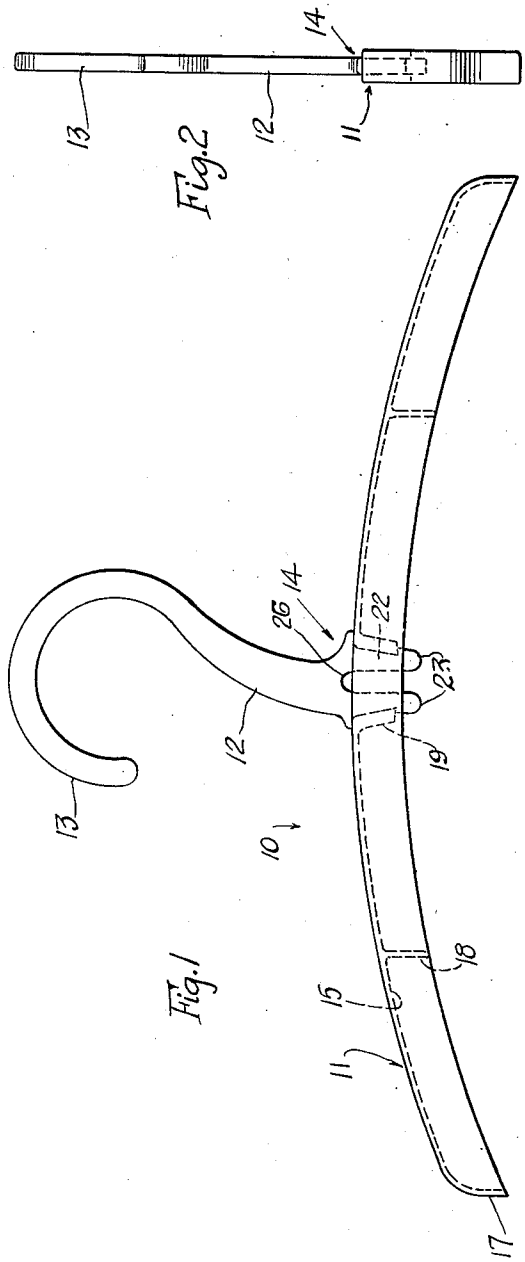
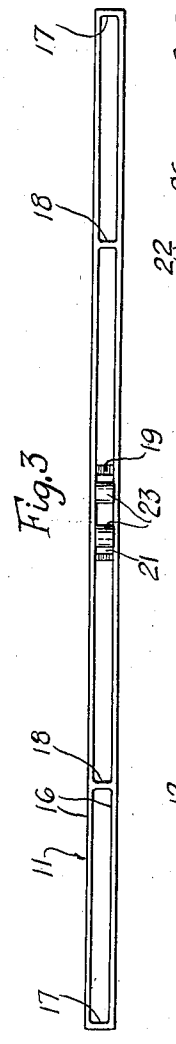
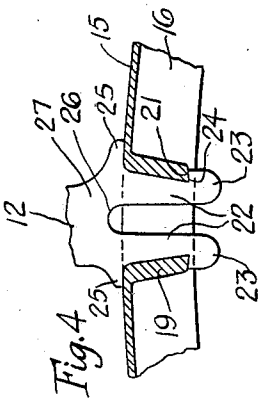
Jan. 1, 1946. N. T. BALDANZA ET AL 2,392,080

KNOCKDOWN COAT HANGER

Filed Dec. 30, 1944







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Patented Jan. 1, 1946 2,392,080

UNITED STATES PATENT OFFICE

2,392,080

KNOCKDOWN COAT HANGER

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Application December 30, 1944, Serial No. 570,550

4 Claims. (Cl. 223—92)

This invention relates to coat hangers.

One object of the invention is to provide a coat hanger having improved means for interconnecting the coat hanger bar and its supporting hook so that the ultimate consumer can readily assemble the same.

Another object of the invention is to furnish a coat hanger having improved means for interconnecting the coat bar and hook in a detachable but otherwise strong and rigid manner.

Coat hangers involve a shipping cost that is out of proportion to the usually inexpensive nature of the article. A knockdown coat hanger would assure compact packaging or storage to the manufacturer, retailer and user, and would permit the same to be readily carried in small valises and the like. To properly achieve these purposes, the coat hanger must be not only strong and durable, but inexpensive to make and practically obvious in its mode of assembling.

It is therefore an object of the invention to furnish a coat hanger which shall fulfill the above mentioned requirements.

Another object of the invention is to provide a coat hanger of which the coat bar, or hook, or both are adapted to be made by simple and rapid molding, preferably free of undercuts which require an expensive die and slow up the molding operation.

Another object of the invention is the provision of a coat hanger having improved connecting means between the coat bar and hook virtually wholly concealed in the coat bar, and preferably in improved relation to the hollow or channel structure of the coat bar.

Other objects and advantages of the invention will become apparent as the specification proceeds.

With the aforesaid objects in view, the invention comprises the novel features, combinations and arrangements of parts hereinafter described in their preferred embodiments, pointed out in the subjoined claims, and illustrated in the annexed drawing, wherein like parts are designated by the same reference characters throughout the several views.

In the drawing:

Figure 1 is a view in side elevation showing a coat hanger embodying the invention.

Fig. 2 is a view in end elevation thereof.

Fig. 3 is a bottom plan view thereof.

Fig. 4 is an enlarged, fragmentary, sectional view of the coat hanger showing details of the connecting means.

Fig. 5 is a similar view but showing the connecting means in detached position.

Fig. 6 is an edge view thereof.

The advantages of the invention as here outlined are best realized when all of its features and instrumentalities are combined, but, useful embodiments may be produced involving less than the whole.

It will be obvious to those skilled in the art to which the invention appertains, that the same may be incorporated in several different constructions. The accompanying drawing, therefore, is submitted merely as showing a preferred exemplification of the invention.

Referring in detail to the drawing, 10 denotes a coat hanger embodying the invention. The same may include a coat hanger bar 11 of any suitable size or shape, and a supporting member 12 therefor which may have the conventional hook portion 13. Improved means 14 interconnect the coat bar 11 and the member 12 at a central point of the coat bar, with the center of the hook 13 being in vertical alinement with the center point. As shown the coat bar, hook member and connecting means lie in a common plane, the coat bar being adapted to be suspended in horizontal position.

The coat bar 11 is preferably molded of plastic material so as to be channel-shaped in cross section, and thus it has a web or back wall 15 and side walls or flanges 16. At its ends, the channel is closed by angular wall portions 17. At spaced points, the channel is interrupted by thin, transverse reenforcing ribs 18 and 19. The ribs 18 are parallel to the end walls 17 to facilitate removal of the bar 11 from the mold. The ribs 19 are thicker and lie at opposite sides of the center of the bar 11. Between these ribs 19 is defined a space or socket chamber S which registers with the opening 20 in the back 15 of bar 11. The lower ends of the ribs 19 terminate at 21 within the channel, in spaced relation to the free edges of the flanges 16, for a purpose hereinafter apparent. The ribs 19 converge downwardly toward each other, and thus afford, in conjunction with the adjacent portions of the flanges 16, a socket S of generally rectangular cross section, of uniform width but diminishing length, since the socket tapers downwardly at the ribs 19. This socket is fully open at its upper and lower ends, for a reason hereinafter apparent, and is readily molded by a die projection at the upper side of the coat bar. Disengagement from the die is facilitated by the angularity of the ribs or walls 19.

The member 12 may be molded or stamped out of sheet material of plastic or the like. It may be of uniform thickness throughout, equal to the space between the flanges 16 of the coat bar 11. Downwardly projecting at its lower end are fingers or tongues 22 spaced to lie at opposite sides of the center of the coat bar. At their free ends, the tongues are formed with lateral projections or elements 23 which extend away from each other. The upper edges 24 of these elements are at a slight acute angle and the bottom edges at 21 of the walls 19 form like angles. Since the tongues 22 consist of resilient material, they are adapted to be deflected toward each other. The arrangement of the elements 23 is such that they produce such a deflection by engaging the walls 19 in course of inserting the tongues 22 into the socket S. Insertion of the tongues is limited by the stop portions 25. When the tongues have been fully inserted, the elements 23 are free to move outward under the walls 19, with the acute angle faces 24 thereof engaging those at 21 so that tension on the member 12 does not tend to cause releasing movement of the elements 23. As the tongues 22 spring apart they come into complete contact with the walls 19, being suitably shaped for that purpose. Ample resilience for the tongues is obtained by sufficiently elongating the cut out therebetween as at 26. The seating face of the elements at 24 is concealed within the channel, and the elements may project from the channel and are preferably of sufficient size to constitute finger pieces whereby the tongues can be pressed together for detachment of the hook member 12.

In use, the coat bar 11 and hook member 12 may be packaged in separated condition. This much less space is occupied in shipping and in carrying in a small suitcase and the like. Attractive color combinations are possible as between the handle and coat bar.

In assembling, the operator grasps the hook member and inserts the tongues 22 into the socket S. First the rounded elements 23 engage the suitably curved or beveled edge of the socket, and as they ride in, the tongues are sprung together, and then released to spring apart and maintain the elements 23 in locking position as shown. A pull on the hook member tends to cause the elements 23 to lock in more tightly due to the angular seating at 24. No vertical twisting of the hook member is possible and by utilizing a portion of the coat bar channel as a socket, the tongues 22 may be of ample width and strength. If the leverage on the ends of the coat bar is uneven, the projections 25 serve as stops, so that the angular force shall not act laterally upon the tongues, but rather produce mainly a tension at the elements 23. One of the tongues may have more resilience than the other, as where the opening 26 approaches more closely to the right edge of the hook member than to its left edge to form a neck 27 for the adjacent tongue. To release the hook member, the operator grasps the elements 23 and presses them together so that they disengage and are simultaneously pressed inward by the fingers. The taper of the socket assists in a quick release, and the hook member has a tendency to fly away from the coat bar.

The coat hanger is neat in appearance, the connecting structure being concealed in the coat bar. There is no opportunity for the clothing to catch on any parts, because even the seating portions at 24 lie within the channel. The connection is rigid and only infinitesimal play need occur by reason of the acute angle seating at 24.

It will now be seen that the invention may be regarded as including a coat bar means having portions on opposite sides of its center for receiving spaced tongues on a hook member, the tongues having lateral elements at their free ends to prevent separation of the hook member, these elements being releasably locked by relative angular movement between the side portions and the tongues.

We claim:

1. A coat hanger including a generally horizontal coat hanger bar, an upright hook central to the bar for suspending the latter, the bar being of generally rectangular form in cross section and having an opening therein elongated along the length of the bar, and resiliently interengaged means interconnecting the bar and the hook, comprising a plate-like portion of the hook fitted in said opening and having laterally extending spaced elements in the vertical plane of the bar, the latter having spaced elements engaging the first mentioned elements at opposite sides of the center line of the bar, said means having a tongue section consisting of resilient material and carrying certain of the elements whereby the different elements are interengaged, the tongue section cooperating with said elements for positive interengagement of the latter so as to prevent accidental release under the tension to which the said means is subjected.

2. A knockdown coat hanger having a generally horizontal coat hanger bar, an upright hook central thereto for suspending the bar, the latter having extending therethrough a central upright opening elongated in the plane of the bar and the hook having a section fitted in said opening, said bar having a pair of spaced portions and the said section having a pair of spaced portions having hook-like, positive engagement with the first mentioned portions at points on opposite sides of the center of the bar and in the plane thereof, certain of said portions being resilient for a snap-in engagement of the different portions, the resilient portions having elements projecting downward to form finger pieces whereby the resilient portions can be forcibly deflected for removal of the hook from the bar.

3. A knockdown coat hanger, including a horizontal coat hanger bar, a generally upright central hook for suspending the same, the bar having an upright opening therethrough elongated in the vertical plane of the bar and being thus long and narrow, the end surfaces of the opening converging downwardly toward each other, the hook having a plate-like shank slotted to form a pair of spaced downwardly projecting tongues of resilient material adapted to be deflected toward each other, the tongues being fitted in the opening and being in contact with the convergent faces, the tongues having at their lower ends lateral elements extending in opposite directions in the said plane of the bar and engaging the lower face thereof, the tongues being so related to the opening that the said elements are adapted to be freely received in the upper part of the opening and cause the tongues to be deflected toward each other in course of engaging the hook with the bar, the elements finally moving into operative position below the bar with the tongues moving resiliently apart from each other to thus interconnect the hook and bar.

4. A knockdown coat hanger including a gen-

erally horizontal bar, a central, upright hook for suspending the same, the bar having an opening therethrough elongated in the vertical plane of the bar, the hook having a plurality of downwardly extending spaced tongues, the latter having at their lower ends oppositely extending lateral elements lying in the said plane of the bar, the tongues being snugly fitted in the opening and consisting of resilient material so as to be capable of being deflected toward each other, the bar having lower surface portions adjacent the opening under which the elements engage to prevent removal of the tongues except upon deflection of the latter toward each other, the elements cooperating with the said surface portions for contact with each other along surfaces that are inclined so as to diverge upwardly to assist in maintaining the tongues spaced apart in operative engagement with the bar.

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