Dec. 30, 1941. H. C. RUEN 2,268,265

GARMENT HANGER

Filed Dec. 9, 1940

Fig. 1

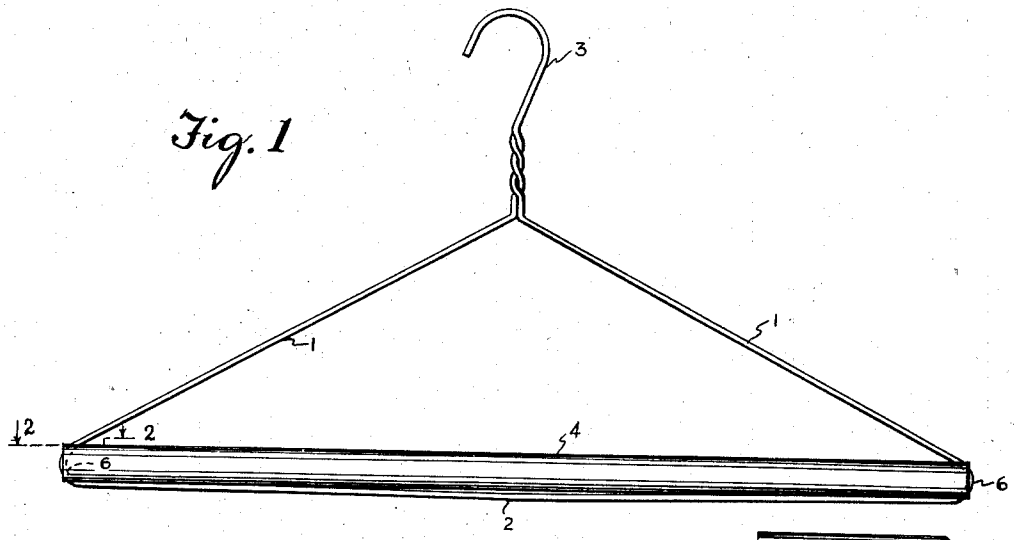


Fig. 2

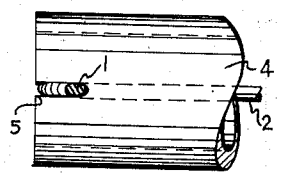


Fig. 4

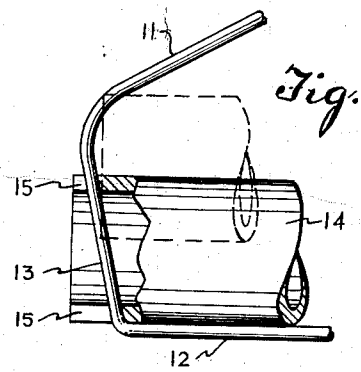


Fig. 3

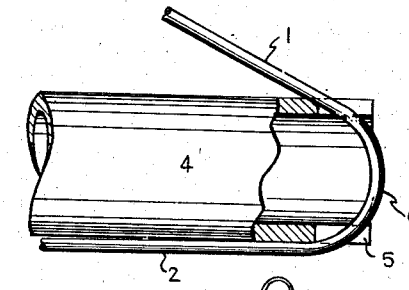


Fig. 5

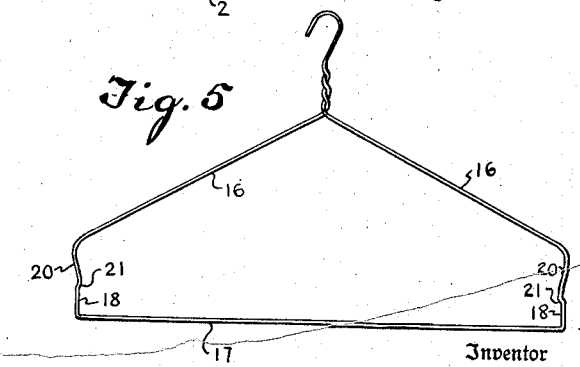
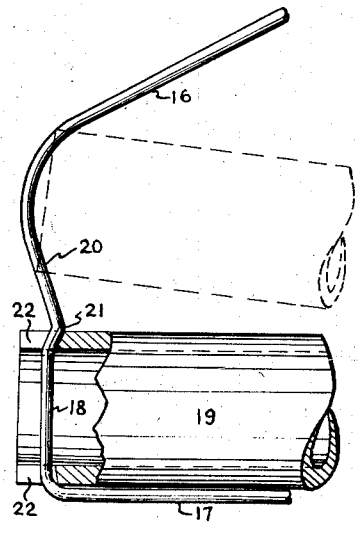


Fig. 6



Inventor

Henry C. Ruen

By

J. S. Murray

Attorney

Patented Dec. 30, 1941

2,268,265

UNITED STATES PATENT OFFICE

2,268,265

GARMENT HANGER

Henry C. Ruen, Detroit, Mich., assignor to Cleaners Hanger Company, Detroit, Mich., a corporation of Michigan

Application December 9, 1940, Serial No. 369,155

5 Claims. (Cl. 223—88)

This invention relates to garment hangers and particularly wire garment hangers of triangular form.

In the wire garment hanger industry, weight of wire is the primary cost factor, and any provision for accomplishing a reduction in requisite size of wire is highly desirable. The lower spans of triangular hangers commonly serve to carry trousers folded across said spans, substantially midway of the trousers length, and it is desirable to provide a seating surface for the trousers considerably exceeding that afforded by the bare wire, since the latter would tend to produce a transverse crease.

An object of the invention is to provide a tubular strut strongly reinforcing the lower span of a triangular wire hanger, and permitting a material reduction in size of wire employed, and further serving as a trousers seat adequate to avoid any creasing effect.

Another object is to so form a triangular wire garment hanger and a reinforcing strut for the lower span of such hanger, that the latter may be used with or without the strut, thus saving cost of the strut in using the hanger for a dress or other light garment.

A further object is to prevent such rocking of the strut transversely to its length as would tend to eventually unbalance a garment hung thereon.

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

Fig. 1 is a view in side elevation of a garment hanger reinforced in accordance with the invention.

Fig. 2 is an enlarged fragmentary sectional view taken on the line 2—2 of Fig. 1 and showing an end portion of the reinforced lower span.

Fig. 3 is an enlargement in partial section of an end portion of Fig. 1.

Fig. 4 is a side elevational view of an end portion of an alternative construction of wire garment hanger with reinforced lower span.

Fig. 5 is a side elevational view of another type of triangular hanger adapted for engagement by a reinforcing strut.

Fig. 6 shows in side elevation an end portion of the hanger of Fig. 5 with a strut applied thereto.

In these views, the reference character 1 designates the downwardly divergent sides of a triangular wire hanger, 2 the lower span thereof, and 3 the usual supporting hook formed by extensions of one or both lengths of wire forming the sides. The span 2 is reinforced by a tubular strut 4 formed preferably of fibrous material and extending above and substantially parallel to said span in close proximity to the latter. To hold the strut in its described position, its extremities are diametrically notched, and the hanger ends are engaged in the notches 5. The width of the notches is preferably only sufficient to snugly admit the wire, so that any rocking of the strut transversely to its length may be positively prevented. The notches are shallow and the length of the strut is preferably slightly less than the maximum longitudinal dimension of the hanger.

It is preferred to specially shape the hanger ends to facilitate their engagement by the strut and assure a permanent assembly, and preferably said ends are rounded to a radius approximately the same as the exterior radius of the strut. Thus assembly of the hanger and strut may be very simply and quickly established by straddling one hanger end by the corresponding end of the strut, and then forcing the other strut extremity into the hanger opening so that the other hanger end may snap into the notches at the other end of the strut.

The described assembly is facilitated by a considerable resilient yielding of the hanger and by a lesser springing of the strut. The cylindrical exterior surface of the strut acts with a camming or wedging effect on the hanger as the strut is forced into the hanger opening. The assembly, when completed, is quite secure and it is in fact difficult to remove the strut without materially distorting the hanger.

In the modification shown by Fig. 4, each side 11 of a triangular wire hanger is integrally connected to the lower span 12 by an end 13 converged downwardly toward the vertical central axis of the hanger, said end slightly exceeding in length the exterior diameter of a reinforcing tubular strut 14. It is thus feasible, after engaging one end 13 of the hanger in notches 15 at corresponding end of the strut, to force the strut at its other end to the slightly raised position shown in dash lines in Fig. 4, so that the other end notches of the strut may confront the other end 13 of the hanger. The hanger is sprung slightly in thus positioning the strut, facilitating such positioning. Finally the strut is lowered to its position of use, in which the hanger ends are set well within the notches. The notches in the bottom wall of the strut may be somewhat deeper than those in the upper wall, this tending to

eliminate any longitudinal play of the strut, as finally applied.

In the construction disclosed by Figs. 5 and 6, the sides 16 of the wire hanger are integrally connected to the lower span 17 by ends having vertical lower portions 18 approximately equal in extent to the interior diameter of the hollow reinforcing strut 19, the upper portions 20 of said ends being downwardly converged at a suitable angle, as, for example, thirty degrees, and interior shoulders 21 being formed at the junctures of the portions 18 and 20. The strut 19 has shallow notches 22 in its ends adapting the latter to straddle the portions 18. Initially, the strut is diagonally positioned to straddle one of the lower end bends of the hanger, thus permitting the other strut extremity to assume position shown in dash lines in Fig. 6 with its notches confronting the upper bend at corresponding extremity of the hanger. The raised end of the hanger is then slid down to position shown in full lines in Fig. 5, both strut ends then straddling the portions 18. The ends will spring apart slightly as the strut passes over the shoulder 21, and thus the strut snaps into its final position, in which it is retained by said shoulders.

It is evident that in either described form of the invention, the wire hanger may be used with or without the strut, the same wire hanger serving a dry cleaner for either light or heavy duty. Over a period of time, omission of the reinforcement, when not needed effects a material economy.

It is to be noted that the strut greatly increases safe load capacity of the upper span of the hanger as well as that of the lower span. The gauge of wire employed, however, need be only adequate for quite light garments, achieving a material economy as compared to the practice now common of using a heavy duty hanger for light as well as heavy loads.

Tubular members have heretofore been slitted from end to end to permit their enclosing the lower span of wire hangers, but such tubes were not readily applicable, were neither intended nor adapted to strongly reinforce the wire span, and were subject to undesirable transverse rocking or rolling. Also there has been some use heretofore of tubular members to replace the lower spans of wire hangers. Such constructions, however, present no practical possibility of eliminating the tubes in using the hangers for light duty.

What I claim is:

1. The combination with a wire garment hanger having spaced upper and lower spans integrally interconnected at the hanger ends, of a substantially rigid tubular strut disposed substantially in its entirety above and adjacent to the lower span and formed with upper and lower notches in each end thereof to straddle the hanger ends.

2. The combination set forth in claim 1, the ends of the hanger being rounded to present divergent portions for engaging the upper and lower notches of the strut.

3. The combination with a wire garment hanger formed with spaced upper and lower spans integrally interconnected at the hanger ends, of a substantially rigid strut disposed substantially in its entirety above and adjacent to the lower span, and having its extremities non-rotatively secured to the hanger ends and snugly fitted between the upper and lower spans to restrain the strut from upward and downward movement.

4. The combination set forth in claim 3, the strut being tubular and each extremity of the strut having upper and lower notches and the hanger ends being engaged in the notches to secure the strut to the hanger.

5. The combination with a wire garment hanger of substantially triangular form having downwardly divergent sides and a lower span integrally joined to said sides by rounded ends, of a substantially rigid strut disposed substantially in its entirety above and adjacent to the lower span and having its ends notched to straddle said rounded ends, and snugly confined between the sides and lower span, whereby the strut is non-rotatively and fixedly secured to the hanger.

HENRY C. RUEN.