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Schuessler

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[54] **DISPOSABLE HANGER RETAINER FOR DISPLAY RACKS**

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[51] **Int. Cl.** **A47f 7/19**

[58] **Field of Search** ..... 211/4, 7, 113, 116, 118, 211/123, 124, 162; 206/7 R, 7 A, 7 D, 46 AP, 279, 291, 483; 312/107.5; 223/85; 248/339, 340

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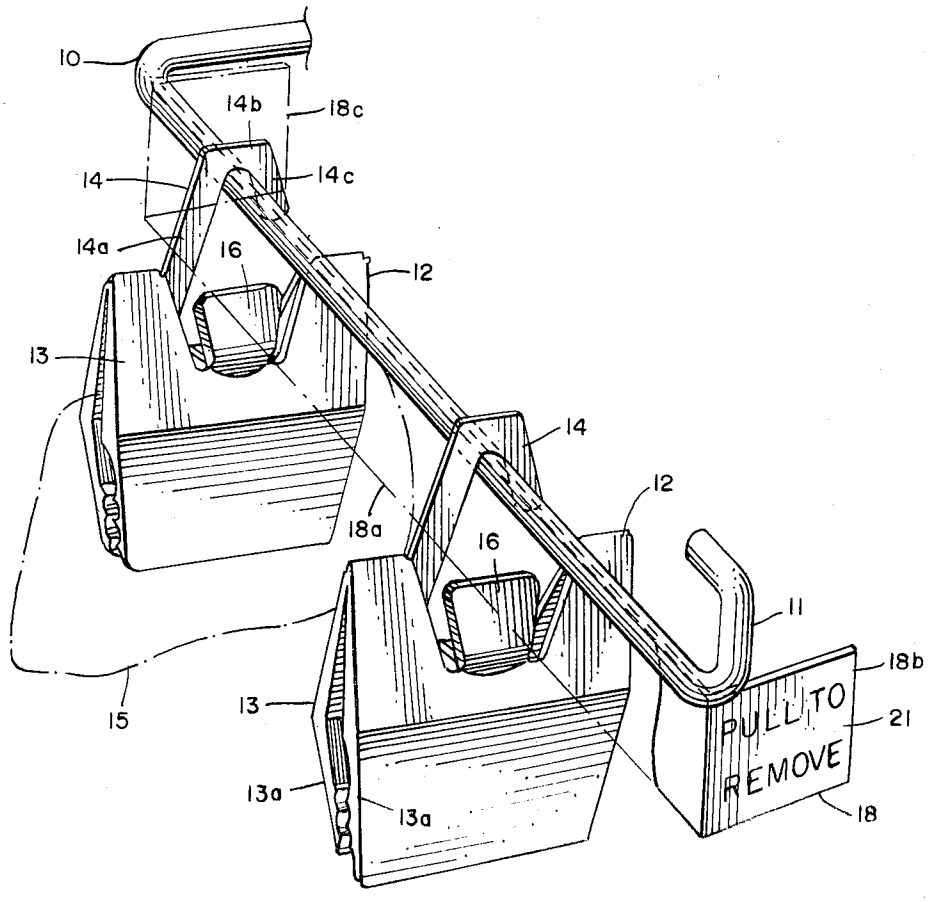
[57] **ABSTRACT**

An inexpensive and disposable locking strip for use in temporarily retaining hanger clips (and the garments or other articles they support) in place on a rack as that rack is moved about during shipment and in preparation for commercial display of the goods. The strip is sufficiently flexible and deformable so that it may be urged laterally beneath the hooks of a plurality of hangers suspended in parallel relation from the horizontal rod of a display rack. Unhooking of the hangers, either accidentally or intentionally, is thereby restrained until such time as the strip is longitudinally extracted.

16 Claims, 3 Drawing Figures



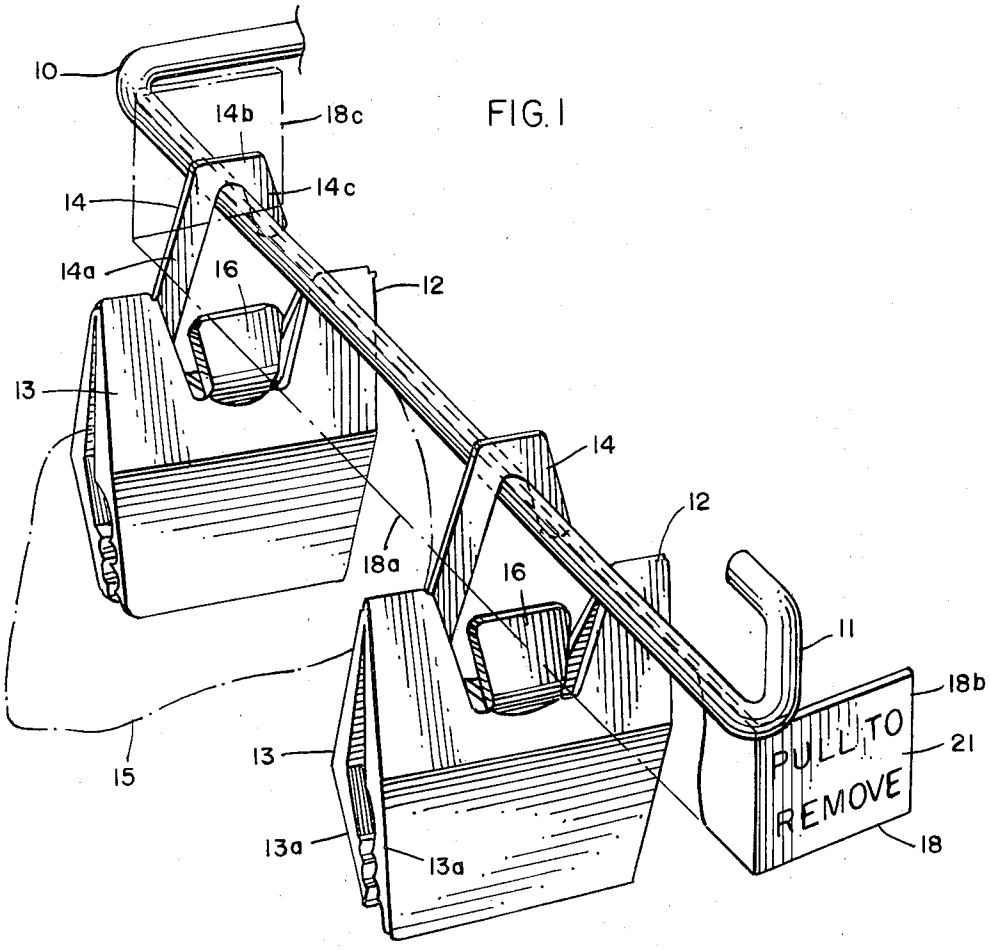


FIG. 1

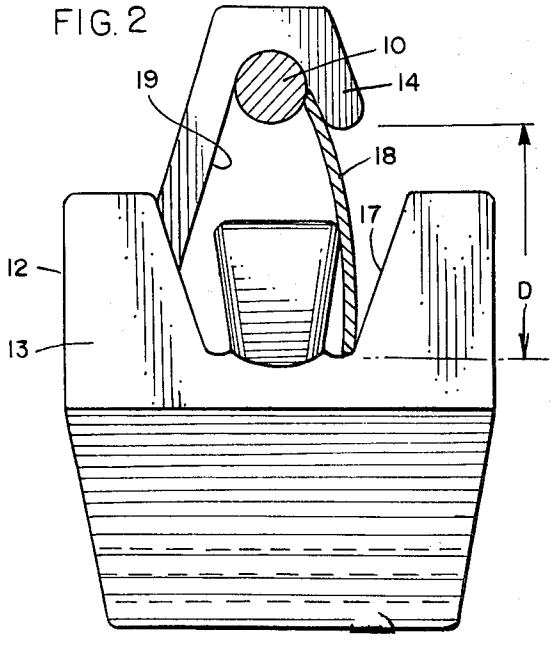


FIG. 2

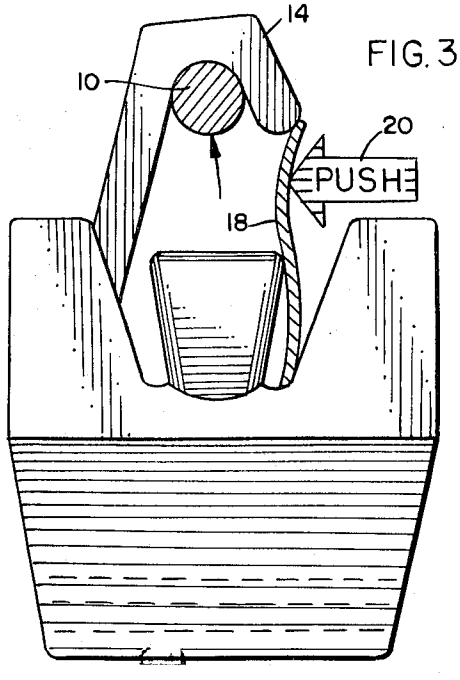


FIG. 3

DISPOSABLE HANGER RETAINER FOR DISPLAY RACKS

BACKGROUND

The display racks for garments and other articles now in common use are ordinarily shipped to the retailer in unloaded condition and the retailer must then hook the hangers and the goods which they support upon the horizontal arms or rods of the racks. Pre-mounting of the hangers (and the articles which they support) upon such a rack by the manufacturer or distributor has not been considered feasible because such hangers are easily unhooked and would undoubtedly become detached during shipment and handling unless some elaborate means, such as the extensive use of packing materials along the baffles, spacers, and the like, were used to hold the hooks in place. To avoid such difficulties and still permit pre-mounting of the hangers, it has been contemplated that such hangers might be formed with eyelets in lieu of hooks; however, the provision of an eyelet would not only prevent such a hanger from releasing during shipment but would also prevent it from being removed from the rack by a perspective customer unless all other hangers closer to the end of the support rod were first withdrawn. Therefore, while the eyelet approach has been used in those instances where each arm of a rack is used only to support goods of identical size and appearance, it has not been considered suitable where even minor differences might be found between the goods suspended from the same arm or support rod.

SUMMARY

An important aspect of this invention lies in the discovery that the aforementioned problems may be easily and inexpensively solved by utilizing a strip of cardboard or other flexible material to lock the hook portions of a plurality of hangers against unintentional release from the support rod of a display rack. When unlocking of the hangers is desired, the strip is simply extracted by pulling it in a longitudinal direction, using a handle portion exposed for that purpose.

More specifically, the flexible strip extends through the spaces beneath the hook portions of all of the hangers carried by a single support rod. The upper longitudinal edge of the strip engages the undersides of the hook portions, and preferably engages the rod, while the lower longitudinal edge of the strip bears against the body portions of the hangers. Since the free end of each hook portion is spaced closer to the body portion of the hanger than the maximum vertical dimension of the space between the hook and body portions, the locking strip is anchored against lateral displacement and in turn prevents each of the hangers from becoming unhooked. Finally, after the pre-loaded rack has reached its destination and is fully set up for display of the goods, the retailer simply pulls the locking strips longitudinally from the rack and discards them, leaving the hangers (and the goods supported thereby) free for individual detachment from the rack.

Other objects and advantages will appear as the specification proceeds.

DRAWINGS

FIG. **1** is a perspective view illustrating a portion of a rack upon which a pair of hanger clips are mounted.

The locking strip for temporarily preventing detachment of the hangers is illustrated partially in broken lines in order to illustrate the relationship of the parts more clearly.

FIG. **2** is an enlarged elevational view of a hanger mounted upon the support rod of a rack with the locking strip fully in place.

FIG. **3** is an elevational view similar to FIG. **2** but showing the locking strip in the process of being inserted into place.

DESCRIPTION

In the embodiment illustrated in FIG. **1**, the numeral **10** generally designates the horizontal wire support arm or rod of a conventional display rack. Ordinarily the rod would be secured to a standard which in turn would be equipped with a base or with other means for supporting the rack upon a floor or table surface. Since such elements are conventional and well known, further description is believed unnecessary herein.

The horizontal rod **10** has an up-turned free end portion **11** for preventing hangers **12** from sliding off the end of the rod. In the illustration given, each hanger **12** takes the form of a plastic clip having a body portion **13** and a hook portion **14.** The body portion includes a pair of integrally formed depending jaws **13***a* which may be urged together for the purpose of holding an article **15** such as, for example, a cap or scarf, in the suspended condition illustrated. A latch member or snap fastener **16,** formed integrally with one of the jaws **13***a*, engages the other of the jaws to maintain the two jaws in clamping condition until member **16** is depressed and the spring jaws are permitted to expand.

Hook portion **14** is also formed integrally with one of the hinged jaws **13***a* and, in the illustration given, has an upstanding portion **14***a*, a transverse portion **14***b*, and a depending terminal portion **14***c*. Portion **14** therefore defines a hook for suspending the hanger, and the article **15** clamped thereby, from the horizontal support rod **10.** It is to be understood that a plurality of such hangers are intended to be supported from rod **10.** Only two such hangers are shown for purposes of illustration; however, a greater number would ordinarily be used in conjunction with any given support rod **10.**

A characteristic of the hanger **12** is that body portion **13** is provided with an upwardly facing recess **17** directly beneath the arch of hook portion **14.** It is to be understood that the hanger **12** shown in the drawings is of conventional construction and might be varied considerably depending on the nature of the articles to be supported. It is, however, particularly desirable that the body portion of the hanger be provided with the recess **17** illustrated, for reasons which will become apparent as the specification proceeds. Since the hanger as shown is already known in the art and is only included in this invention as a combining element, further description is believed unnecessary herein.

The locking strip is designated generally by the numeral **18** and may be formed from any suitable flexible and resilient material such as cardboard or flexible plastics. Polypropylene or polyethylene have been found effective, but other plastics having similar properties might also be used. It will be observed that the strip is provided with an elongated intermediate portion **18***a*, a front portion or handle **18***b* and a rear portion **18***c*. The front and rear portions **18***b* and **18***c* are

turned at substantially right angles to the straight elongated intermediate portion **18***a* and inhibit longitudinal sliding movement of the strip. The rear portion **18***c*, in particular, restrains unintentional extraction of the strip by providing limited resistance to outward sliding movement.

The strip extends along rod **10** and is at least as long as the rod, especially if foldable end portions **18***b* and **18***c* are included. The upper and lower longitudinal edges of intermediate portion **18**a are straight and parallel. The vertical dimensions of the strip's intermediate portion **18**a substantially exceed distance D between the lower free end of hook portion **14** and the body portion **13** of the hanger directly therebelow, as illustrated most clearly in FIG. **2.** However, the vertical dimensions of the strip **18** are less than the maximum vertical dimension of the space **19** defined between the hook and body portions of the hanger.

Since the strip **18** is formed of flexible material, it is capable of being deformed as shown in FIG. **3** when a lateral force represented by arrow **20** is exerted against it. To insert the strip the end portions **18***b* and **18***c* are first preferably brought into longitudinal alignment with intermediate portion **18**a and the lower edge portion of the strip is slipped into the recesses **17** of a plurality of hangers supported in parallel relation upon rod **10.** The upper portion of the strip is then pushed inwardly in the direction represented by arrow **20,** causing the deformation of the strip represented somewhat schematically in FIG. **3.** Depending on the flexibility of the material from which the hanger **12** is formed, such deformation of the strip may be accompanied by limited upward flexing of hook portion **14** (FIG. **3**). After the upper edge of the strip is disposed within the arch of hook portion **14,** it snaps into the position illustrated in FIG. **2** and effectively restrains the hanger from being lifted free from the support rod **10.** As indicated in FIG. **2,** the upper edge portion of strip **18** is preferably wedged between the depending leg **14***c* of the hook so that the compressive forces exerted upon the strip, indicated by the cross sectional deformation shown in FIG. **2,** tend to urge the hanger downwardly and maintain it securely upon support rod **10.**

Removal of the strip is achieved simply by gripping the handle or front portion **18***b* between the fingers and pulling the strip longitudinally along rod **10.** The handle portion **18***b* is preferably provided with suitable indicia **21,** such as the legend "PULL TO REMOVE", shown in FIG. **1.** After the strip has been longitudinally extracted, each of the hangers **12** is free to be lifted from rod **10.**

It is believed apparent from the foregoing that the cooperative relationship between strip **18,** hangers **12,** and rod **10** permits a rack to be pre-loaded with hanger-equipped articles well in advance of ultimate use and that because of such cooperation the hangers will be locked in place upon their support rods during shipment and until such time as the locking strips **18** are removed. Since such strips are formed of paper, cardboard, or some other inexpensive material, they may be discarded by the retailer or user after they have been manually removed in the manner described.

While in the foregoing I have disclosed an embodiment of the invention in considerable detail for purposes of illustration, it will be understood by those skilled in the art that many of these details may be varied without departing from the spirit and scope of the invention.

I claim:

1. In combination with a horizontal support rod and a plurality of article-supporting hangers suspended in parallel therefrom, each of said hangers having a hook portion hooked over said rod and having a body portion directly therebelow defining a space therebetween, said hook portion having a free end disposed above said body portion a vertical distance less than the maximum vertical dimension of said space, wherein the improvement comprises an elongated locking strip of flexible material extending through the spaces beneath the hook portions of all of said hangers, said strip having an upper longitudinal edge engaging the underside of said hook portion and a lower longitudinal edge engaging said body portion of said hanger, whereby, said strip restrains each of said hangers from being unhooked from said support rod, said strip slidably engaging said hook and body portions and being removable by longitudinally sliding said strip out from beneath the hook portion of all of said hangers, the distance between the upper and lower longitudinal edges of said strip exceeding the vertical distance between the free end of said hook portion and said body portion, said body portion of said hanger being provided with an upwardly facing recess, and said lower longitudinal edge of said strip being received within said recess and being restrained thereby against lateral movement.

2. The structure of claim **1** in which said strip is capable of being flexed when viewed in vertical section to reduce the distance between the upper and lower edges thereof and thereby permit said strip to be inserted laterally into the spaces beneath the hook portions of the respective hangers.

3. The structure of claim **2** in which the upper and lower edges of said strip are parallel.

4. The structure of claim **2** in which said flexible strip is formed of cardboard.

5. The structure of claim **2** in which said flexible strip is formed of resilient plastic.

6. The structure of claim **2** in which said strip is at least as long as said rod.

7. The structure of claim **6** in which said strip is provided with a handle portion at one end thereof for the manual gripping of said strip for slidably extracting the same from said hangers.

8. The structure of claim **7** in which said handle portion comprises an end portion of said strip bent at a generally right angle with respect to the remainder of said strip.

9. The structure of claim **8** in which said strip has its opposite end portion bent at generally right angles to inhibit unintentional longitudinal sliding movement and removal of said strip.

10. In combination with a horizontal support rod and a plurality of article-supporting hangers suspended in parallel therefrom, each of said hangers having an arched hook portion extending over said rod and having a body portion spaced directly therebelow, said hook portion having a free end disposed above said body portion a vertical distance less than the maximum vertical dimension of the space beneath the arch of said hook, wherein the improvement comprises an elongated locking strip of flexible material extending through the spaces beneath the hook portions of all of said hangers, said strip having an upper longitudinal

edge engaging said hook portion and bearing against a lower surface portion of said rod facing generally in the direction of the free end of said hook, said strip also having a lower longitudinal edge engaging said body portion of said hanger, whereby, said strip is interposed between said rod and the body of each hanger and restrains said hangers from being lifted and unhooked from said support rod, said strip slidably engaging said hook and body portions and being removable by longitudinally sliding said strip out from beneath the hook portions of all of said hangers, said body portion of each of said hangers being provided with an upwardly facing recess, said lower longitudinal edge of said strip being received within said recess and being restrained thereby against lateral movement.

11. The structure of claim **10** in which the surfaces engaged by the upper and lower edges of said strip are spaced closer together than the width of said strip, whereby, said strip is normally in a state of transverse deformation when its upper edge engages said rod and its lower edge engages the body portions of said hangers.

12. The structure of claim **11** in which the distance between the upper and lower longitudinal edges of said strip exceed the vertical distance between the free end of said hook portion and said body portion.

13. The structure of claim **10** in which the upper and lower edges of said strip are parallel.

14. The structure of claim **10** in which said strip is provided with a handle portion at one end thereof for the manual gripping of said strip for slidably extracting the same from said hangers.

15. The structure of claim **14** in which said handle portion comprises an integral terminal portion of said strip bent at a generally right angle relative to the remainder of said strip.

16. The structure of claim **10** which comprises integral terminal portions of said strip bent at right angles relative to the remainder of said strip.

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