Jan. 25, 1944. L. A. YOUNG ET AL 2,340,033

GARMENT HANGER

Filed May 7, 1942

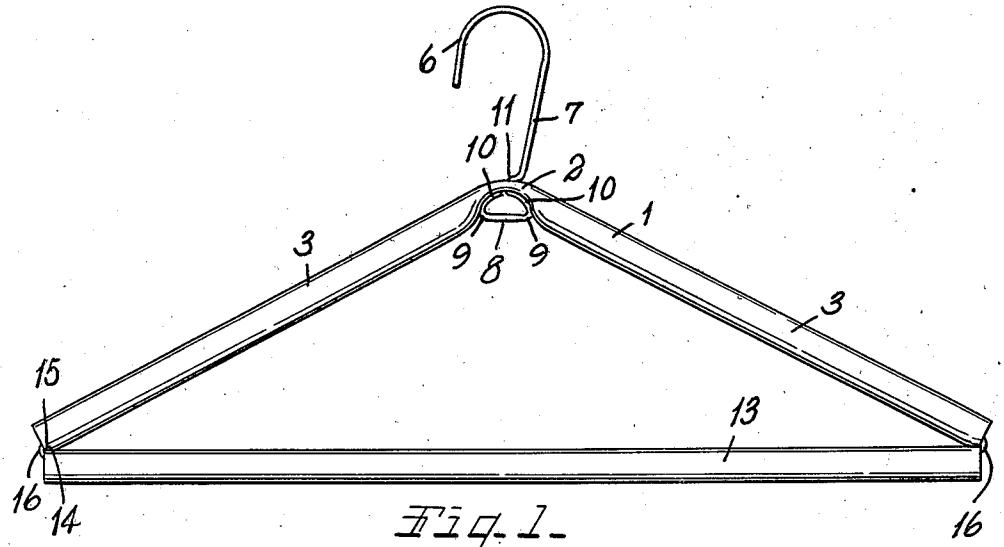


Fig. 1.

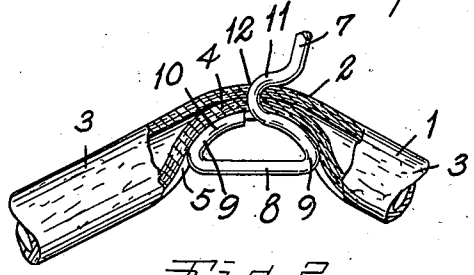


Fig. 2.

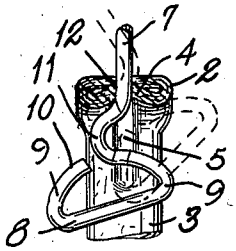


Fig. 3.

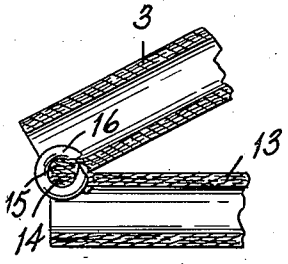


Fig. 4.

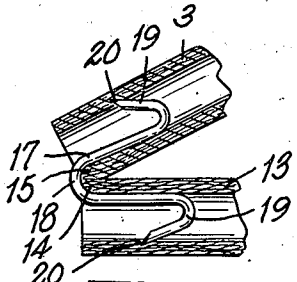


Fig. 5.

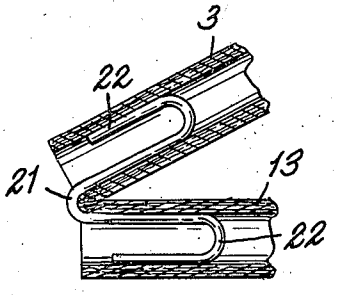


Fig. 6.

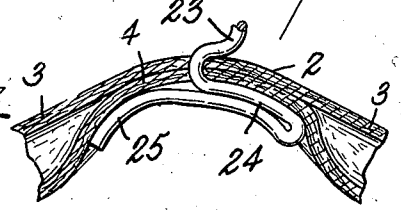


Fig. 7.

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Patented Jan. 25, 1944

2,340,033

UNITED STATES PATENT OFFICE

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GARMENT HANGER

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Application May 7, 1942, Serial No. 442,028

8 Claims. (Cl. 223—88)

This invention relates to improvements in garment hangers.

The main objects of this invention are:

First, to provide a garment hanger employing a relatively small amount of wire which is very strong and rigid and presents desirable non-metallic supporting surfaces of substantial cross section.

Second, to provide a garment hanger which is mainly formed of paper tubing—that is, paper conformed into tubing and having the above stated advantages which may be very economically produced.

Third, to provide a garment hanger comprising a non-metallic yoke portion and a wire hook portion in which the hook may be very quickly and easily assembled and when assembled is very securely retained.

Objects relating to details and economies of the invention will appear from the description to follow. The invention is defined and pointed out in the claims.

Preferred embodiments of the invention are illustrated in the accompanying drawing, in which:

Fig. 1 is a side elevation of a garment hanger embodying the features of our invention.

Fig. 2 is an enlarged fragmentary view partially in section through the apex of the hanger yoke.

Fig. 3 is an enlarged fragmentary transverse section illustrating steps or manipulations of the hook in assembling the same with the hanger yoke.

Fig. 4 is an enlarged fragmentary section illustrating the manner of connecting the strut and yoke in the embodiment illustrated in Fig. 1.

Fig. 5 is an enlarged fragmentary section illustrating a modification in the means for securing the strut to the yoke.

Fig. 6 is an enlarged fragmentary section illustrating still another means for securing the strut to the yoke.

Fig. 7 is an enlarged fragmentary section corresponding to that of Fig. 2 showing a somewhat modified form of suspending hook.

In the embodiment of our invention illustrated, the yoke portion 1 of our hanger is formed of paper tubing, preferably paper convolutely wound, with the various plies or layers adhesively secured together. This tube is bent at the apex 2 thereof to provide the downwardly diverging arms 3. The under wall 4 of the bent portion of the yoke is upwardly collapsed against the top portion, the complete collapsing being central so as to provide a downwardly facing longitudinal recess 5.

The hook 6 formed of a suitable gauge of wire and the shank 7 terminate in a loop 8 providing opposed arms 9, the upper reaches 10 of which are curved to fit the under side of the collapsed under wall.

The shank 7 is provided with an offset 11 lying above one of the arms and spaced therefrom so that when the hook is completely engaged, as shown in Fig. 2, the offset and arm coact to provide a laterally facing loop which clampingly embraces one edge of the opening 12 through which the shank is disposed.

In Fig. 3, I illustrate by full and dotted lines certain steps in the manipulation of the hook which enables its quick and easy engagement. The hook 6 is first passed through the opening 12 with the hook disposed transversely relative to the yoke. The shank is then pulled through the opening until the offset 11 engages, then with a tilting or twisting movement the offset can be readily engaged, as illustrated in Fig. 2.

The strut 13 is also formed of paper tubing and is disposed with the top portion 14 of its ends against the under side of the bottom portion 15 of the ends of the arms. Link-like clips 16 are then clamped upon these contacting portions with the ends of the clips preferably in piercing engagement with the walls of the arms and strut, as shown in Fig. 4. These clips may be very quickly applied and form a secure connection and one which not only holds the strut in place but prevents any objectionable rolling or rocking movement thereof.

In Fig. 5, the clips 17 are of U-shape, the bight 18 of the clips clampingly engaging the contacting portions of the arms and struts while the arms of the clips terminate in outwardly and angularly directed prongs 19 which are of such spread and are sharpened at 20 so that they embed themselves interiorly of the arms and strut. This provides a very secure connection and one which may be applied without the aid of tools.

The struts and yokes may be furnished the user along with the clips 17 so that the user, a dry-cleaner for example, may apply the struts needed for trouser supports and omit them where they are not needed.

In Fig. 6, the clips 21 are very similar to those shown in Fig. 5 with the exception that the arms of the clips terminate in prongs 22 which are not designed to embeddingly engage the arms of the yoke and strut but frictionally engage the

same—that is, the loop-like arms of the clips are of such dimensions that they frictionally engage the walls on which they are telescoped.

In Fig. 7, the hook shank **23** terminates in laterally disposed arms **24** and **25** curved to engage the under side of the apex portion of the hanger, the arms being somewhat longer than those shown in Figs. 1, 2 and 3, one arm **24** being formed by looping the wire and the other arm **25** by the end of the wire.

We have illustrated and described our invention in embodiments thereof which we have found very satisfactory. We have not attempted to illustrate or describe certain other modifications or adaptations as it is believed that this disclosure will enable those skilled in the art to embody or adapt our invention as may be desired.

Having thus described our invention, what we claim as new and desire to secure by Letters Patent is:

1. In a garment hanger, the combination of a supporting yoke formed of a paper tube having downwardly diverging arms, a suspending hook at the apex of the said yoke, a tubular strut disposed with its upper side at its ends against the under sides of the arms at the ends thereof, and ring-like clips extending around and embracing the end edges of said arms and strut and clampingly and piercingly engaging the contacting wall portions of said arms and strut.

2. In a garment hanger, the combination of a supporting yoke formed of a paper tube having downwardly diverging arms, a suspending hook at the apex of the said yoke, a tubular strut disposed with its upper side at its ends against the under sides of the arms at the ends thereof, the ends of said arms and strut being open, and ring-like clips extending around and embracing the end edges of said arms and strut and securing the ends of said strut and arms and disposed in the open ends thereof.

3. In a garment hanger, the combination of a supporting yoke formed of a paper tube having downwardly diverging arms, a suspending hook at the apex of the said yoke, a tubular strut disposed with its upper side at its ends against the inner sides of the arms at the ends thereof, the end of said arms and strut being open, and clips extending around and embracing the end edges of said arms and strut and securing the ends of said strut and arms and disposed in the open ends thereof.

4. In a garment hanger, the combination of a supporting yoke formed of a paper tube having downwardly diverging arms, a suspending hook at the apex of the said yoke, a tubular strut disposed with its upper side at its ends against the under sides of the arms at the ends thereof, the ends of said arms and strut being open, and clips clampingly and piercingly engaging within the open ends of the said arms and strut, said clips clamping only said upper and under sides of the strut and arms respectively to each other.

5. In a garment hanger, the combination of a supporting yoke formed of a paper tube having downwardly diverging arms, a suspending hook at the apex of the said yoke, a tubular strut disposed with its upper side at its ends against the under sides of the arms at the ends thereof, the ends of said arms and strut being open, and clips clampingly engaging within the open ends of the said arms and strut, said clips clamping only said upper and under sides of the strut and arms respectively to each other.

6. In a garment hanger, the combination of a supporting yoke formed of a tube having downwardly diverging arms, a suspending hook at the apex of said arms, a tubular strut disposed with the upper side of its ends against the undersides of the ends of the arms of the yoke, the ends of said yoke arms and tubular strut being open, and means disposed within the open ends of said yoke arms and strut and securing the contacting wall portions thereof together, said means securing only the upper side of the tubular strut to the under side of the tubular arms.

7. In a garment hanger, the combination of a supporting yoke formed of a tube having downwardly diverging arms, a suspending hook at the apex of said arms, a tubular strut disposed with the upper side of its ends against the underside of the ends of the arms of the yoke, the ends of said tubular arms and strut being open, and clips engaged within the open ends of said tubular yoke arms and strut and clamping them together and having piercing retaining engagement with the contacting parts thereof, said clips clamping only said upper and under sides of the strut and arms respectively to each other.

8. In a garment hanger, the combination of a supporting yoke formed of a tube having downwardly diverging arms, a suspending hook at the apex of said arms, a tubular strut disposed with the upper side of its ends against the underside of the ends of the arms of the yoke, the ends of said tubular arms and strut being open, and clips engaged within the open ends of said tubular yoke arms and strut and clamping them together and having piercing retaining engagement therewith, said clips clamping only said upper and under sides of the strut and arms respectively to each other.

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