

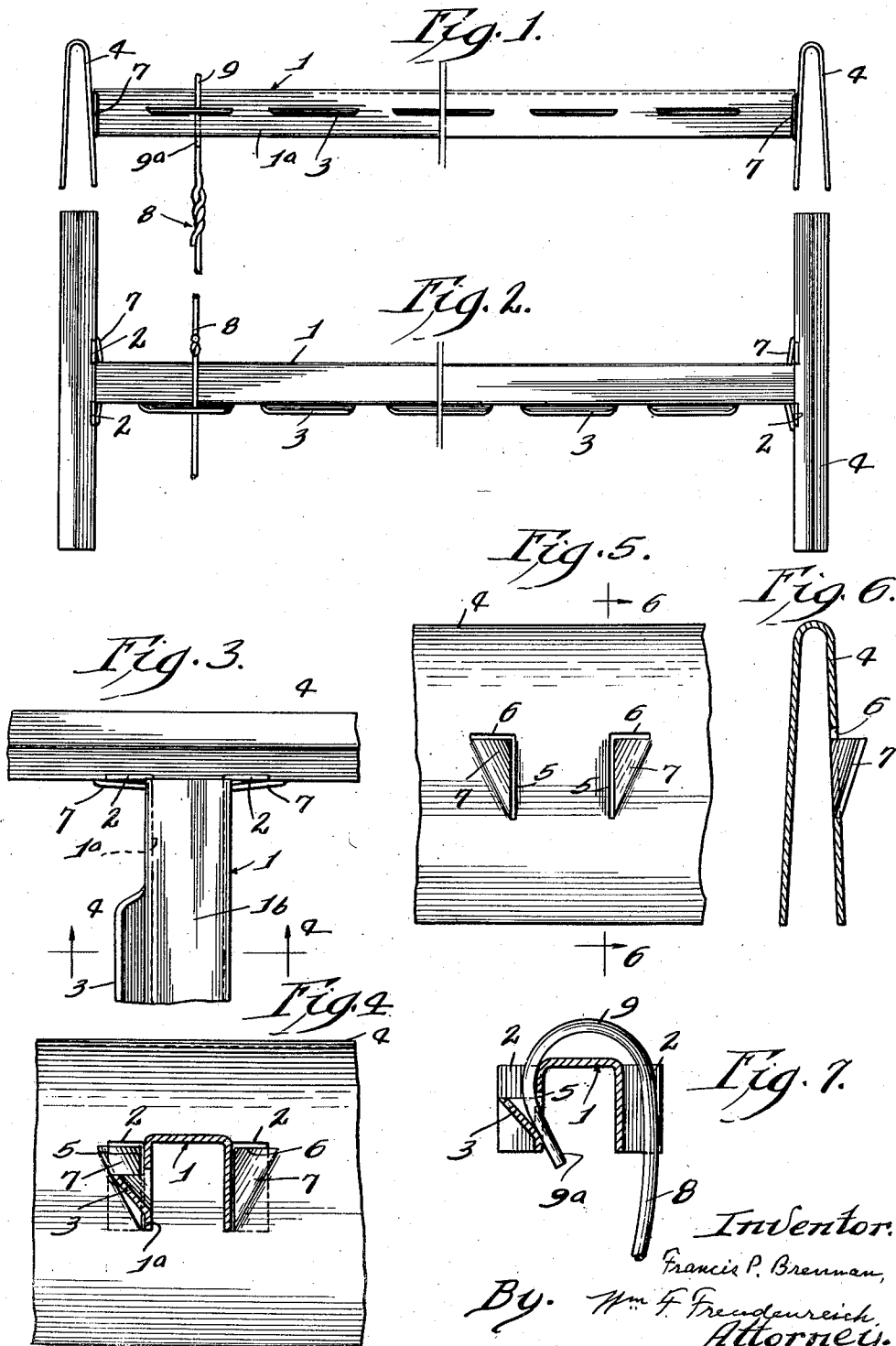
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GARMENT SUPPORTING STRUCTURE

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1

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GARMENT SUPPORTING STRUCTURE

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2 Claims. (Cl. 211—123)

It is common practice to ship groups of garments suspended by means of conventional coat hangers from a bar across the upper part of a sturdy carton.

The object of the present invention is to produce a simple, novel and inexpensive bar device which may easily be applied to a carton and effectively serve its intended purpose.

In the use of prior devices of which I am aware, the hooks on conventional wire coat hangers sometimes, under the weight of heavy garments and the jarring to which the container and its contents are subjected, straighten to a degree sufficient to allow the hangers to slip off the supporting bar.

One of the objects of the present invention is to produce a bar that causes the hooks of conventional hangers to be locked to the bar, by reason of the weight of the garments, so that they cannot straighten and permit the garments to drop.

The various features of novelty whereby the present invention is characterized will hereinafter be pointed out with particularity in the claims; but, for a full understanding of the invention and its objects and advantages, reference may be had to the following detailed description, taken in connection with the accompanying drawings, wherein:

Fig. 1 is a side view of a garment supporting structure or unit embodying the present invention;

Fig. 2 is a top plan view of the unit shown in Fig. 1;

Fig. 3 is a view, similar to Fig. 2, but on a larger scale, showing only an end portion of the structure;

Fig. 4 is a section on line 4—4 of Fig. 3;

Fig. 5 is a side view of a fragment of one of the cross pieces at the ends of the structure, showing only the area in which the connection with the bar member is made;

Fig. 6 is a section on line 6—6 of Fig. 5; and

Fig. 7, also, is a section on line 4—4 of Fig. 3, showing only the bar member and a coat hanger hook engaged therewith.

Referring to the drawing, 1 is a metal channel bar, namely a bar that is U-shaped in cross section. The flange portions of the bar are continued beyond the ends of the web portion and are bent outwardly, at right angles to the bar, as wings 2. In one of the flanges 1^a of the bar is a row of long louvres 3 arranged end to end and as close together as is practicable without seriously weakening the flange. The louvres are spaced a substantial distance from and face toward the plane of the bottom wall or web of the channel.

At each end of bar 1 is a supporting member in the form of a deep, narrow, open-ended trough 4. In one side wall of each of these troughs are two L-shaped slits, each comprising a main slit 5 and a branch slit 6; slits 5 being parallel, spaced apart a distance approximating the width of bar 1, and arranged at right angles to the longitudinal axis of the trough; and slits 6 being aligned and extending in opposite directions from the ends of slits 5 farthest from the long free edges of the trough. The metal in the areas within the angles of the L's is pressed

2

outwardly to create ears 7, spaced far enough from the wall from which they have been created, to allow the wings 2 on either end of the bar to be slipped behind them. The edges of ears 7 along slits 5, 5 serve as guides that engage and center the bar to cause the wings to register with the gaps behind ears 7, in making the assembly.

In use the parts are assembled as shown in Figs. 1 and 2. The device, with the open sides of the channel bar and the end supports facing downward, is set on top of an open carton (not shown) with the trough-like end pieces 4 embracing marginal portions of two opposed side walls of the carton, and bar 1 spanning the distance between such walls.

Garments on individual conventional coat hangers 8 may be hung on the bar, either before or after the bar has been placed in position on the carton. The louvres are long and provide the bar with longitudinal slots considerably wider than the diameter of the wire of the hook element 9 of the hanger. Therefore, when one of the hooks is lowered to engage the bar, with the free end or tip portion 9^a passing down close to the side of the bar, the hook will thread its way down through one of the louvres unless it happens to register with one of the short gaps between the louvres. In the latter event the hook need only be slid a short distance along the bar in order to enter a louvre.

The wire in the hooks of conventional wire coat hangers tend to straighten under the downward pull of a heavy garment, the straightening action being accentuated by vibration during transportation of the packaged garments; this sometimes resulting in distortion of a hook to such a degree that it will slip off supporting bars as heretofore made. In the case of my novel bar, however, a downward pull on hook, as can be seen in Fig. 7, prevents such straightening of the hook; the nose or tip of the hook simply pressing against a stationary stop so that it cannot swing outwardly as would be necessary in the straightening of the hook. Actually, under a sufficient pull, the hook may contract until it presses against both upper corners of the channel bar and thus frictionally grips the bar so as to be securely locked thereto.

By employing louvres opening upwardly, the stop for the nose of the hook is brought near the extreme end of the hook, far from the point where the wire curves around the nearer upper corner of the channel. Therefore, a small frictional resistance at the stop can have its effectiveness multiplied to prevent the wire from sliding upward past said nearer corner and allowing the hook to straighten.

It will therefore be seen that the channel shape of the bar, having web and flange portions which need be only from three quarters of an inch to one inch wide, and the louvres cooperate to provide effective locking of coat hanger hooks to the bar in a manner to prevent the hooks from straightening and pulling off the bar.

It will furthermore be seen that coat hangers may be attached to the bar as quickly and easily as to a conventional bar having no louvres.

It will also be seen that not only do the louvres permit a holding force to be applied close to the free end of the wire in a hook, but they also provide a ramp of considerable width over which the end of the wire must ride before it becomes free. Therefore, a sudden jar during transportation is not likely to destroy the anchorage of the free end of a hook even though such a jar should cause a hanger and its load to jump upward relatively to the supporting bar.

I claim:

1. A garment supporting element comprising a metal channel bar adapted to be supported horizontally with the open side facing down, one of the flanges of the bar

3

containing elongated slots distributed along the same, said flange having on its outer side opposite each slot a louvre, each louvre comprising a wall joined to said flange along the lower edge of the adjacent slot and sloping upwardly and away from the said flange, and said walls ending in end walls extending inwardly toward the flange and joined thereto at the ends of the corresponding slots; whereby each louvre constitutes a means to receive the tip of a hook applied to the bar from above the same and to guide the hook tip into the adjacent slot in the bar.

2. A garment supporting structure as set forth in claim 1, wherein the open tops of the louvres are disposed a substantial distance from channel bottom, whereby the

4

free end of a hook may be slid down the vertical side of the bar before entering a louvre.

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