May 14, 1940. B. A. COOK 2,200,669

HANGER

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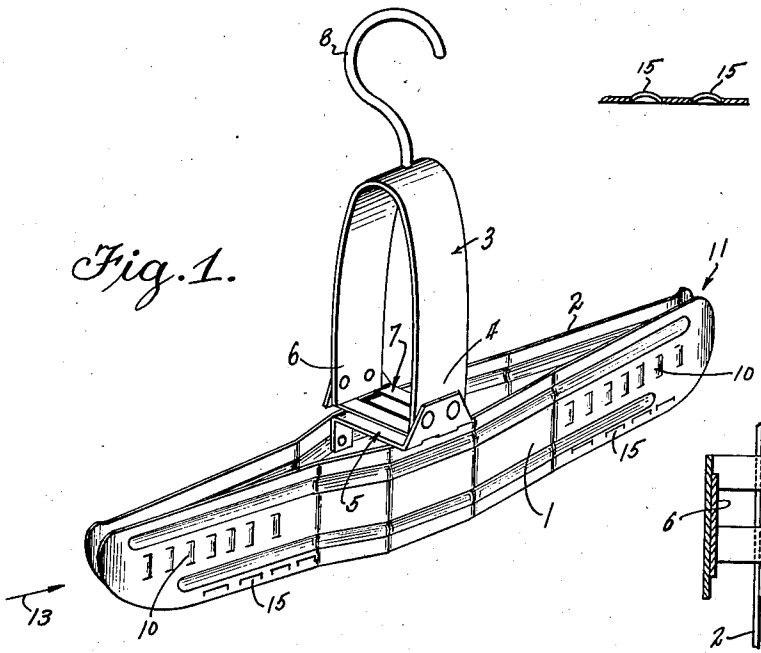


Fig. 1.

Fig. 7.

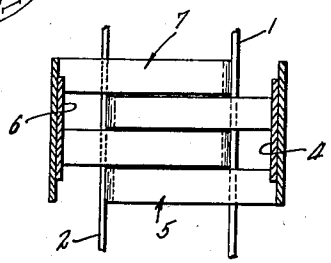


Fig. 4.

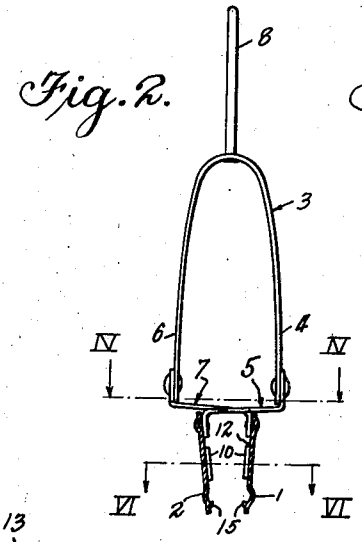


Fig. 2.

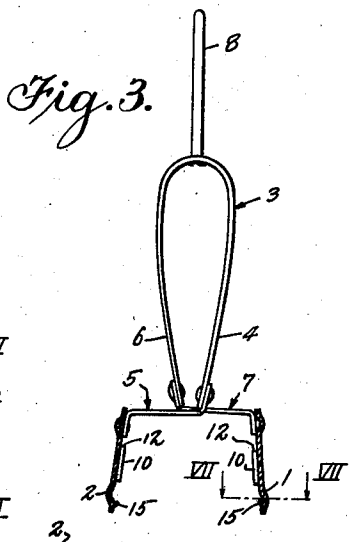


Fig. 3.

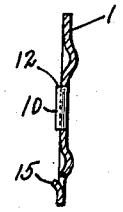


Fig. 5.

Fig. 6.

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HANGER

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Application April 15, 1938, Serial No. 202,224

3 Claims. (Cl. 223—96)

This invention relates to garment hangers of the type adapted to releasably grip garments at the top, and is particularly useful to support trousers.

An object of the invention is to provide a hanger that is simple, easy to manipulate, and holds the garment securely when in use.

The invention will be explained by describing in detail, with reference to the drawing, a preferred embodiment thereof.

In the drawing:

Fig. 1 is a perspective view of a complete hanger in accordance with the invention;

Fig. 2 is a cross section, taken substantially through the center of the hanger, with the hanger in closed position;

Fig. 3 is a cross section similar to Fig. 2, but showing the hanger in open position;

Fig. 4 is a sectional view, taken substantially in the plane IV—IV of Fig. 2;

Fig. 5 is a vertical detail sectional view through one of the clamping members of the hanger;

Fig. 6 is a horizontal section through the clamping members of the hanger, taken substantially in the plane VI—VI of Fig. 2; and

Fig. 7 is a detail horizontal section taken in the plane VII—VII of Fig. 3.

Referring to the drawing the hanger therein depicted comprises, as its essential elements, a pair of identical clamping members 1 and 2, respectively, attached to a spring element 3 which functions as a support for the members 1 and 2 and a garment clamped therebetween, and also functions to urge the clamping members together to grip the garment.

Spring element 3 is simply a strip of spring metal doubled back upon itself in the general shape of an inverted letter U with one end 4 of the spring secured by a connecting member 5 to the clamping member 2 and with the other end 6 of the spring connected by connecting member 7 to the clamping member 1. Each of the connecting members 5 and 7 is slotted to define bars, and the bars of one element pass through the slots of the other element so that the connecting members cross over each other without interference with the movement. The spring 3 tends, by virtue of its elasticity, to straighten itself, and in so doing urges the clamping members 1 and 2 together. The members 1 and 2 may be separated for the insertion of a garment by securing the two ends 4 and 6 of the spring 3 together. A hook 8 is preferably attached to the upper end of the spring 3 for supporting the device from a pole or hook.

In a hanger of the type described, the only force preventing separating of the clamping members 1 and 2 is the force of the spring 3. If the members 1 and 2 have smooth inner surfaces so that there is little resistance to sliding motion of a garment out of the hanger, then the spring 3 must be made relatively stiff in order to support heavy garments. It is undesirable to have to employ a very stiff spring for the reason that it is then difficult to squeeze the ends together with the fingers when inserting or removing a garment. On the other hand, if ordinary points or projections are provided on the inner surfaces of the clamping members 1 and 2 to increase the frictional resistance to sliding motion of a garment out of the hanger, then such points are liable to drag or catch on the fabric of the garment during insertion or removal thereof.

In accordance with the present invention, I eliminate the foregoing objections to both smooth clamping elements and conventional roughened or sharpened elements by so constructing the clamping members 1 and 2 as to strongly resist downward motion of a garment while offering little or no obstruction to horizontal movement of the garment between the members. That is, movement in a direction longitudinally past the clamping members.

Referring to Figs. 1 and 2 and 6, I provide on the inner surface of each clamping member a plurality of edges 10 extending inwardly from the main surface of each member at an angle. Thus the edges 10 may conveniently be formed by constructing the members 1 and 2 of sheet metal and stamping sections of the metal inwardly. A U-shaped cut is first made for each tongue with the cross portion of each U-shaped cut toward one end 11, the metal being then forced inwardly along the cross portion of each cut to define vertical edges substantially square at their upper corners, as indicated at 12 in Figs. 2 and 3, and extending inwardly and toward the end 11 of the clamping members. With the clamping members 1 and 2 separated by squeezing the spring 3, a garment may be readily positioned between the elements by first introducing one edge of the garment between the ends of the clamping members 1 and 2 adjacent the arrow 13 and then sliding the garment between the clamping members toward the end 11. By virtue of the inclination of the tongues defining the edges 10, little frictional resistance to such movement of the garment is introduced even though the garment contacts the clamping member. However, when the clamping members are urged together by the spring 3, the

edges 12 will penetrate into the fabric of the garment to a certain extent and any downward movement of the garment in response to the weight thereof is positively prevented by the catching of the fabric of the garment on the upper corners 12 of the edges 10. However, the garment may be easily removed from the hanger by separating the clamping members and sliding the garment horizontally out of the hanger in the direction of the arrow 13, the fabric then slipping past the edges 10 and the upper corners 12 without catching.

There are also shown in the clamping members 1 and 2 additional gripping edges 15, these being formed by making horizontal cuts in the members 1 and 2 and then bending the lower edge of each cut inwardly at the center to form upwardly and inwardly extending lips, which are smoothly rounded in a horizontal plane, as shown to best advantage in Fig. 7. These lips or edges 15 dig into the fabric of a garment supported in the hanger to a slight extent and substantial impedance to downward movement of a garment out of the hanger is given. However, when the two clamping members 1 and 2 are separated the garment may readily be taken out of the hanger by sliding it longitudinally therethrough, as previously described, the curved lips 15 offering little resistance to such longitudinal movement although they will seriously interfere with downward movement of the garment.

For purposes of illustration, the hanger depicted in the drawing has been shown as incorporating both the longitudinally directed gripping edges 10 and the upwardly directed edges 15. It may even be desirable to incorporate both forms of construction in a single clamp, as illustrated, but it is to be understood that if desired only one type of gripping edge need be employed in a particular hanger construction. Furthermore, although only a single row of the edges or projections 10 has been shown, and a single row of the projections 15, as many rows of these projections may be provided as desired, and the extent to which the edges project beyond the surfaces of the clamping member may be varied to suit different fabrics.

Although the invention has been explained by describing in detail a particular embodiment thereof, various minor changes may be made in the construction described without departing from the invention, which is to be limited only to the extent set forth in the appended claims.

I claim:

1. A garment hanger comprising a pair of juxtaposed clamping members having inner garment-contacting surfaces with means for urging said members together to engage and support a garment positioned therebetween, in which said members have projections on their inner surfaces adapted to imbed themselves in the fabric of a garment, said projections having substantially horizontal upper edge portions and being horizontally inclined at a low angle to the inner face of the associated member, whereby they offer less resistance to horizontal movement of a garment than to downward movement of the garment.

2. A garment hanger comprising a pair of juxtaposed clamping members with means for urging them together to support the weight of the garment clamped therebetween, in which said members have projections on their inner surfaces adapted to imbed themselves in the fabric of a garment, said projections extending inwardly and upwardly and having substantially horizontal upper edges curving smoothly inwardly from the main surface of the member in a horizontal direction, whereby the projections slide over instead of digging into a garment moved horizontally through the hanger.

3. A garment hanger comprising a pair of juxtaposed clamping members with means for urging them together to support the weight of a garment clamped therebetween, in which said members have projections on their inner surfaces for increasing the frictional resistance to sliding movement of a garment with respect to said clamping members, said projections having surfaces horizontally inclined at a low angle to the inner face of the associated member and all facing the same way for permitting free horizontal entry of a garment into the hanger from one end and free horizontal removal from the other end while impeding downward movement of the garment out of the hanger.

BURTON A. COOK.