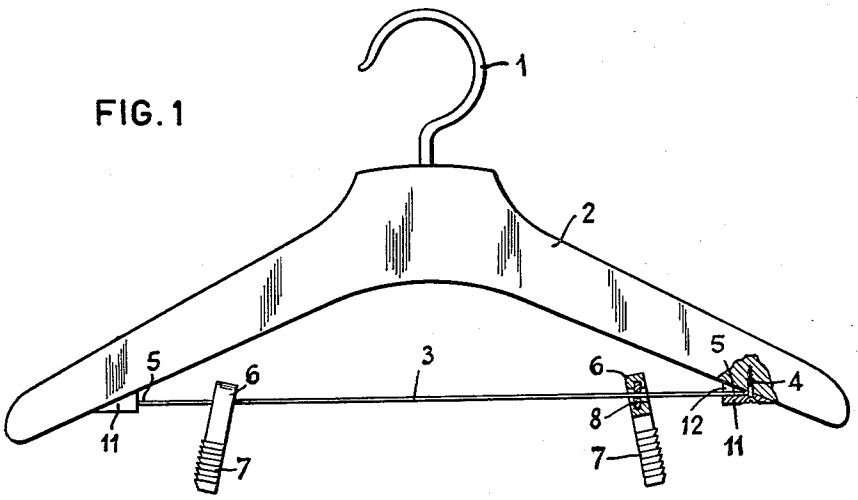
Jan. 14, 1964 E. FISCHER 3,117,705

GRIPPING DEVICE FOR SUSPENDING TROUSERS, A WOMAN'S JUPON AND THE LIKE

Filed Feb. 27, 1961

FIG. 1



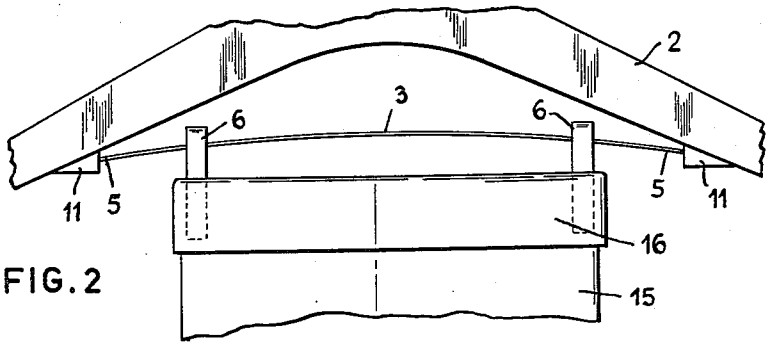


FIG. 2

FIG. 3

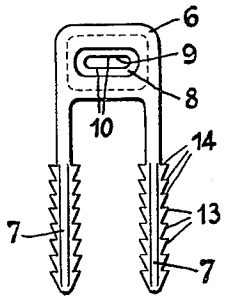
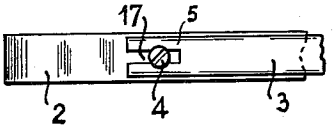


FIG. 4



Inventor
Erich Fischer

By Michael S. Striker
Attorney

United States Patent Office

3,117,705

Patented Jan. 14, 1964

3,117,705
GRIPPING DEVICE FOR SUSPENDING TROUSERS, A WOMAN'S JUPON AND THE LIKE

Erich Fischer, Schmitten 26, Roggwil, Bern, Switzerland

Filed Feb. 27, 1961, Ser. No. 91,993
Claims priority, application Switzerland Feb. 25, 1960
4 Claims. (Cl. 223—95)

The invention refers to a gripping device adapted for carrying a piece of clothing, such as trousers at the end of their legs or a woman's jupon at its waist ribbon, in suspended position, whereby the leg ends or the waist ribbon are kept stretched by means of two holders being slidably guided along a bar which is disposed horizontally when being in position of use.

According to the invention the bar of the gripping device is elastically flexible and each holder is formed with means for engaging the bar substantially anywhere on its length in a locking manner and further with a rigid pair of downwardly extending shanks, the two pairs of shanks occupying in unlocked condition each an inclined position in the plane of their displaceability, whereas in locked condition, when gripping a piece of clothing, the pairs of shanks are at least approximately parallel to each other.

The accompanying drawing illustrates one embodiment of the present invention.

FIG. 1 is a lateral view of a coat-hanger equipped with a gripping device according to the invention;

FIG. 2 shows the gripping device in use;

FIG. 3 is front side view of one of the holders of the device; and

FIG. 4 shows from below a modification of the attachment of the bar of the device on the coat-hanger.

The embodiment of the invention shown in FIG. 1 comprises an ordinary coat-hanger 2 having a suspension hook 1. A flat elastically flexible bar 3, preferably of steel, is attached in substantially horizontal position with its both ends 5 to the two arms of the coat-hanger 2 in such a way that the bar can be bent upwardly towards the hanger. For this purpose a piece 11 of U-shaped cross-section is secured by means of a screw 4 to the underside of each arm of the coat-hanger 2, the two pieces forming each at the underside of the hanger a pocket 12, which accommodates the end 5 of the bar and leaves to the latter the necessary free space for the upward bending.

Two holders 6 mainly consisting of artificial resin are slidably mounted on the bar 3 and have each a rigid pair of parallel shanks 7 which extend downwardly from the bar. In the middle portion connecting the upper ends of the shanks of each holder, a metal plate 8 is embedded in the artificial resin. This plate is arranged transversely to the bar and has a slit-like low aperture 9, as shown in FIG. 3. The aperture 9, which is traversed by the bar and guides the holder thereon, leaves a little space toward the under flat side of the bar, which space can be offset by tilting the holder so that the keen longitudinal edges 10 of the holder at the upper and lower side of the aperture 9 can engage the flat sides of the bar anywhere on its length in a locking manner. The plane containing the metal plate forms an acute angle with the plane through the pair of shanks 7 of the holder in such way that the two holders occupy in unlocked condition symmetrically inclined positions, as shown in FIG. 1, whereas in locked position the pairs of shanks are at least approximately parallel to each other if the bar is thereby bent upwards to a certain extent, as shown in FIG. 2.

As may be seen from FIG. 3, the shanks 7 of the holder are provided with a plurality of ribs 13 arranged side by side transversely to the shank direction and having a saw-toothed cross section, whereby the face 14 of the

teeth are upwardly directed on the holder in order to prevent the piece of clothing from slipping from the holders. The holder in its essential parts may be made of metal, for instance by injection moulding.

For suspending trousers 15 at the turnover ends 16 of their legs the shanks 7 of the two holders 6 are inserted into the opening of these ends. Then, by shifting the holders as apart as possible on the bar until they firmly engage the leg ends 16 of the trousers 15 and are tilted thereby into locking position, the bar 3 will be slightly bent upwards and its elastic tension will keep the leg ends in stretched condition by means of the holders which maintain the trousers suspended. For suspending a woman's jupon at its waist ribbon the same must be folded in the middle of the length of its ribbon, so that four equal portions of the ribbon length lie side by side. One holder 6 is now inserted with each one of its shanks between an outer and an inner of the ribbon length portions and the other holder 6 is inserted with its both shanks between the two inner ribbon length portions. In order to engage and stretch the waist ribbon for suspending the jupon the holders will be shifted apart on the bar and arrive in a parallel position whereby the bar is slightly bent upwards. Under this condition the holders engage the bar in locking manner and maintain the waist ribbon stretched.

The described gripping device allows the use of the holders already in a very small as well as in a considerable distance from each other in adaptation to the piece of clothing to be suspended, whereby the stretching tension of the bar is sufficiently effective in any case.

For removing the piece of clothing from the gripping device one holder 6 may be tilted by hand into its sliding position under a momentary increase of the bending of the bar 3. A still simpler way to achieve this consists in seizing the coat-hanger 2 with one hand and pressing with its thumb the middle portion of the bar 3 a little further upwards. Thereby the holders are released from its locking position and release the piece of clothing which can be seized with the other hand.

According to FIG. 4, the flat bar 3 can be mounted at each end 5 to the underside of the coat-hanger 2 directly by means of a screw 4. In this case the bar end 5 is provided with a longitudinal slit 17 which is traversed by the screw 4 screwed into the underside of the hanger arm, so that the bar 3 is supported by the screw head and has sufficient play for its upward deflection.

What I claim is:

1. A clothes hanger comprising, in combination, an elongated flexible resilient strip having a pair of opposed free end portions; a pair of garment-engaging members spaced from each other; means mounting each of said garment-engaging members for sliding movement on said strip when said means is normal to said strip and for locking said garment-engaging members when said means is tilted relative to said strip; and a pair of rigid support means forming part of said clothes hanger and mounted thereon spaced from each other for supporting said strip only at said free end portions thereof, said free end portions resting on said support means and being supported by the latter for free shifting movement toward and away from each other whereby the operator may place a garment in such a position that such garment-engaging members may extend into an opening in the garment and the operator may move said members away from each other until said members engage the garment in the openings thereof and are tilted into locking position, consequently flexing said resilient strip upwardly so that the garment is supported.

2. A hanger for garments, comprising in combination, a resilient elongated strip having opposite end portions; rigid support means supporting the end portions of said

strip for free movement one toward the other when said strip is flexed away from the other when the flexing stress is removed from said strip; and a pair of spaced garment engaging members carried by and slidably adjustable on said strip and having means for locking with said strip, said members being formed with a guiding aperture so that in the unstressed condition of said strip said members are spaced apart a distance less than the width of an opening in a garment to be suspended and in which said members may be received, the opening in the garment having a width less than the extended length of said elongated strip so that the operator may move said members away from each other until the garment is engaged by the members in the opening thereof, said members being tilted into locking position, so as to flex said resilient strip upwardly to place said strip in stressed condition whereby the garment is supported.

3. A clothes hanger, comprising in combination, an elongated flexible resilient strip having a pair of opposed free end portions; a pair of garment-engaging members spaced from each other and each comprising a head portion formed with an opening and at least one longitudinal extension extending from said head portion; means mounting each of said garment-engaging members for sliding movement on said strip when said means is normal to said strip and for locking said garment-engaging members when said means is tilted relative to said strip, each of said means comprising a plate angularly disposed within

said opening of the respective garment-engaging member and formed with a guiding slot of a width only slightly greater than the width of said strip and through which said strip extends; and a pair of rigid support means forming part of said clothes hanger and mounted thereon spaced from each other for loosely supporting said strip only at said free end portions thereof for permitting free shifting movement of said free end portions toward and away from each other, whereby in the fully extended condition of said strip, a garment may be placed in such a position that said garment-engaging members extend into an opening in the garment, said garment-engaging members may be slid along said strip by the operator until they engage said garment and are tilted into locking position, consequently flexing said resilient strip upwardly, so that the garment is supported.

4. A clothes hanger in accordance with claim 3 in which the head portion and extension are of plastic material and the plate is of metal rigidly embedded in the plastic material of said head portion.

References Cited in the file of this patent

UNITED STATES PATENTS

2,552,842	Clausen	May 15, 1951
2,805,011	Ambrosino	Sept. 3, 1957
2,810,172	Wiglesworth	Oct. 22, 1957