

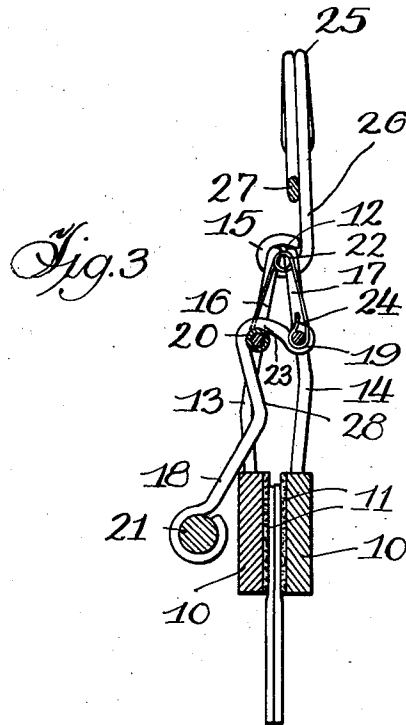
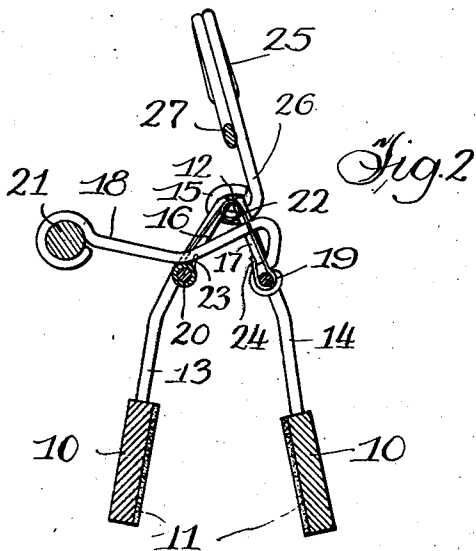
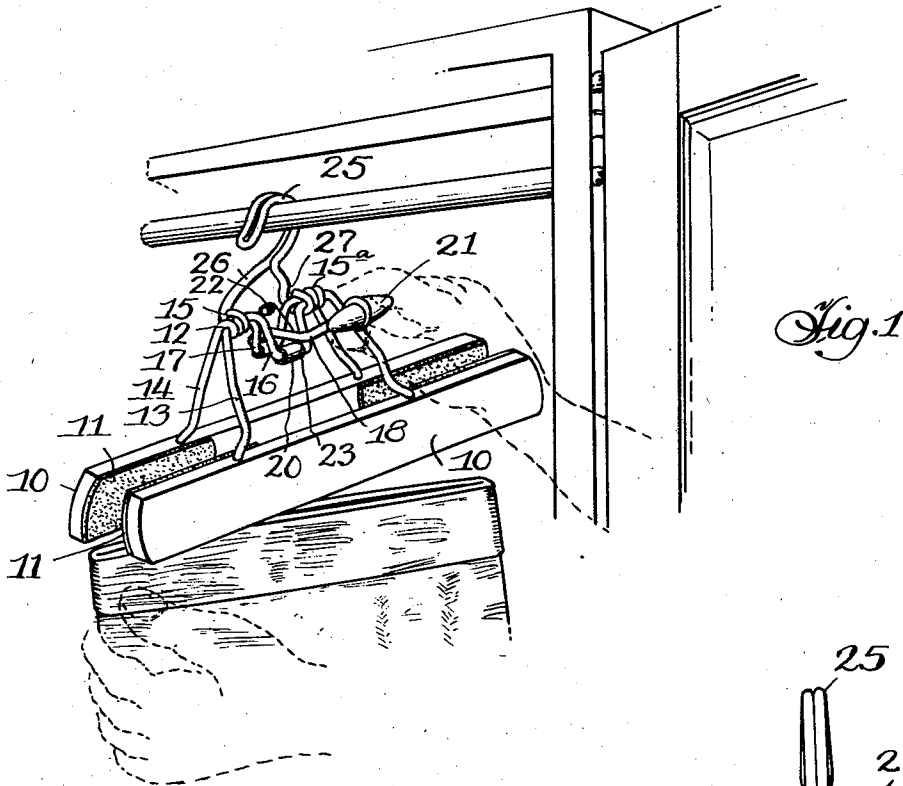
Jan. 6, 1942.

C. E. WARREN

2,269,413

GARMENT HANGER

Filed Dec. 4, 1939



Witness: Chritton, Miles, Davies, Hirschl & Dawson
Chas. E. Hirschl.

INVENTOR.
Clarke E. Warren,
ATTORNEY.

UNITED STATES PATENT OFFICE

2,269,413

GARMENT HANGER

Clarke E. Warren, La Grange, Ill., assignor to
Mackie-Lovejoy Manufacturing Co., Chicago,
Ill., a corporation of Illinois

Application December 4, 1939, Serial No. 307,511

1 Claim. (Cl. 223—96)

This invention relates to improvements in garment hangers of the type in which a pair of clamping members or jaws are hinged together and are moved to clamping position by a lever.

An object of this invention is to provide a device of this character in which the lever is so disposed that it may be conveniently manipulated to operate the clamping members.

Another object is to provide a lever having an arc of movement such that in effecting the clamping operation the manual pull on the lever is in a direction substantially opposite to the force exerted by the hook upon the hanger as a whole.

A further object is to provide the lever with a handle so positioned that the garment hanger as a whole may be operated into its clamped position by the use of one hand.

Other objects, features and advantages of this invention will become apparent as the description proceeds.

In the accompanying drawing I have illustrated a commercial embodiment of the invention wherein:

Fig. 1 is a perspective view with the jaws in open position;

Fig. 2 is a section on a vertical plane near the center with the jaws open; and

Fig. 3 is a similar view with the jaws closed.

The jaws or clamping members, as shown, are made preferably of strips of wood 10 lined with felt pads 11 on their inner surfaces at the ends, the middle portions being preferably made thinner so that the clamping engagement is effected primarily by the ends of the clamping members. Said members may, of course, be made of other material, and are connected by a hinge formed from heavy wires or from metal rods of small diameter, the axis of the hinge being shown at 12. There are two such rods 13 and 14, having their ends received in openings in the wooden clamping members, the rod 14 being bent around portions of the rod 13, in the form of helices, as shown at 15, 15a, permitting the parts to swivel about said axis 12. The middle portion of each rod is bent down into substantially U shaped form, as shown at 16 and 17. The clamping lever 18, which may also be made of a rod of small diameter, has one end, 19, bent around the horizontal span constituting the base of the U shaped portion 17 and pivots about the same. The corresponding horizontal span of the other U shaped portion 16 has a roller 20 on it, formed preferably of a strip of metal bent around to form a short cylinder. When the lever 18 is swung about

its pivot 17, it engages the roller 20 and rides over the same while drawing the clamping jaws together into yielding engagement, as shown in Fig. 3. In this position, the rod 18 is substantially vertically disposed, the outer end extending downwardly and being provided with a handle 21. Said handle is in the form of a small cylinder with tapering ends i. e. a double cone.

Said jaws are normally held in the open position shown in Figs. 1 and 2 by means of a spring 22, the middle portion of which may be in the form of a helix coincident with the axis 12, the ends of the spring being bent around the base of the U shaped portions as shown at 23 and 24 in Fig. 1, one end terminating at one end of the roller 20 and the other end terminating at one side of the bent around end 19 of the rod 18. Thus the jaws tend to remain in open position so that if the hanger as a whole is held in one hand, the trousers, or other garment, may be inserted between the clamping jaws with the other hand and said jaws pressed toward each other, after which the clamping lever may be swung downwardly to clamp the garment firmly in place, the wire hinge members being distorted somewhat in this final clamping position, whereby they exert a strong spring pressure, which, together with the friction pads, prevent the garment from slipping. The clamping lever rides freely over the roller as said lever is being swung to clamping position, providing an effective leverage and making it very easy to clamp the jaws together, even though, before clamping, they are held apart at a considerable angle. The roller also reduces wear, prolonging the life of the device. The lever, it will be noted, is bent in such a way as to form a hook at the bottom, the curvature being such that said lever after it has ridden over the roller almost to its final position, passes the dead center so that the resilient action of the U shaped portions 16 and 17 will tend to urge the lever into its extreme locked position.

The hook 25 is provided with two lower arms 26 and 27 which are rigidly affixed to the rod 14. The lower ends of the arms 26 and 27 may be curled around the rod 14 adjacent the helices 15 and 15a, and clamped thereto. This prevents pivotal movement of said hook with respect to the rod 14 and maintains it in fixed relation with respect to the U-shaped portion 17 of said rod. The rod 13 and its associated clamping member are free to pivot in the helices 15 and 15a and the arms 26 and 27 are so located that they will not impede the free movement thereof. The device may be operated in either of two

ways. In one method of operation, the garment, such as the trouser, may be grasped in say the left hand, and the right hand may close the clamping members 10, the hanger at this time being hooked over the clothes rod. With the right hand firmly urging the clamping members together so that the trousers will not drop from engagement therewith, the left hand may be released from the trousers and grasp the handle 21 and pull it downwardly, thereby locking the two clamping members together. It will be seen that with this operation the pull on the handle 21 is substantially opposite to the reacting force along the hook 25. By this method of operation the garment can be quickly and conveniently clamped into the hanger without removing the hanger from the clothes rod. To unclamp the garment it is necessary only to grasp the handle 21 with say two fingers and with the thumb of the same hand to push against the clamping member 10. The handle and associated clamping lever 18 may then be displaced through a sufficient angular distance so that it will ride over dead center, after which the resilience of the U shaped portions 16 and 17, together with the action of the spring 22, will serve to completely open the clamping members 10.

According to the other mode of operation the hanger is removed from the clothes rod and grasped in the right hand with two fingers projecting between each of the rods 13 and 14 and their associated clamping members 10, the outer ends of the two fingers grasping the handle 21 and the palm pressing against the clamping member 10 which is associated with the rod 14. As the hand is closed the handle 21 is brought down into its extreme locking position. It will therefore be seen that the entire clamping operation can be performed with one hand while the other hand is free to adjust the position of the garment between the clamping members 10.

The lever 18 is bent in such a way that it might be considered that an intermediate portion thereof 28 forms a cam surface which reacts against the roller 20. During the first portion of the movement of the handle which will serve to bring

the clamping members 10 together, the only work that is done is against the action of spring 22, and consequently the cam surface is so shaped that it will have very little mechanical advantage. During the latter portion of its rotative movement, however, that is after the clamping members have been brought into engagement with one another, the cam portion is so shaped that there will be a great mechanical advantage, which is desirable inasmuch as the lever 18 is working against the relatively strong spring action of the U shaped portions 16 and 17 and of the arms 13 and 14 which are curved or bent between the hinged portions and the ends thereof.

It will be seen consequently that the shape of the lever 18 is such that a mechanical advantage is provided by means of which the clamping operation may be easily effected by one hand.

I claim:

A garment hanger comprising two rods, one of which is coiled around the other at two horizontally aligned portions to form a hinge, two clamping members each of which is secured to the ends of one of said rods, the middle portions of each of said rods being U shaped, a clamping lever pivotally mounted on one of said U shaped portions, a roller mounted on said other U-shaped portion, said clamping lever normally resting on said roller when said clamping members are spaced apart in open position and having a bend therein between its pivotal mounting and its point of contact with said roller, to provide an increased mechanical advantage when said lever is being swung downwardly to closing position, and having also a reverse bend near the point of contact with said roller when said clamping members are in open position, and an upwardly extending hook for detachably supporting said hanger on a fixed support, said hook having lower ends spaced apart and curved around both of said rods adjacent the coiled portions which form said hinge, whereby said hook is non-rotatable with respect to one of the two rods forming said hinge.

CLARKE E. WARREN.