

Jan. 14, 1964

S. LIGEIKIS ETAL
GARMENT DISPLAY RACKS

3,117,674

Filed March 14, 1962

3 Sheets-Sheet 1

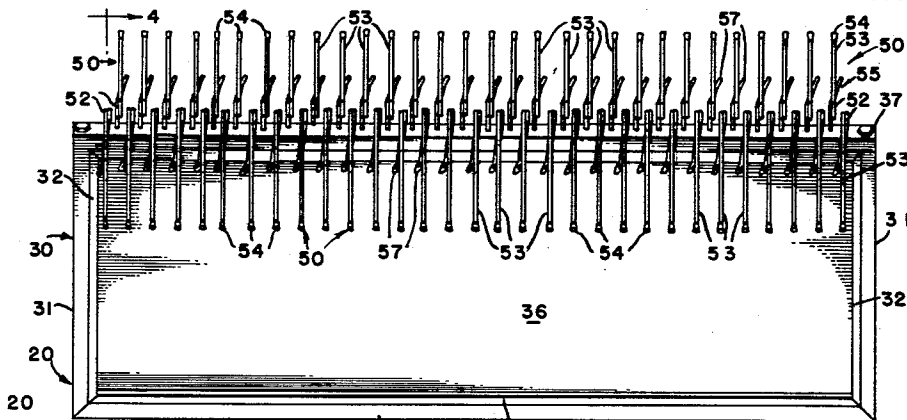


FIG. 1.

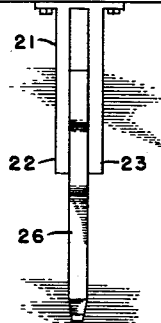
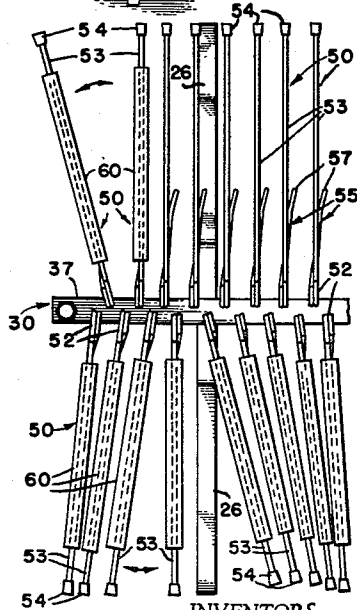
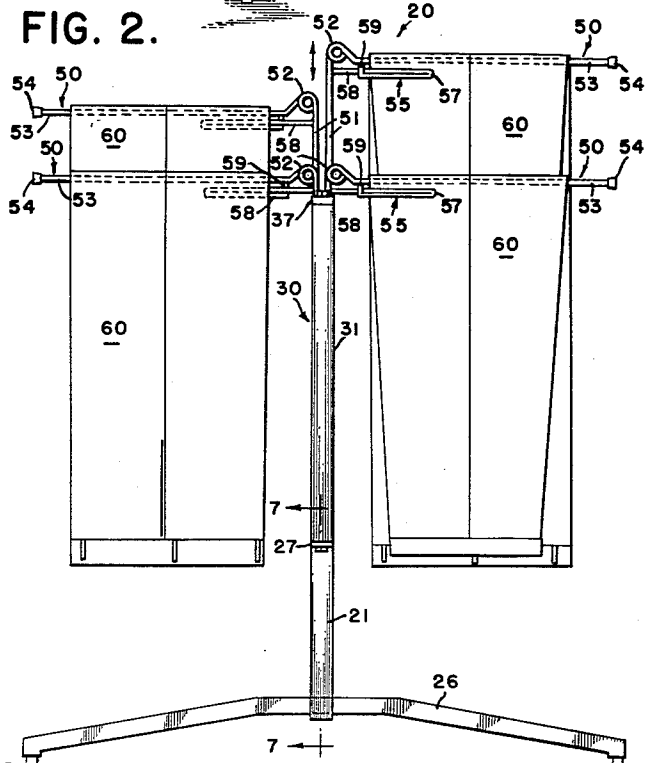


FIG. 3.

FIG. 2.



INVENTORS
STEVE LIGEIKIS
BY STEVE LIGEIKIS, JR.

Albert J. Kramer
ATTORNEY

Jan. 14, 1964

S. LIGEIKIS ETAL
GARMENT DISPLAY RACKS

3,117,674

Filed March 14, 1962

3 Sheets-Sheet 2

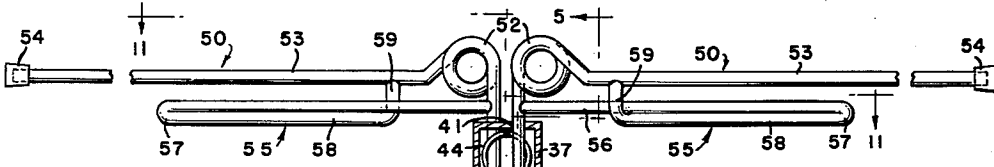


FIG. 4.

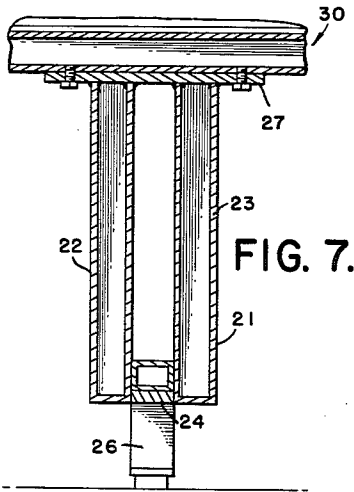


FIG. 7.

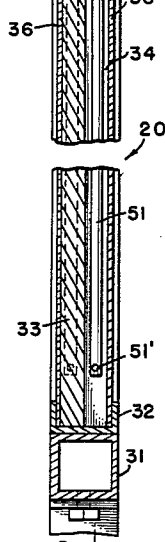


FIG. 6.

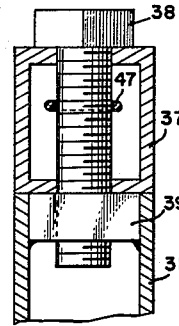
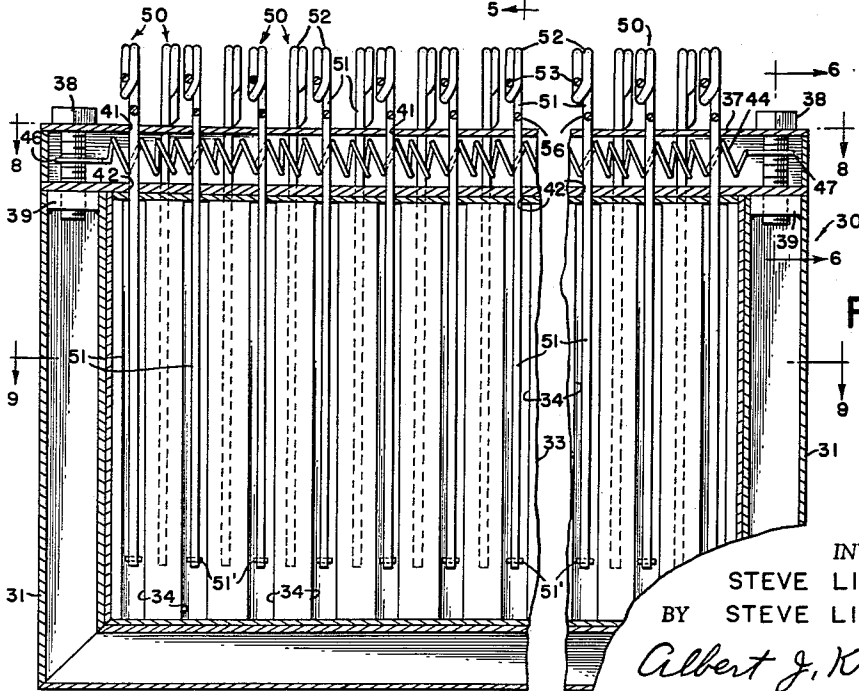


FIG. 5.



INVENTORS
STEVE LIGEIKIS
BY STEVE LIGEIKIS, JR.

Albert J. Kramer
ATTORNEY

Jan. 14, 1964

S. LIGEIKIS ETAL
GARMENT DISPLAY RACKS

3,117,674

Filed March 14, 1962

3 Sheets-Sheet 3

FIG. 8.

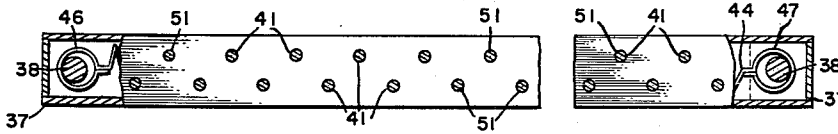


FIG. 9.

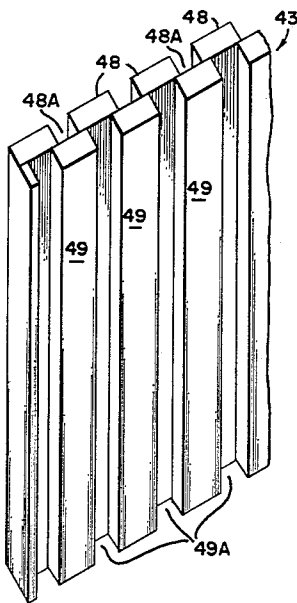
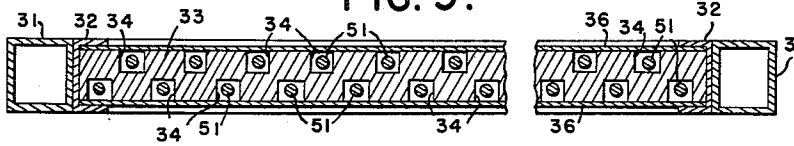


FIG. 10.

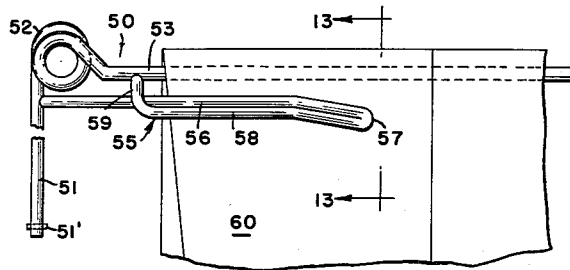


FIG. 12

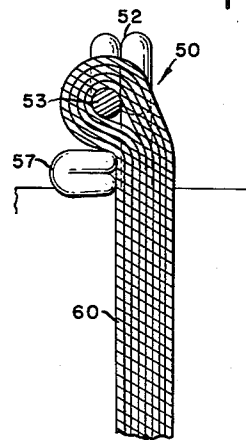


FIG. 13

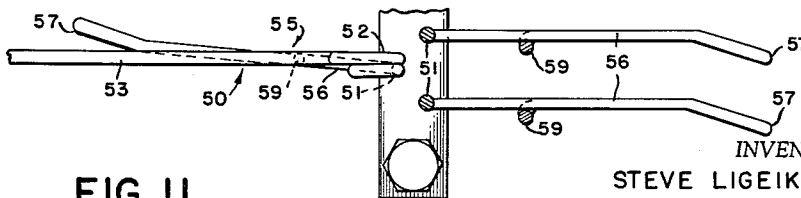


FIG. 14.

INVENTORS
STEVE LIGEIKIS
BY STEVE LIGEIKIS, JR.

Albert J. Kramer
ATTORNEY

1

3,117,674

GARMENT DISPLAY RACKS

Steve Ligeikis and Steve Ligeikis, Jr., both of
P.O. Box 245, Perrine, Fla.

Filed Mar. 14, 1962, Ser. No. 179,668
8 Claims. (Cl. 211-168)

The present invention relates to garment display racks, and more particularly to such racks which are capable of displaying individual garments in isolated position without removal of the garment from the rack, and also relates to a garment display rack comprising a hanger with an improved retaining clip which permits the semi-automatic loading and unloading of the hanger, with the garment properly and securely held by the clip when loaded on the hanger.

In retail merchandising of garments, such as trousers, slackets, etc., it is desirable to display a large number of garments in a minimum amount of space, and this requirement has led to the utilization of garment display racks in which a number of hangers are supported from and by a suitable structure, the structure usually standing free on a sales floor. The hangers are conventionally placed relatively close to each other, and are pivotal about generally vertically extending axes, to thereby permit the viewing of one garment at a time by a customer.

During the selection process by the customer, the hangers are swung so that individual garments may be viewed one at a time. As usually happens, the selection process usually eliminates a good many of the garments, resolving the issue down to a choice between one of several garments. At this step in the purchasing of the garment, the customer desires to view comparatively the several garments among which the final selection will be made. Often, the customer calls upon a salesman to remove the garments thus initially selected from their hangers so that they may be comparatively viewed and scrutinized, and this removal of the garments, or the spreading of the hangers in an unnatural fashion, results in several deleterious consequences. For one thing, a large amount of the salesman's time is consumed in removing the garments, being present while the garments are finally judged, and then loading back onto their hangers the garments not selected. Also, this procedure has the effect of requiring an undue amount of handling of the garments, leading to the garments becoming soiled, unpressed, or otherwise shopworn, all of which effects lessen the profits to the store and/or cause an increase in the cost of the garments.

The garment display racks heretofore utilized have often taken up an undue amount of valuable space on the sales floor, and/or have revealed so much of the rack itself that the racks did not lend themselves to all interior decors. Also, these prior racks have not been usable by themselves for the display of one or several individual garments apart from the remainder of the garments.

The hangers of the prior display racks have been provided with clip devices to retain the garment on the hangers, to prevent them from falling off the hangers onto the floor and thereby becoming soiled. Often, the clip or retainer devices pressed the fabric of the garment between two members, which were of metal or other material, and this tended to crease or deform the garment in an unnatural way, thus preventing them from giving the best appearance. Other clip or retainer constructions on hangers has utilized a fabric-to-fabric contact to prevent the sliding of the garment off the hanger. However, these have required that the garment be handled in a unique and unobvious manner, so that garment wear resulted and so that the customers did not understand how to properly load the hanger with the result that the clip or retainer was not utilized by the customer and often a garment eventually fell to the floor.

2

An object of the present invention is to provide a garment display rack which is substantially concealed by the garments displayed thereon.

Another object of the present invention is the provision of a garment display rack in which a selected one or more of the garments displayed thereon may be individually viewed.

Yet another object of the present invention is to provide a garment display rack in which one or more selected hangers, with garments thereon, may be individually isolated from the mass of garments on display to thereby permit individual viewing thereof.

A further object of the present invention is the provision of a garment display rack in which a unique display effect may be obtained by isolating one or more selected garments from the mass of garments on the rack, and maintaining them in a variety of positions.

A still further object of the present invention is to provide a garment display rack in which garment handling during the selection process leading to a purchase is at a minimum.

Another object of the present invention is the provision of a garment display rack with hangers which facilitate loading and removal of garments thereon.

Yet another object of the present invention is to provide a garment display rack having hangers which facilitate the loading and removal of garments thereon by a person, such as a customer, having no experience with the rack.

A further object of the present invention is the provision of a garment display rack having hangers which may be loaded and unloaded with garments with little or no manipulation of the garment.

Other objects and many of the attendant advantages of the present invention will be readily understood from the following specification and drawings, wherein:

FIG. 1 is a side perspective view of a garment display rack in accordance with the present invention.

FIG. 2 is an end view of the garment display rack of FIG. 1, showing hangers individually positioned.

FIG. 3 is a plan view of a portion of the garment display rack shown in FIG. 1.

FIG. 4 is an enlarged cross-sectional view taken on the line 4-4 of FIG. 1.

FIG. 5 is a cross-sectional view taken on the line 5-5 of FIG. 4.

FIG. 6 is a cross-sectional view taken on the line 6-6 of FIG. 5.

FIG. 7 is an enlarged cross-sectional view taken on the line 7-7 of FIG. 2.

FIG. 8 is a cross-sectional view taken on the line 8-8 of FIG. 5.

FIG. 9 is a cross-sectional view taken on the line 9-9 of FIG. 5.

FIG. 10 is a perspective view of a part of an alternate construction support structure for the hangers of the display rack of the present invention.

FIG. 11 is a cross-sectional view taken on the line 11-11 of FIG. 4.

FIG. 12 is an elevational view showing a hanger and clip of the present invention.

FIG. 13 is a cross-sectional view taken on the line 13-13 of FIG. 12.

Referring now to the drawings, wherein like or corresponding reference numerals are applied to like or corresponding parts throughout the several views, there is shown in FIG. 1 a garment display rack generally designated 20. Display rack 20 has a base portion comprising the two identical legs 21, a support generally designated 30 and a plurality of hangers 50 carried by the support 30.

Each of the legs 21 comprises the two standards 22 and 23, as may be seen in FIGS. 1 and 7, these standards 22 and 23 being tubular members of square cross-section and

3

having a connecting plate 24 at their lower end. A foot member 26 (see also FIG. 2) extends through and between the standards 22 and 23 and is secured therethrough, as by welding, foot member 26 overlying the connecting plate 24. The standards 22 and 23 are secured at their upper ends to a connecting plate 27 which is secured by bolts or the like to a portion of the support 30.

As may be seen from FIGS. 1, 2 and 3, the support 30 is generally planar, having a relatively narrow width in comparison to its length and height. Support 30 as shown in FIG. 5, has a frame 31 bounding it at its end and bottom, the frame 31 also being formed of a tubular member or members of generally square cross-section, as may be seen in FIGS. 4 and 9. The frame 31 supports a channel member 32 inwardly of the bottom and ends thereof, and across the upper part thereof. Within the channel 32 is a plate-like member generally designated 33, and as may be seen in FIG. 9 the plate-like member 33 has a plurality of grooves 34 in the opposite faces thereof, these grooves 34 providing channels or pockets for receiving vertically extending portions 51 of the hangers 50. The grooves 34 in one face of the plate-like member 33 are offset relative to the grooves 34 in the other face of the plate-like member 33. Grooves 34 may be formed in known fashion by routing them out from the opposite faces of a single piece of material such as wood. The grooves 34 may be seen to extend vertically in FIGS. 4 and 5, the vertical portions 51 of the hangers 50 being shown therein.

Covering over the grooves 34, and providing a neat and attractive appearance to the garment display rack 20, as well as insuring the garments against damage, are the panels 36, and as will be seen from FIG. 4 the panels 36 are contained, with plate-like member 33, within the channel 32.

Referring now to FIG. 5, there may be seen extending across the top of support 30, and forming a part thereof, a tube 37 which is secured to the frame 31 by bolts 38, bolts 38 extending through the tube 37 and engaging in nuts 39 suitably affixed in the upper ends of the side portions of frame 31. As may be seen in FIG. 6, the tube 37 is generally square in cross-section.

The tube 37 has a series of oppositely disposed pairs of holes 41 and 42 in the upper and lower plates thereof, the axis of each pair of holes being in alignment with a said groove 34.

A coil spring 44 extends within the tube 37, as may be seen in FIGS. 4 and 5, the ends 46 and 47 of the coil spring 44 being passed around the bolts 38, as may be seen in FIGS. 5 and 8.

Referring now to FIG. 10, there is shown an alternate construction of the plate-like member 33, there being shown in FIG. 10 a plate-like member 43 made up of a first row of spaced, longitudinally-extending members 48 of generally rectangular cross-section and a similar row of members 49. These members 48 and 49 are secured to each other in alternate overlapping fashion, as by gluing or the like, and thereby provide grooves 48A and 49A between the several members 48 and the several members 49, respectively, these grooves or channels corresponding to the grooves 34 in plate-like member 33.

Referring now to FIG. 4, it may be seen that the hangers 50 of the present invention each comprises a rod with a vertically extending portion 51 having a loop 52 at its upper end and a horizontal portion 53 extending from the loop 52, and thereby extending from the upper end of the vertical portion 51. As may be seen from FIGS. 5 and 11, the vertical portions 51 and the horizontal portion 53 lie in adjacent vertical planes.

Each of the hangers 50 has a protection knob 54 at its outer end, and each hanger 50 is provided with a clip generally designated 55. Each clip 55 comprises a horizontal part 56 having one end thereof secured to the upper part of the vertical portion 51, as by brazing or welding, the end of horizontal part 56 being preferably adjacent

4

the top of vertical portion 51, near loop 52. Horizontal part 56 extends beneath the horizontal portion 53 of hanger 50, as may be seen from FIG. 4, and is preferably in skew relation to said horizontal portion 53, as is best seen in FIG. 11. The outer end of clip 55 is formed into a bight 57, and as may be seen from FIG. 11 the bight 57 lies on the opposite side of a vertical plane extending through the hanger horizontal portion 53 from the hanger vertical portion 51. A return part 58 of the clip 55 extends from the bight 57 generally parallel to the horizontal part 56, return part 58 having an upturned end 59 which is secured in suitable fashion to the underside of horizontal portion 53. Preferably, and as may be seen from FIG. 11, the end of clip 55 adjacent bight 57 is in angular relation to the horizontal part 56 and 58, this end adjacent bight 57 diverging away from the vertical plane containing hanger horizontal portion 53 and being removed from a vertical plane through horizontal portion 53 sufficiently to be engaged by the folds of a garment placed on and slid along the horizontal portion 53.

In FIG. 12, there may be seen the hanger 50 and its clip 55 with a pair of trousers 60 arranged on the horizontal portion 53, and extending rearwardly of the horizontal part 56 and 58 of the clip 55. As it is shown in FIG. 13, this construction causes fabric-to-fabric engagement so as to prevent the trousers from slipping off the hanger 50.

As is shown in FIG. 5, each of the vertical portions 51 extends through a pair of holes 41 and 42 in the tube 37 and thence into a groove 34 in plate-like member 33. Each vertical portion 51 has a suitable detent or enlargement 51' at its lower end to prevent withdrawal of the hanger 50 entirely from the grooves 34, the horizontal part 56 of clip 55 limiting the downward movement of the hanger 50. Vertical portion 51 is in bearing engagement with a convolution of coil spring 44, having engagements therewith on opposite sides thereof as shown in FIG. 5.

The coil spring 44 is, of course, a single, unitary spring, and serves to hold an entire array of hangers 50. Should spring 44 break, it will, at most, fail to engage only one of the hangers 50, all off the other hangers being operatively engaged therewith even when it is broken.

A hanger 50 is retained in any elevated position by the combined action of the binding of the vertical portion 51 with the holes 41 and 42, and in addition by the engagement of the vertical portion 51 with the convolution of the coil spring 44.

The garment display rack, when ready for use, rests on its feet 21, with the hangers 50 extending in two banks or rows, in opposite direction from the central plane of hanger support 30. As may be seen from FIG. 3, individual hangers 50 may be rotated about a vertical axis to expose the garments thereon, as indicated by the arrows, so that each garment may be used by the customer.

When the garment display rack 20 has garments on the hangers 50, the rack itself will be substantially concealed by the garments thereon, thus permitting the rack to be utilized with any interior decor. Individual hangers may be elevated different distances, as will be apparent from FIG. 2, to thereby promote and display individual garments on the several hangers thus elevated and isolated. Thereby, one or a plurality of the racks 20 may be utilized to form an eye-appealing display of the merchandise, separating and isolating certain of the garments for enhanced sales appeal.

When the customer views the garments on the display rack 20, each of the hangers may be swung in a horizontal plane, as is indicated by the arrows in FIG. 3, to thereby permit viewing of the garments individually. When the choice is narrowed down to several garments, the individual hanger 50 upon which each selected garment is held may be readily raised by the customer, so that the several garments are placed in isolated positions away

5

from the mass of other garments on the display rack 20, thereby permitting viewing and comparison of the few selected garments from which the final choice will be made.

Each hanger will be held in any selected elevated position, up to the maximum elevation as determined by the detent 51'. Because of the eccentric weight of the garment relative to the axis of vertical portion 51 of hanger 50, the vertical portion 51 will be under a tendency to cant and thereby bind in the holes 41 and 42 through which it extends. In addition, the hanger vertical portion 51 will be in engagement with a convolution of the coil spring 44, there being, usually, a two point contact by the convolution with the vertical portion 51, on opposite sides of vertical portion 51.

When it is desired to unload a garment from the hanger 50, it is only necessary to pull the garment away from support 30, so that after a short distance of travel the garment 60 will be freed from clip 55 and its further and final removal from hanger 50 may be readily and effortlessly effected. To load a garment onto a hanger 50, it is only necessary to fold a garment over the horizontal portion 53, and then to slide it toward the support 30. The leading edge of the garment will engage with and be guided by the outer end of the clip 55, shortly behind the bight 57, so that the folds of fabrics will come into contact with each other to effect the holding relationship clearly shown in FIGS. 12 and 13. This provides for practically automatic retaining or clipping of the garment on the hanger 50 and results from an inherent action which would be normal and expected from a customer, even a customer who was unfamiliar with the rack 20 and hanger 50. As will be appreciated there is, in the loading and unloading hereinabove referred to, a minimum of garment manipulation.

There has been provided a garment display rack which is substantially concealed by the garments displayed thereon, and which will therefore accommodate itself with any interior decor. Individual garments may be isolated and displayed by utilization of the rack of the present invention, and attractive displays of selected garments may be made.

Hangers may be individually isolated with the rack of the present invention so that individual viewing of one or more selected garments may be achieved, while the garments are still on the hangers, thus resulting in reduced shop-wear and consumption of time of sales personnel. The hangers of the present invention may be readily moved to and from isolated positions, to promote the individual viewing herein referred to.

In addition, there has been provided a garment hanger which facilitates loading and removal of garments, even by persons inexperienced with respect to such rack and hangers. The hanger provided by the present invention securely holds a garment thereon, while permitting the garment to be semi-automatically loaded into a clipped or retained relationship with the hanger.

It will be obvious to those skilled in the art that various changes may be made without departing from the spirit of the invention and therefore the invention is not limited to what is shown in the drawings and described in the specification but only as indicated in the appended claims.

What is claimed:

1. A garment display rack comprising a base, a hanger support carried by said base, and a plurality of hangers carried by said hanger support, said support comprising a plate-like member having a plurality of generally vertically extending grooves in the opposite faces thereof, and panels on the opposite faces of said plate-like members covering over said grooves, a frame about the ends and bottom of said member and panels, a tube extending along the top of said plate-like member and having a series of oppositely disposed pairs of holes therein, the axis of each pair of holes being in alignment with a said groove, a bolt at either end of said tube extending therethrough and

6

securing said tube to said frame, a coil spring extending in said tube and having its ends secured to said bolts, said hangers each comprising a rod with a vertically extending portion and a horizontal portion at the upper end of the vertical portion, said portions lying in adjacent vertical planes, each hanger vertical portion extending in a said groove, through a pair of holes in said tube and between and in engagement with a convolution of said coil spring, each hanger vertical portion having a retainer element at the lower end thereof to prevent its complete withdrawal from said support, and a clip on each hanger comprising a horizontal part extending from the hanger vertical portion adjacent the top thereof beneath and in skew relation to said hanger horizontal portion, the end of said clip being a bight which lies on the opposite side of a vertical plane extending through said hanger horizontal portion from said hanger vertical portion, and a return part of said clip extending generally parallel to said horizontal part and thence upwardly with the end thereof secured to the hanger horizontal portion, the bight end of said clip being in angular relation to the horizontal parts thereof and diverging away from the vertical plane containing the hanger horizontal portion.

2. A garment display rack comprising a hanger support and a plurality of hangers carried thereby, said support comprising a plate-like member having a plurality of generally vertically extending grooves in the opposite faces thereof, and panels on the opposite faces of said plate-like members covering over said grooves, a frame about the ends and bottom of said member and panels, a tube extending along the top of said plate-like member and having a series of oppositely disposed pairs of holes therein, the axis of each pair of holes being in alignment with a said groove, means securing said tube to said frame, a coil spring extending in said tube, said hangers each comprising a rod with a vertically extending portion and a horizontal portion at the upper end of the vertical portion, said portions lying in adjacent vertical planes, each hanger vertical portion extending in a said groove, through a pair of holes in said tube and between and in engagement with a convolution of said coil spring, each hanger vertical portion having a retainer element at the lower end thereof to prevent its complete withdrawal from said support, and a clip on each hanger comprising a horizontal part extending from the hanger vertical portion adjacent the top thereof beneath and in skew relation to said hanger horizontal portion, the end of said clip being a bight which lies on the opposite side of a vertical plane extending through said hanger horizontal portion from said hanger vertical portion, and a return part of said clip extending generally parallel to said horizontal part and thence upwardly with the end thereof secured to the hanger horizontal portion, the bight end of said clip being in angular relation to the horizontal parts thereof and diverging away from the vertical plane containing the hanger horizontal portion.

3. The garment display rack of claim 2, said plate-like member comprising two rows of vertically longitudinally extending members, the longitudinally extending members in each row being in horizontally spaced relationship, the longitudinally extending members of one row being secured to the longitudinally extending members in the other row in alternate overlapping fashion.

4. A garment display rack comprising a base, a hanger support carried by said base, and a plurality of hangers carried by said hanger support, said support comprising a plate-like member having a plurality of generally vertically extending grooves in the opposite faces thereof, and panels on the opposite faces of said plate-like members covering over said grooves, a frame about the ends and bottom of said member and panels, a tube extending along the top of said plate-like member and having a series of oppositely disposed pairs of holes therein, the axis of each pair of holes being in alignment with a said groove, a bolt at either end of said tube extending therethrough and securing said tube to said frame, a coil spring ex-

7

tending in said tube and having its ends secured to said bolts, said hangers each comprising a rod with a vertically extending portion and a horizontal portion at the upper end of the vertical portion, each hanger vertical portion extending in a said groove, through a pair of holes in said tube and between and in engagement with a convolution of said coil spring.

5 5. A garment display rack comprising a hanger support and a plurality of hangers carried by said hanger support, said support comprising a plate-like member having a plurality of generally vertically extending grooves in the opposite faces thereof, and panels on the opposite faces of said plate-like member covering over said grooves, a frame about the ends and bottom of said member and panels, a tube extending along the top of said plate-like member and having a series of oppositely disposed pairs of holes therein, the axis of each pair of holes being in alignment with a said groove, means securing said tube to said frame, a coil spring extending in said tube, said hangers each comprising a rod with a vertically extending portion and a horizontal portion at the upper end of the vertical portion, each hanger vertical portion extending in a said groove, through a pair of holes in said tube and between and in engagement with a convolution of said coil spring.

10 6. A garment display rack comprising a hanger support and a plurality of hangers carried by said hanger support, said support comprising a plate-like member having a plurality of generally vertically extending grooves in the opposite faces thereof, a frame about the ends and bottom of said member, and panels on the opposite faces of said plate-like member covering over said grooves, a tube extending along the top of said plate-like member and having a series of oppositely disposed pairs of holes therein, the axis of each pair of holes being in alignment with a said groove, means securing said tube to said frame, a

8

coil spring extending in said tube, said hangers each comprising a rod with a vertically extending portion and a horizontal portion at the upper end of the vertical portion, each hanger vertical portion extending in a said groove, through a pair of holes in said tube and between and in engagement with a convolution of said coil spring.

7. A garment display rack comprising a hanger support and a plurality of hangers carried by said hanger support, said support comprising a plate-like member having a plurality of generally vertically extending grooves in the opposite faces thereof, means extending along the top of said plate-like member and having a series of hole-defining means therein in alignment with said grooves, a coil spring mounted within the means extending along the top of said plate-like member, said hangers each comprising a rod with a vertically extending portion and a horizontal portion at the upper end of the vertical portion, each hanger vertical portion extending in a said groove, through a said hole-defining means and between and in engagement with a convolution of said coil spring.

8. The garment display rack of claim 7, said plate-like member comprising two rows of vertically longitudinally extending members, the longitudinally extending members in each row being in horizontally spaced relationship, the longitudinally extending members of one row being secured to the longitudinally extending members in the other row in alternate overlapping fashion.

References Cited in the file of this patent

UNITED STATES PATENTS

1,780,061	Bluff	Oct. 28, 1930
2,428,240	Pierce	Sept. 30, 1947
2,901,116	Daley	Aug. 25, 1959
2,926,824	St. Clair	Mar. 1, 1960
2,944,675	Cohen	July 12, 1960