened to the end of the panel 25 so as to extend across substantially the full width of the forward end portion 26 of the panel 25 as shown particularly in Figs. 1 and 2. A flat strip 31, Figs. 5 and 6, is fastened to the upper face of the bar 30 so as to abut the forward edge of the panel 25, and as will be observed in Fig. 1, the strip 31 is notched on either side at 31N for a purpose to be mentioned below. A thin strip 32, Figs. 5 and 6, is fastened to the upper face of the bar 30 rearwardly of the strip 31, and the bottom of the panel 25 is notched at its forward end as can be appreciated from Figs. 5 and 6 so that the strip 32 is adapted to fit therein for nailing the bar 30 to the panel 25.

In achieving the desired S-shape for the panel 25, quarter inch plywood is preferably used, and this may be faced with gloss surfacing 25S, Fig. 5, of approximately one-eighth inch in thickness. To impart the desired S-shape to the panel 25, resort is had primarily to a pair of rigid ribs 35 and 36 having upper edges which embody the configuration that is desired to impart to the panel 25. Thus, in effect the upper edges of the ribs 35 and 36 constitute half a sine curve in each instance, and the panel 25 may be nailed or screwed to the upper edges of the ribs 35 and 36 to assume the configuration shown in Fig. 7. Braces 37 and 38 are used between the ribs 35 and 36 as shown in Figs. 1 and 2.

The display panel 25 is supported at its upper end portion by a base 40, Fig. 7. The base 40 includes a forward wall 41 inclined in a forward direction from the vertical as shown in Fig. 7, so that the upper end thereof engages the bottom of the panel 25 forwardly of the rear end 42 of the panel 25. Vertical strips 43 and 44 are fastened by wood screws 45 in spaced relation to the side of the wall 41 that faces the ribs 35 and 36, and wood screws 47 are used in turn to fasten the strips 47 to the inner faces of the ribs 35 and 36 as will be observed particularly in Fig. 3.

The base 40 includes side walls 50 and 51 which, as will be observed in Fig. 1, are slightly inwardly of the outer edges of the panel 25. The side walls 50 are, for a purpose to be mentioned, somewhat V-shaped in outline as will be observed in Fig. 7, and each such side wall proceeding from the rear edge is formed with a horizontal shoulder 55 which terminates at a vertical extension 56 of the side wall. The extensions 56 extend upwardly to the upper edges of the side walls 50 and 51, and these upper edges are shaped complementary to the upper portion of the panel 25 between the wall 41 and the outer edge of vertical extension 56 of the side wall of the base 40 so as to complementally engage the bottom of the panel 25 at this area. It will thus be seen that the panel 25 is supported in a relatively rigid manner at the upper end portion thereof, the portions of the upper end of the panel 25 that overlie the upper edges of the side walls 50 and 51 of the base 40 being fastened thereto in a convenient manner as by wood screws.

As will be described, the upper ends of certain of the samples that are being displayed are clamped to the stand, and to rigidify the upper end of the panel 25 for this purpose, bracer strips 60, 61 and 62, Fig. 3, are arranged beneath the bottom of the panel 25 at the upper area thereof so as to extend rearwardly from the rear face of the wall 41 as shown in Fig. 7. These bracers are anchored to the wall 41 at their forward ends, and the rear ends of these bracers terminate at a molding strip 65 which is used to finish off the exposed ends of the structure at the upper end of the stand.

A pocket 70, Figs. 1 and 7, is provided at the back of the stand for a purpose to be mentioned below, the front wall of this pocket being afforded by the wall 41 of the base 40. Extending between the side walls 50 and 51 of the base 40 is another wall 72, and this wall defines the rear wall of the pocket 70 as will be observed in Fig. 7. It was mentioned that the wall 41 is inclined. The wall 72, it will be observed, is inclined in the opposite direction, and this defines a relatively large pocket 70 substantially of V-shape. It is desirable of course that unencumbered access be afforded for the pocket 70. It is for this reason that the side walls 50 and 51 are provided wtih the shoulders 55 thus to locate the rear wall 72 of the pocket substantially rearwardly of the rear edge of the panel 25. The bottom of the pocket 70 is defined by a horizontal strip 75, Figs. 1 and 7, which extends between the side walls 50 and 51. To enable the pocket to be cleaned or swept out conveniently, the bottom strip 75 is provided with an opening 76 intermediate the ends thereof, and the bottom strip 75 also serves as a support for the casters 21.

Certain of the rug samples, as R1, R2 and R3 in the present instance, Fig. 7, are held or clamped to the upper end portion of the panel 25 with the rear edges thereof aligned as will be observed. One way of achieving this is by a clamping bar 80 which extends across the top of the panel 25 as will be observed in Figs. 1, 2 and 3. The clamp bar 80 has an opening at either end thereof, and push rods 81 and 82 are extended through these openings and are passed downwardly through guide bosses 83 and 84, this being in accordance with the arrangement described in U.S. Patent 2,137,748 and reference may be had thereto for details. Thus, in clamping the samples R1, R2 and R3, the ends thereof are arranged beneath the clamp bar 80 and it may be pointed out that the push rods 81 and 82 are spaced apart a greater width than the rug samples. After the desired number of rug samples have thus had the upper ends thereof disposed beneath the clamp bar 80, the rods 81 and 82 are pushed downwardly so as to tightly clamp the rug samples between the clamp bar 80 and the panel 25. A spring biased lever 85, Fig. 7, angularly engages each of the rods 81 and 82 at either side of the stand so as to hold the rods firmly in the positions they assume when the rug samples are clamped, this being in accordance with the arrangement described in the aforesaid patent. To release the clamp bar 80, release pins 87 and 88 are afforded, and these release pins engage the related levers as 85, so that by actuating the release pins 87 and 88 the levers 85 are released to enable the rods 81 and 82 to be withdrawn upwardly.

The configuration of the panel 25 inherently produces a cascading of the lower ends of the rug samples R1, R2 and R3 as will be observed in Fig. 7, and this exposes the lower end of each such sample so that each sample may be compared to another at a glance, noting that the lower end portion 26 of the panel 25 is disposed horizontally for an appreciable extent thereby presenting the lower end of the rug samples conveniently for comparison.

In achieving the desired display of the rug samples, there are instances where a forward extension of the panel 25 is required in order to enable the required progression of lower ends of rug samples or the like to be supported in substantially a horizontal plane for convenient comparisons. Under the present invention, the lower end of the stand 20 is adapted to have removably mounted thereto a forward extension of the panel 25, and such forward extension structure is indicated generally at 100, Figs. 1 and 7. The extension 100 includes a panel 101 having the same thickness and width as the panel 25. The rear end of the panel 101 is provided at either side with fingers 102 and 103 which are complemental to the notches 31N mentioned above enabling the end of the panel 101 to be complementally mated with the strip 31, and preferably a strip 104 is fastened to the bottom of the panel 101 so as to overlap the bottom of the strip 31 as shown in Fig. 7.

Just inwardly of its forward edge, the panel 101 is provided with a bottom strip or block 105 which extends substantially from one side of the panel 101 to the other as shown in Fig. 1. It will be noted that the bottom strip 105 serves to support the front casters 23 that are associated with the forward extension structure 100.

In detachably associating the front extension structure 100 with the stand 20, two tie rods 110 and 111, Figs. 1 and 7, are passed through corresponding openings in the bottom strip 105 so as to extend in a rearward direction. The tie rods are provided with apertures, and in anchoring the rods to the bottom strip 105 nails are driven upwardly into the strip 105 through the aforementioned apertures in the tie rods. The rear ends of the tie rods 110 and 111 are threaded and extend beyond the rear edge of the panel 101 as shown in Fig. 5. The bottom strip 30 that is associated with the lower end of the panel 25 is provided with openings through which the rear ends

of the tie rods **110** and **111** are passed, and the arrangement is such that when the fingers **102** and **103** are complemented with the notches **31N**, the threaded ends of the tie rods **110** and **111** are exposed at the rear edge of the bottom strip **30**. A washer **115** and a nut **116**, Fig. 5, are then mounted on the threaded ends of the tie rods **110** and **111**, and the nuts **116** are tightened to rigidly associate the forward extension structure **100** with the remaining part of the stand **20**.

As shown particularly in Fig. 4, the bar **30** at the forward end of the panel **25** is provided with a pair of spaced apart notches as **30N** inwardly of the remote ends thereof, and these notches are adapted to receive the forward ends of the ribs **35** and **36**. Wood screws as **35S** are passed through apertures in the bar **30** that are aligned with the notches **30N**, and in this maner the lower or front ends of the ribs **35** and **36** are secured to the bar **30**.

As shown in Fig. 7, the front extension structure **100** is adapted primarily to support the lower ends of rug samples as R4 through R9, the ends of these samples being forwardly of the lower ends of the samples R1, R2 and R3 that were mentioned above. Thus, it will be observed that the ends of the samples R4 through R9 are cascaded, and having established this relation means are afforded upwardly of the lower end of the panel **25** to enable the upper ends of these samples to be fastened to the display panel **25** below the clamp bar **80**. Thus, as shown in Figs. 1 and 2 a plurality of openings as **124** and **129** are provided inwardly of either side of the panel **25** in a progressive relation, and the spacing between these openings will correspond to the spacing between the lower ends of the samples R4 through R9. Preferably this spacing is approximately three inches under the present circumstances. The openings as **124** and **129** are adapted to take sheet metal screws which are passed through the upper ends of the samples R4 through R9 to fasten these samples to the display stand below the clamp bar **80** that is used for the uppermost ones of the samples as R1, R2 and R3.

Of particular importance in the present instance is that the ribs **35** and **36** are widened vertically as at **35W**, Fig. 7, in the portions that are below the upper extent of the panel **25**. In this way a truss effect is afforded between the wall **41** of the support and the ribs where the weight of the rug samples is greatest.

The display stand **20** can handle uppermost samples in addition to the samples R1, R2 and R3, and the lower ends of these can extend in cascade fashion progressively for about two-thirds of the length of the panel **25** upwardly from the lower end **26** thereof. The rear ends of such additional samples will extend beyond the clamp bar **80**, but will overhang into the pocket **70** so as to be disposed conveniently therein as afforded by the unimpeded access to the pocket **70**. The size of the pocket **70** is adequate to also receive sample books.

Hence, while we have illustrated and described the preferred embodiment of our invention, it is to be understood that this is capable of variation and modification, and we therefore do not wish to be limited to the precise details set forth, but desire to avail ourselves of such changes and alterations as fall within the purview of the following claims.

We claim:

1. In a display stand for rug samples or the like, a substantially S-shaped panel arranged to afford a sample supporting surface that ascends along a gradual slope from a lower end to an upper end, means on the stand adjacent the upper end of the panel to hold the upper extents of the samples so that the lower ends of the samples are cascaded to expose substantially the individual lower ends of the samples for color or design contrast, a base for supporting the upper end of the panel, said base affording the front wall, the rear wall and side walls of a rear pocket of the stand, and ribs anchored to the front wall of said base for supporting the underside of the panel and being curved complemental to the underside of said panel and extending from said base forwardly substantially to the lower end of the panel, said ribs being widened vertically in the portions beneath the upper extent of said panel and being gradually narrowed vertically in a forward direction.

2. In a display stand for rug samples or the like, a substantially S-shaped one-piece panel arranged to afford a sample supporting surface that ascends along a gradual and extended S-shaped slope from a substantially horizontal lower end portion to a substantially horizontal upper end portion, a clamping bar mounted above said upper end portion of the panel to hold the upper extents of the samples so that the remaining portions of the samples on the panel are cascaded on the panel to expose substantially the individual lower ends of the samples for color or design contrast, a base arranged in supporting relation below the upper end portion of the panel and to which the upper end portion of the panel is connected, and a pair of one-piece ribs anchored to said base to support the underside of the panel forwardly of the base and having upper edges curved complemental to the bottom of the panel and extending in contact therewith from the base forwardly substantially to the lower end of the panel, said ribs being widened vertically in the portions beneath the upper extent of the panel forwardly of said upper portion of the panel and being gradually narrowed in a forward direction.

3. A stand according to claim 2 wherein the base has a forward wall to which the ribs are anchored and wherein the base has a divergent rear wall defining a pocket at the rear of the stand having a wide open upper end below and rearward of said clamping bar.

4. In a display stand for rug samples or the like, a substantially S-shaped panel arranged to afford a sample supporting surface for the samples that ascends along a gradual slope from a lower end to an upper end, a clamping bar mounted on the stand above the upper end of the panel to clamp the upper extents of certain of the samples so that the lower ends of the samples on the panel are cascaded to expose the individual lower ends of the samples for color or design contrast, a base for supporting the upper end of the panel, ribs anchored to said base to support the underside of the panel forwardly of the base and having upper edges curved complemental to the underside of said panel and extending in contact therewith from said base forwardly substantially to the lower end of the panel, said ribs being widened vertically in the portions beneath the upper extent of said panel and being gradually narrowed vertically in a forward direction, and aligned means on the S-shaped panel below said clamping bar to fasten upper ends of those samples having ends cascaded on said forward extension.

5. A stand according to claim 4 wherein the base includes a pair of upwardly diverging front and rear walls, said ribs being anchored to said front wall, said rear wall being shorter than the front wall and affording therewith a pocket having a wide open upper end below and rearward of the rear end of said panel.

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