April 24, 1951 S. SIMMONS 2,550,167

GARMENT HANGER AND METHOD OF REINFORCING SAME

Filed June 11, 1947

FIG.1.

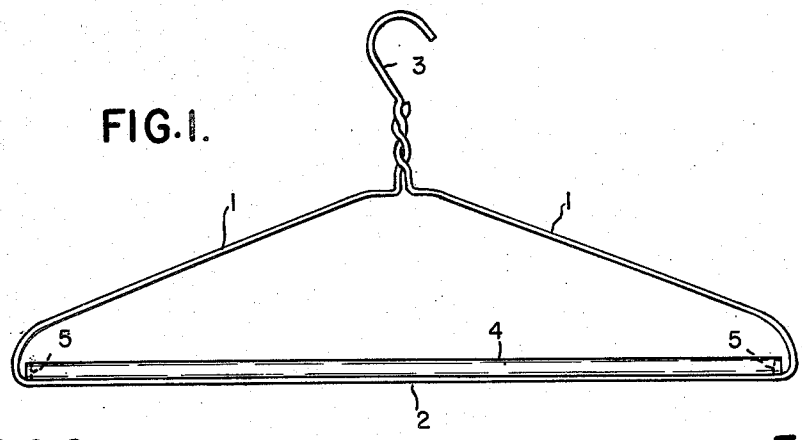


FIG.2.

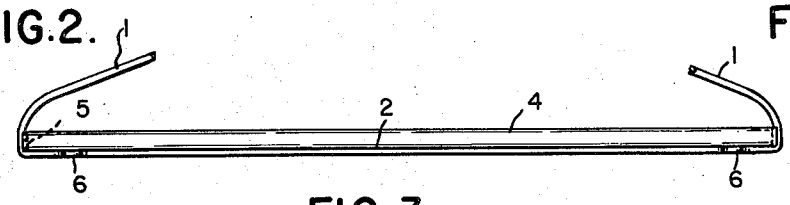


FIG.4.

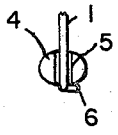


FIG.3.

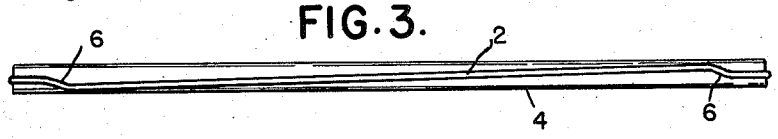
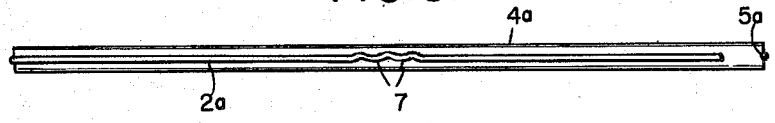


FIG.5.



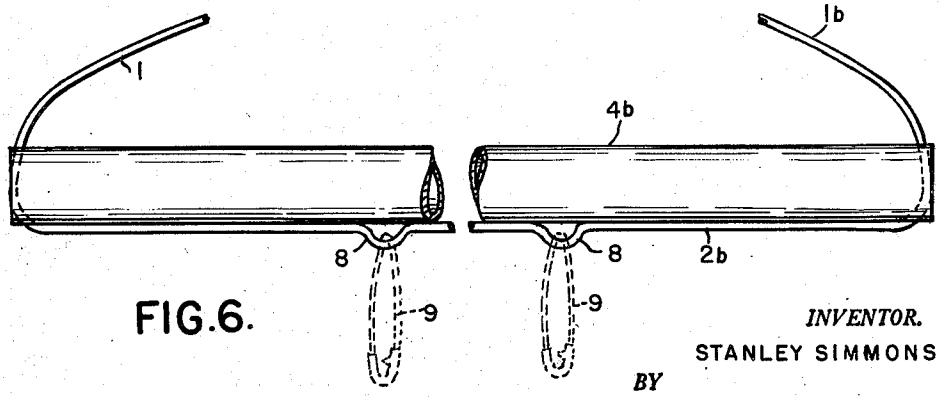


FIG.6.

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GARMENT HANGER AND METHOD OF REINFORCING SAME

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Application June 11, 1947, Serial No. 753,956

5 Claims. (Cl. 223—88)

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This invention relates to reinforced wire garment hangers and particularly to methods of applying reinforcements to such hangers.

It is common to apply struts to the lower spans of triangular wire garment hangers, thus adding to the load capacity of the hangers and also increasing the garment-seating width of said spans, so as to substantially eliminate any tendency of such a span to produce a crease in a garment hung thereon. The struts, formed of wood or fibrous tubing, have notched ends, and it has devolved on the dry cleaners or other industrial users of the garment hangers to assemble the struts in the hangers with the notches receiving the hanger ends. Such manual assembly work is tedious, laborious, and inefficient, particularly since most dry cleaners lack employees skilled in work of that nature. Also it has not been feasible by manual assembly methods to tightly hold the struts in place, and their escape has occasionally resulted under stresses arising in use of the hangers, particularly in the course of delivering garments hung thereon.

An object of the invention is to apply struts to triangular wire garment hangers by a method lending itself to use of a power-operated machine, and hence lending itself to a much more rapid, more secure and less expensive assembly than methods heretofore practiced.

This and various other objects are attained by the method hereinafter described and illustrated in the accompanying drawing, wherein:

Fig. 1 is a side elevational view of a wire garment hanger, illustrating an initial step in applying a wooden strut to the hanger.

Fig. 2 is a similar view showing the strut as permanently applied.

Fig. 3 is a bottom view of the same.

Fig. 4 is a fragmentary end view of the same.

Fig. 5 is a bottom view of a modified assembly of hanger and strut.

Fig. 6 is a fragmentary side elevational view of a further modification.

As illustrated in Figs. 2, 3, and 4, a triangular wire hanger of a well-known construction comprises the usual inclined sides 1 jointly forming an upper span, a bottom span 2, and a hook 3 connected to said upper span at the juncture of said sides. Fitted between the ends of the hanger, just above its lower span is a wooden strut 4 having its ends vertically formed with notches 5 into which the hanger ends are tightly drawn. The strut is preferably substantially elliptical in cross section, with its major axis transverse to the plane established by the triangular hanger. The

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original spacing of the hanger ends is sufficient to allow a ready insertion of the strut 4 between said ends, as Fig. 1 illustrates. While the strut is rigidly positioned, by any suitable mechanical means (not shown), within the hanger with its notches registered with the hanger ends, two reverse offsets 6 are formed respectively in the end portions of the span 2, thus shortening said span sufficiently to draw the hanger ends firmly into the notches 5. It is preferred to give these offsets a direction transverse to the plane of the hanger so as to maintain close proximity of the entire span 2 to the strut 4. Due to the relatively reverse nature of the two offsets, they impart to the span 2 a diagonal relation to the strut 4. While no mechanism is illustrated for producing the described offsets, it is believed evident that these may be formed by a power-driven machine, capable of effecting the desired operation rapidly and with the exercise of a force suitable to draw the hanger ends tightly and permanently into the notches.

The construction shown in Fig. 5 differs from that already described only in that the hanger ends are firmly drawn into the notches 5*a* of the wooden strut 4*a* by forming the mid portion of the lower span 2*a* with a few adjacent corrugations 7.

My method, modified as per Fig. 6, forms the lower span 2*b* with a pair of downwardly bowed offsets 8 equally spaced from the hanger ends, and effecting the desired shortening of the span and a resultant embedding of the hanger ends in those of a tubular fibrous strut 4*b*. Said offsets are useful to receive safety pins or the like 9 by which small garments (not shown) may be suspended from the hanger.

By practising the described method, and employing in such connection power-driven machinery of at least a semiautomatic type, it is feasible to furnish dry cleaners and other large users of garment hangers, a reinforced and guarded hanger, of superior construction to that heretofore assembled by hand, and at a lesser cost than that of the manual assembly. At the same time, the customer is relieved of an assembly job that he cannot efficiently perform and which he regards as a nuisance. Use of the fibrous struts 4*b* eliminates need for preformation of notches in the strut ends.

The extensive field of use of hangers produced by the disclosed method is evident from the fact that approximately half of all manufactured wire hangers require some type of shield for the lower span to safeguard garments hung thereon, some

such shields having a reinforcing value and others being merely cardboard strips. While such strips are in themselves quite inexpensive, their manual application to wire hangers renders the final cost of the shielded hanger greater than that of the herein-disclosed, machine-made assembly.

What I claim is:

1. The method of reinforcing a substantially triangular wire garment hanger by a strut, consisting in disposing the strut between the ends of the hanger and in substantial parallelism with the lower span of the hanger, such strut being proportioned to fit freely between said ends, and then crimping said span and thereby permanently reducing its length to embed the hanger ends in the strut ends.

2. The method of reinforcing a substantially triangular wire garment hanger by a strut, consisting in disposing the strut between the ends of the hanger and in substantial parallelism with the lower span of the hanger, such strut being proportioned to fit freely between said ends, and then forming said span with a plurality of offsets permanently reducing the span length and embedding the hanger ends in the strut ends.

3. The method of reinforcing a substantially triangular wire garment hanger by a strut, consisting in disposing the strut between the ends of the hanger and in substantial parallelism with the lower span of the hanger, such strut being proportioned to fit freely between said ends, and offsetting the lower span of the hanger in a direction transverse to the plane established by the sides of the hanger, and thereby permanently reducing the span length and embedding the hanger ends in the strut ends.

4. The process of reinforcing a substantially triangular hanger by a strut, consisting in notching the strut ends, disposing the strut between and in proximity to the hanger ends and in substantial parallelism with the lower span of the hanger, such strut being proportioned to fit freely between said ends, and then offsetting said lower span and thereby permanently reducing its length and drawing the hanger ends into the notches of the strut.

5. In combination with a substantially triangular wire garment hanger, of a strut extending from end to end of said hanger above and in close proximity to the lower span, the lower span having its end portions offset in opposite directions substantially transversely to the plane of the hanger, establishing a straddling relation between each strut end and the corresponding hanger end, and establishing a substantially diagonal relation of said span to said strut.

STANLEY SIMMONS.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
2,272,587	Ruen	Feb. 10, 1942