Oct. 27, 1959 H. L. AUTEN 2,910,215

GARMENT HANGER

Filed Jan. 15, 1957

Fig. 1

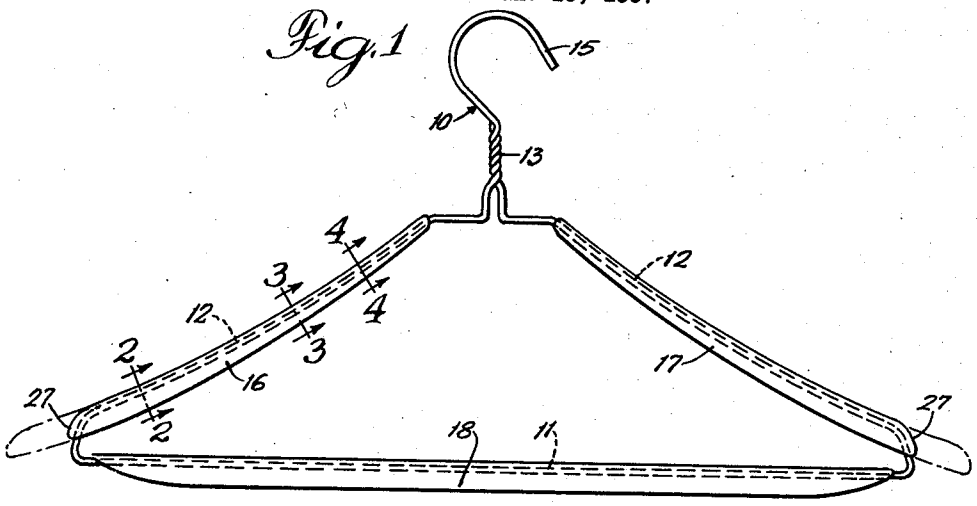


Fig. 2

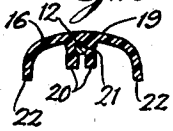


Fig. 3

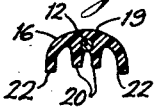


Fig. 4



Fig. 5



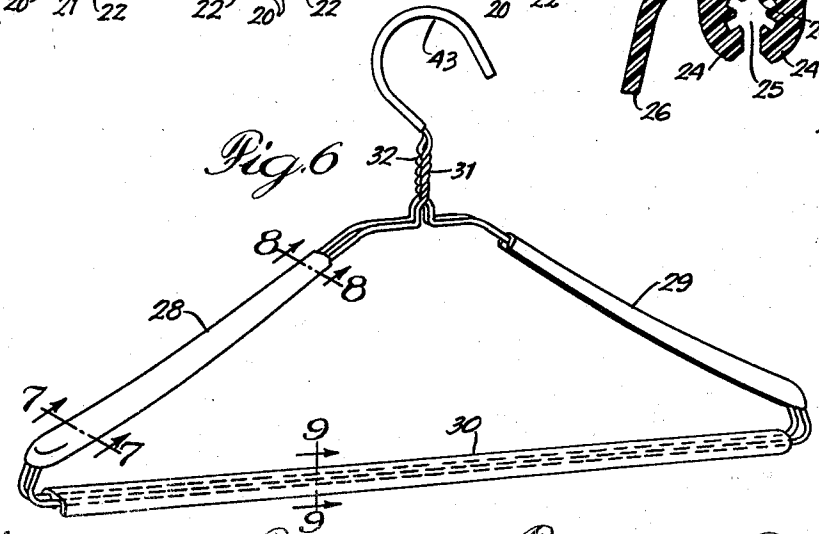


Fig. 7



Fig. 8



Fig. 9



Fig. 10



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GARMENT HANGER

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7 Claims. (Cl. 223—98)

This invention relates to garment hangers and more specifically to improved hanger pad structures which are particularly useful in combination with conventional wire garment hangers.

It is the general practice for cleaning establishments to use and furnish wire hangers for supporting garments which have been pressed or cleaned and pressed. Since these hangers are passed on to the customers at the time the garments are delivered, the customers are free to use the wire hangers for temporarily hanging the garments in storage. However, the structure of these hangers makes them generally unsuitable for continued or extensive use in the home.

For one thing, the narrow gauge wire from which the hangers are formed provides an unsatisfactory support surface for garments and tends to crease and deform them if they are permitted to remain too long on the hangers. Also, the wire is easily bent and tends to yield under the weight of heavy garments such as suits or coats, thereby wrinkling and distorting such garments. If the protective paint covering should chip or peel from the wire hangers, there is the danger that rust stains will appear upon the portions of the garments in direct contact with the exposed metal of the hangers.

While a number of different pad structures have been devised for making wire hangers more suitable for continued use, these structures have been found generally unsatisfactory. For example, the paper reinforcements folded over the cross-bars or connecting portions of the hangers often buckle or roll off the bars and are thereby rendered ineffective. Furthermore, such reinforcements reduce the possibility that clothing hung over the cross-bars will become creased by the bars but do not eliminate this problem.

Guards have also been provided for strengthening and enlarging the sloping shoulder-supporting portions of hangers but these guards have been relatively expensive and have had the undesirable tendency to twist and rotate upon the wire frames and disengage from the hangers. In addition, such guards have not been adjustable; that is, they cannot be positioned upon the hanger frames at the locations most suitable for properly supporting garments of different sizes.

Therefore, one of the principal objects of the present invention is to overcome the aforementioned defects and disadvantages inherent in present hanger pad structures. Another object is to provide pad structures which may be easily attached to the shoulder-support and cross bar portions of wire hangers to reinforce those hangers and to provide enlarged surface areas for supporting garments without creasing or distorting those garments. In this connection, it is a specific object to provide shoulder pad structures which are locked or anchored upon the hangers so that they will not rotate upon the wire frames. A further object of the present invention is to provide flexible pads which may be detachably mounted upon conventional wire hangers, the shoulder pads being slidably adjustable upon the hangers to provide the most suitable support for garments of various sizes. A still further object is to provide plastic hanger pads capable of interlocking a plurality of wire hangers to provide a sturdy unit for supporting relatively heavy garments such as overcoats, fur coats, etc.

Other objects will appear from the specification and drawings in which:

Figure 1 is a front elevation of a wire garment hanger equipped with the detachable pads of the present invention; Figure 2 is an enlarged cross sectional view taken along line 2—2 of Figure 1; Figure 3 is an enlarged cross sectional view taken along line 3—3 of Figure 1; Figure 4 is an enlarged cross sectional view similar to Figures 2 and 3, and taken along line 4—4 of Figure 1; Figure 5 is an enlarged vertical section of the cross-bar pad shown in Figure 1; the wire frame of the hanger being omitted for the purpose of clearly illustrating the pad structure; Figure 6 is a perspective view of a pair of garment hangers secured together by pad structures which comprise a second embodiment of the present invention; Figure 7 is an enlarged cross sectional view taken along line 7—7 of Figure 6; Figure 8 is an enlarged cross section of the shoulder pad and hangers along line 8—8 of Figure 6; Figure 9 is an enlarged cross sectional view taken along line 9—9 of Figure 6; and Figure 10 is an enlarged cross sectional view of a pad which constitutes a further modification of the present invention.

Referring to the drawings, Figure 1 shows a conventional wire hanger designated generally by the numeral 10 and formed from a single piece of narrow gauge steel wire.

Hanger 10 is equipped with the usual horizontal cross-bar or connecting portion 11 and has a pair of upwardly and inwardly inclined shoulder portions 12. These converging shoulder portions are securely wound together at 13; at least one of the portions continuing upwardly to form a support hook 15. It is to be noted that the upwardly inclined shoulder portions 12 dip slightly or more specifically have a longitudinal curvature towards the central connecting portion 11. Since the wire hanger frame is entirely conventional, a more detailed description of that structure is believed unnecessary herein.

The pad structures 16, 17 and 18 are preferably formed from a flexible and somewhat resilient plastic material such as polyethylene. Each pad comprises an elongated body having a convexly curved top surface and at least one pair of flexible and longitudinally extending ribs depending from the lower surface thereof. For example, pad 16 (and identical pad 17) has a rounded or convexly curved top surface 19 (Figures 2, 3 and 4) and a pair of centrally disposed depending ribs 20 which extend along the entire length of the pad. In the illustration given, the upper opposing surfaces of the spaced ribs 20 are curved to define a generally cylindrical channel or groove 21 for snugly receiving the wire shoulder portion of hanger 10. It will be seen that the opposing surfaces of the flexible ribs below the channel are spaced closer than the diameter of the hanger's wire frame for securely locking a selected portion of that frame within the channel or groove. Preferably, the top or outer portion of the hanger pad curves downwardly along opposite sides of the centrally disposed ribs to provide depending flanges 22 below channel 21.

The horizontal cross-bar pad 18 is similarly provided with a convexly curved outer surface 23, spaced depending ribs 24, a channel or groove 25 and depending side flanges 26. It will be noted that the outer surface of pad 18 is provided with small ridges 23*a* which tend to cling to the fabric of garments hung upon the bar and

reduce sliding movement of those garments. Like the ribs of pads **16** and **17**, ribs **24** are formed integrally with the pad and have opposing portions below channel **25** which are spaced closer together than the diameter of the hanger's wire frame received within that cylindrical channel.

Preferably, the inner surface of channel **25** is provided with flexible and resilient fingers or fins **26***a* which extend longitudinally and which project inwardly or radially to engage the surface of the wire cross-bar when the pad is mounted thereon. Since these fins are resilient and flexible and define a space smaller than the diameter of the cross-bar, they yield or twist upon engagement with the wire bar and produce a jamming or locking action which effectively resists rotation of the pad upon the hanger. While these fins are shown only in conjunction with the cross-bar pad, it will be understood that the shoulder pads **16** and **17** may also be provided with similar fingers or fins. Furthermore, it is apparent that shoulder pads **16** and **17** may be embossed with ridges similar to the ridges **23***a* shown in Figure 5 with reference to the cross-bar pad.

Most desirably, the outer walls of pads **16** and **17** taper upwardly and inwardly to provide the greatest support areas adjacent the lower ends of the pads. At the lower ends of the shoulder pads, the outer walls of those pads may curve downwardly to provide rounded terminal surfaces **27** (Figure 1) and to close off the lower ends of channels **21**.

The shoulder pads **16** and **17** are easily mounted upon the wire hanger by simply inserting the lower corner of the frame into the channels at the tapered ends of the pads and then sliding the pads upon the sloping shoulder portions of the wire frame. The horizontal cross-bar pad may be similarly mounted upon the cross-hanger by urging a portion of the cross-bar into an end portion of the channel and then guiding the rest of the bar into the remaining portion of the channel to lock the pad in place.

Since the tough plastic pads are somewhat bendable, shoulder pads **16** and **17** may be curved to conform with the longitudinal curvature of the hanger's wire shoulder portions **12**. The corresponding curvatures of these pads and the wire shoulder portions, and the tight frictional engagement between the flexible channel-providing ribs and the hanger's wire frame prevent rotation of the shoulder pads upon the hanger. Hence, the shoulder pads will not twist upon or disengage from the hanger when coats or other garments are pulled off of the padded hangers. At the same time, the relatively large surface areas of the pads provide proper support for garments placed upon the hangers and greatly strengthen the hanger's wire frame. As a result, creasing, wrinkling or distorting of the garments which might otherwise result from direct contact between the garments and the wire hangers is completely avoided.

To provide proper support for garments of different size, the shoulder pads **16** and **17** may be slid towards or away from each other along the wire shoulder portions **12** of the hanger. For instance, if the particular garment is a coat of relatively large size, the pads may be shifted outwardly into the positions represented by the broken lines in Figure 1 to properly support the shoulders of the coat and prevent them from drooping beyond the limits of the wire frame. Since the longitudinal curvatures of the pads and arcuate wire portions coincide even when the pads are in extended positions, it is evident that these pads are at all times secured against independent rotation upon the hanger.

If the garment is of smaller size, the pads may be moved inwardly into the most suitable location for supporting that particular garment. It will be noted that the wall and depending flange at the outer end of each shoulder pad is engageable with the outer ends of the wire hanger to limit the inward movement of the pads.

Figures 6 thru 9 illustrate a second embodiment of my invention which is particularly suitable for supporting relatively heavy garments such as topcoats, overcoats, fur coats, etc. Pads **28**, **29** and **30** are similar to the pads already described except that each of these pads is adapted to accommodate corresponding wire portions of a pair of hangers **31** and **32**. The elongated shoulder pads **28** and **29** are identical and are provided with pairs of longitudinally extending grooves or channels **33** defined by inner ribs **34** and outer ribs **35**. From Figures 7 and 8 it will be seen that the outer ribs **35** are extensions of the curved outer wall **36** of each pad and that these ribs continue downwardly to provide depending flanges **37**. The cross-bar pad **30** is of similar construction and is equipped with a pair of longitudinally extending channels **38**, inner and outer ribs **39** and **40** respectively, an outer wall **41**, and depending side flanges **42**.

The pads of this embodiment thereby lock a pair of wire hangers together to form a single hanger unit of substantial strength. Since shoulder pads **28** and **29** have longitudinal curvatures corresponding with the arcs of the hanger's shoulder portions and since all of the pads, including pad **30**, are securely connected to a pair of corresponding portions of the hangers, relative rotation of the pads and the portions of the wire frames to which the pads are secured is prevented.

Like the shoulder pads illustrated in Figure 1, pads **28** and **29** may be shifted longitudinally along the wire shoulder portions of the respective hangers for supporting garments having different shoulder sizes. If desired, a piece of flexible tubing **43** formed of rubber or other plastic material may be placed upon the adjacent hook portions of the connected wire hangers.

While only a pair of connected wire hangers are illustrated in Figures 6–9, it is evident that pads similar to pads **28**, **29** and **30** may be provided for joining three or more of such hangers. For example, Figure 10 illustrates a pad having three parallel channels **45** for receiving the corresponding portions of three wire hangers. In other respects, pad **44** is similar to the hanger pads already described.

While in the foregoing I have disclosed the embodiments of my invention in considerable detail for purposes of illustration, it will be understood by those skilled in the art that many of these details may be varied without departing from the spirit and scope of the invention.

I claim:

1. A pad structure for wire hangers comprising an elongated body formed of flexible plastic material having a transversely rounded upper surface, said body having a plurality of depending longitudinal ribs extending substantially the entire length of said body and defining a plurality of elongated parallel channels extending between opposite ends of said pad for receiving corresponding portions of a group of wire hangers, the opposing surfaces of said ribs below each of said channels being provided with longitudinally extending ridges for locking each of the portions of said hangers within the respective channels, whereby, said pad provides a rounded surface for supporting garments and cooperates with all of the hangers of said group to prevent relative rotation of said pad and the corresponding portions of the hangers received thereby.

2. The structure of claim 1 in which said pad is slidable longitudinally along the corresponding portions of said wire hangers received within said parallel channels.

3. The structure of claim 2 in which said hangers are each provided with converging wire shoulder portions, a pair of said pads receiving in the parallel channels thereof the corresponding shoulder portions of all of said hangers and being slidable longitudinally along said shoulder portions for supporting garments having different shoulder sizes.

4. A garment supporting structure comprising a plu-

rality of wire hangers, a plurality of elongated pads formed of flexible plastic material, each of said pads having a curved outer surface and having a plurality of depending ribs extending substantially the entire length of said pad, said ribs defining parallel channels therebetween and extending along substantially the entire length of the pad for snugly receiving corresponding wire portions of said plurality of hangers, said ribs having opposing ridges below said channels for locking said wire portions within said channels.

5. In a garment hanger formed of wire and having a wire connecting portion and a pair of longitudinally curved inclined wire shoulder portions, a pair of elongated and longitudinally curved shoulder pads each having at least two flexible ribs extending substantially the entire length of each pad and depending from the under surface thereof, said ribs of each pad being spaced apart and defining at least one longitudinally curved channel extending substantially the entire length of said ribs for snugly receiving a curved wire shoulder portion of said hanger therein, said ribs being provided with opposing portions below said channel spaced closer than the diameter of said channel for securely locking the wire portion of said hanger within the channel along substantially the entire length thereof.

6. The structure of claim 5 in which said channel defined by the ribs of each pad slidably receives the longitudinally curved shoulder portion of said wire hanger for longitudinal displacement of said pad along said shoulder portion, whereby, each of said pads may be moved longitudinally along the curved wire shoulder portions of said hanger to adjust said pads for supporting garments of different sizes.

7. The structure of claim 5 in which each of said pads is provided with a plurality of depending ribs defining a plurality of longitudinally curved channels therebetween, said channels being adapted for receiving corresponding wire shoulder portions of a plurality of hangers and for providing a single hanger unit composed of a plurality of interlocked wire hangers.

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