



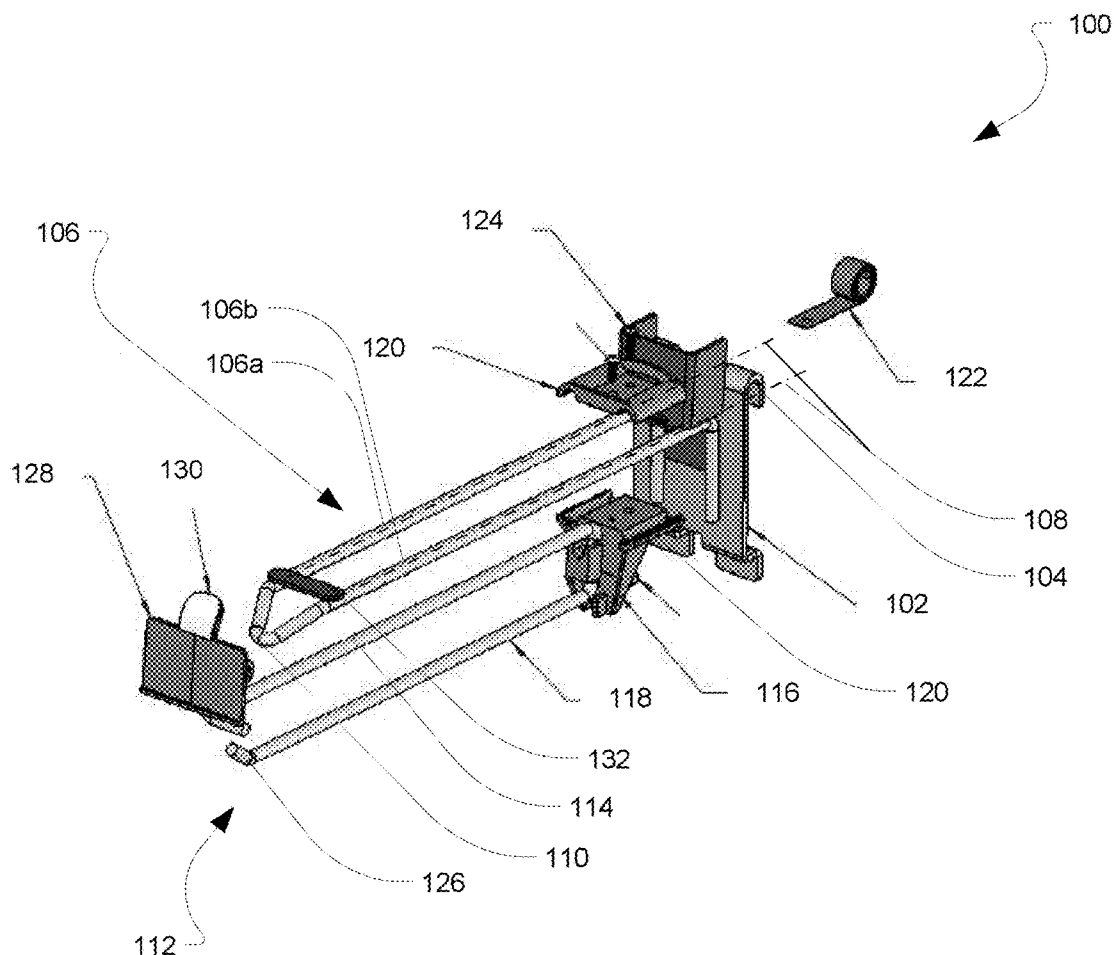
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(19) **United States**(12) **Patent Application Publication**
Wirengard et al.(10) **Pub. No.: US 2016/0367049 A1**(43) **Pub. Date: Dec. 22, 2016**(54) **EXTENDABLE DISPLAY HANGER****Publication Classification**(71) Applicant: **COLGATE-PALMOLIVE COMPANY**, New York, NY (US)(51) **Int. Cl.**
A47F 5/08 (2006.01)(72) Inventors: **Peter Wirengard**, Scarsdale, NY (US);
Donald Whetstone, New Lisbon, WI (US)(52) **U.S. Cl.**
CPC **A47F 5/0853** (2013.01); **A47F 5/0838** (2013.01); **A47F 5/0869** (2013.01)(21) Appl. No.: **15/073,911**(22) Filed: **Mar. 18, 2016****Related U.S. Application Data**

(60) Provisional application No. 62/182,976, filed on Jun. 22, 2015.

(57) **ABSTRACT**

In some embodiments, a display hanger includes a post, a product support moveable relative to the post between a retracted position and an extended position, and a biasing member biasing the product support to the retracted position. A shopper may manually move the product support to the extended position to visually inspect products hanging on the product support.



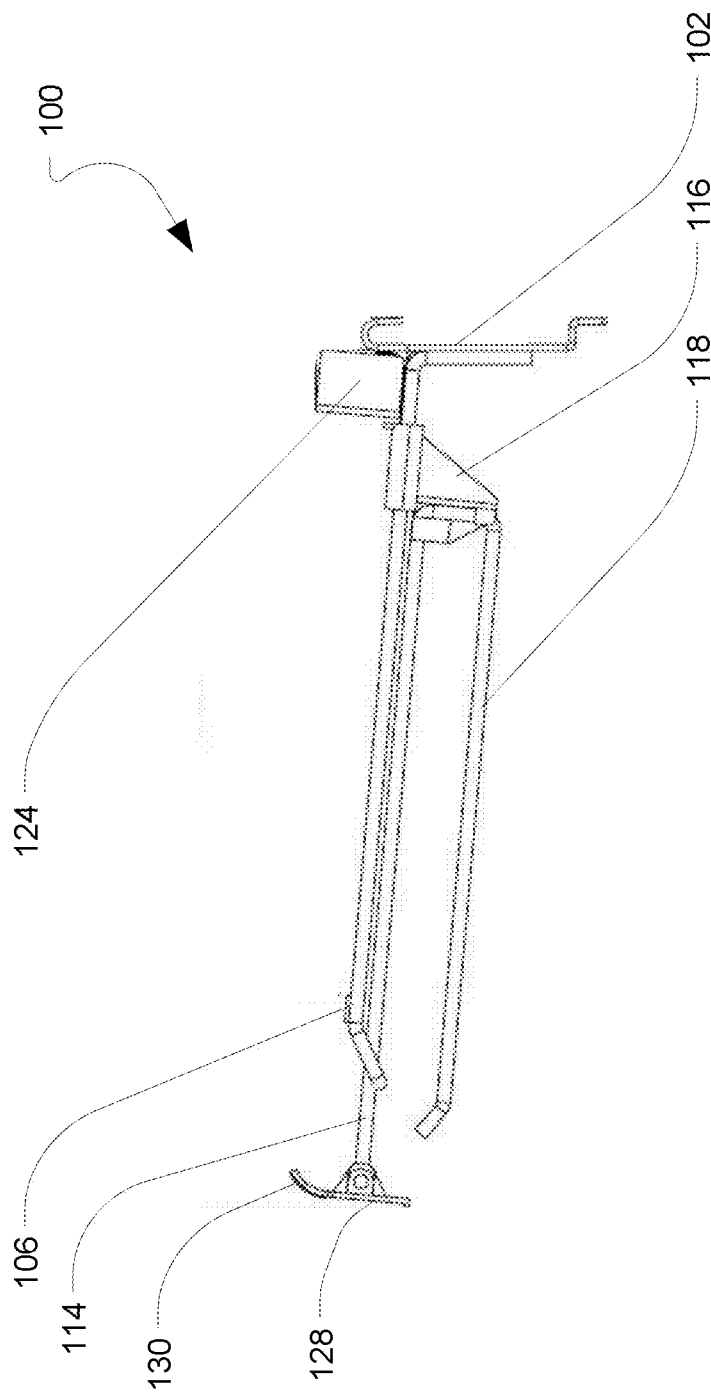


FIG. 1B

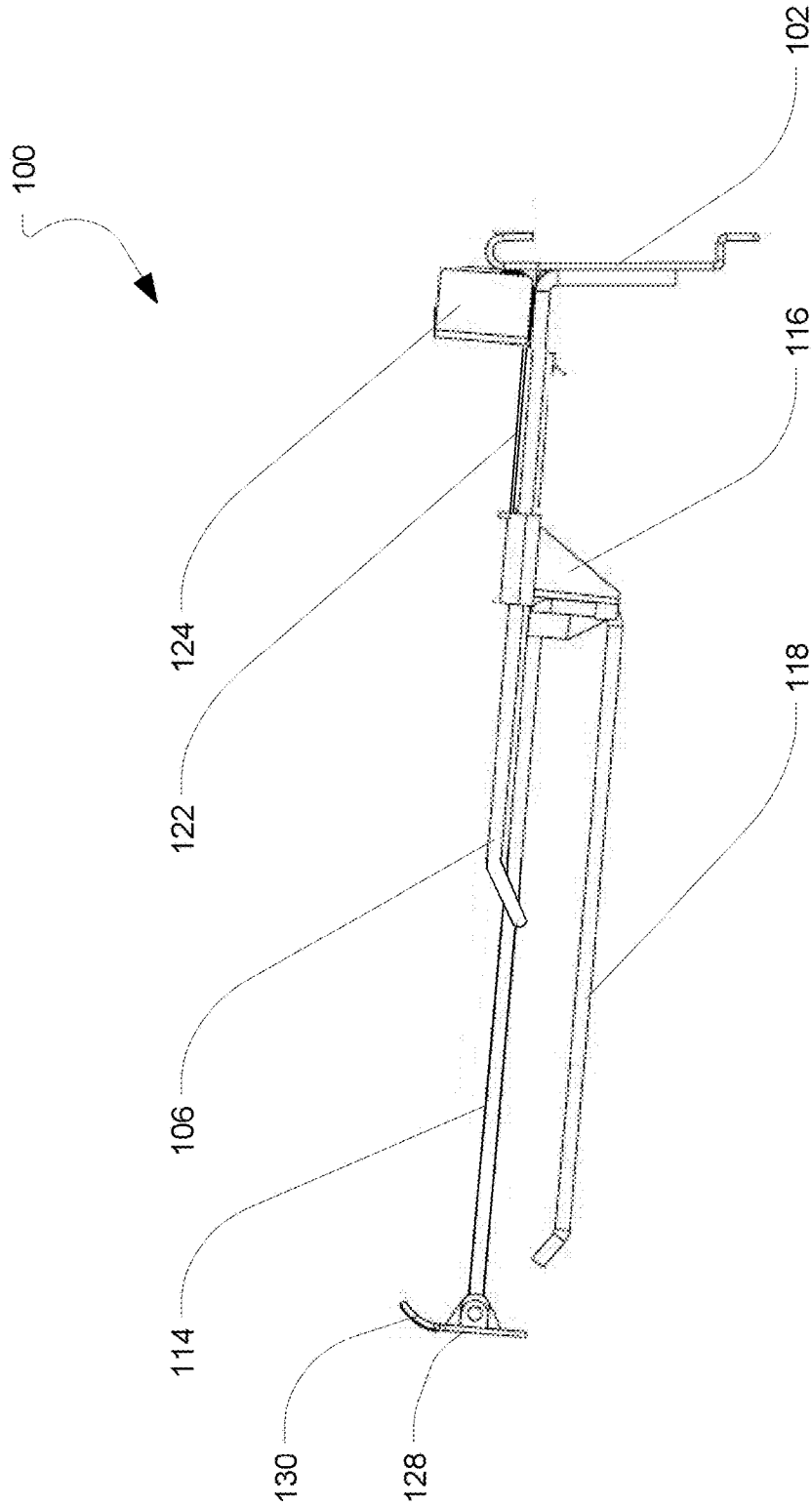


FIG. 1C

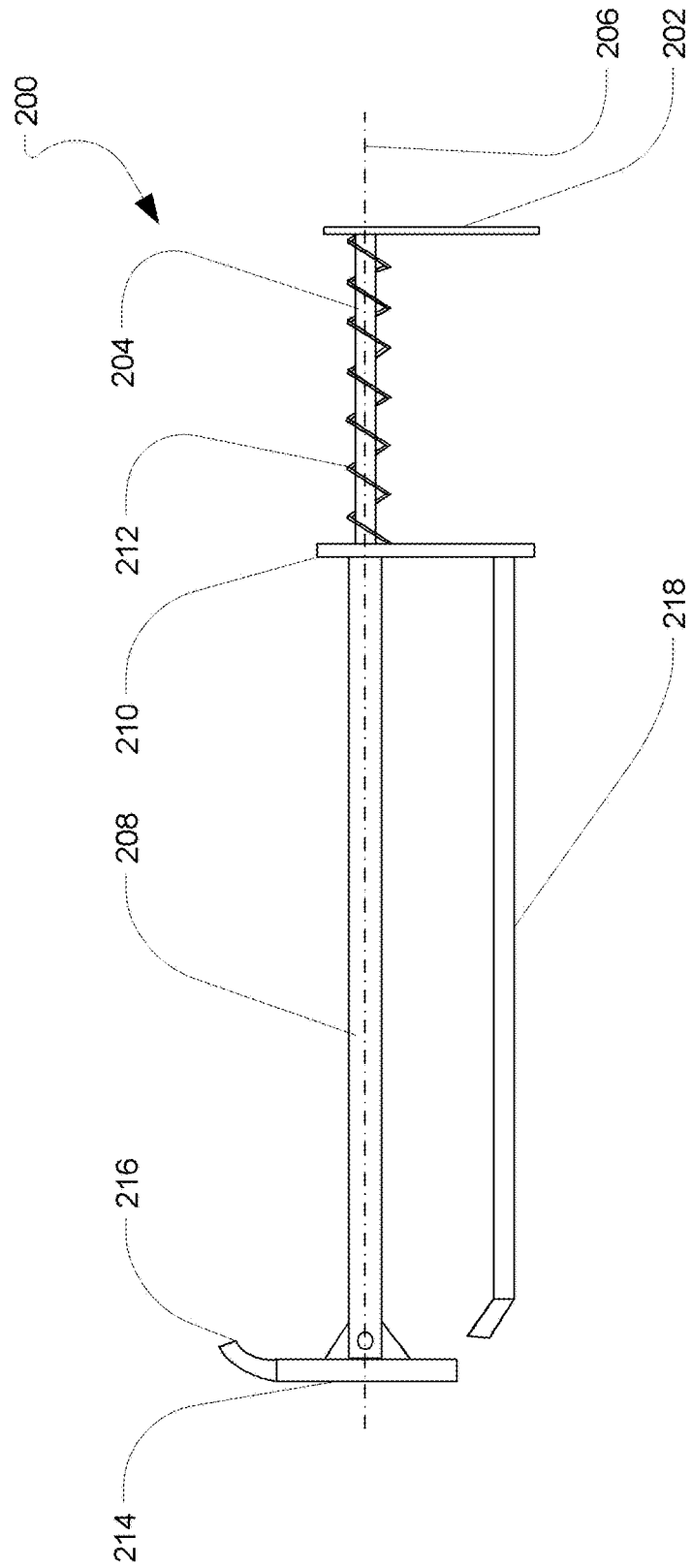


FIG. 2A

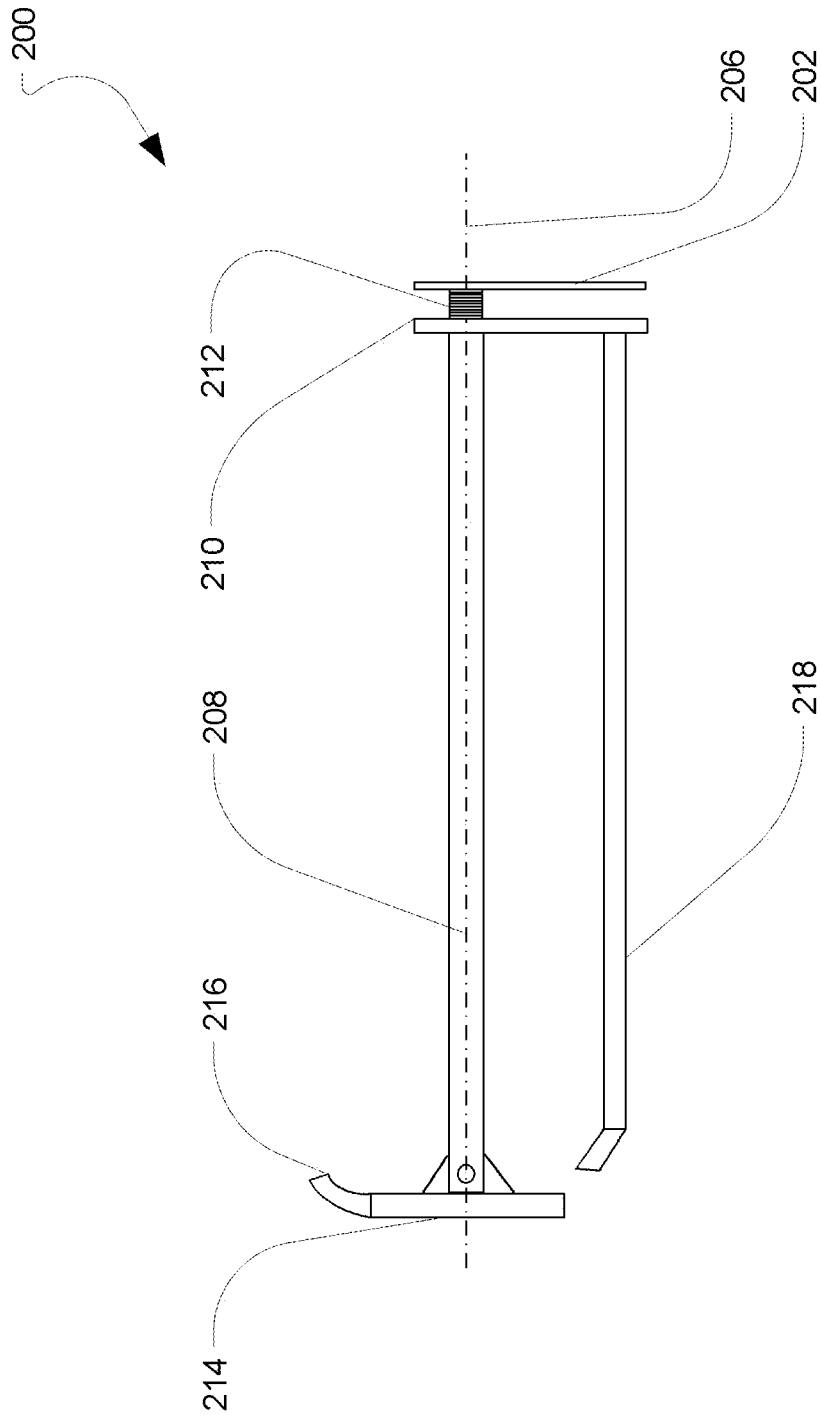


FIG. 2B

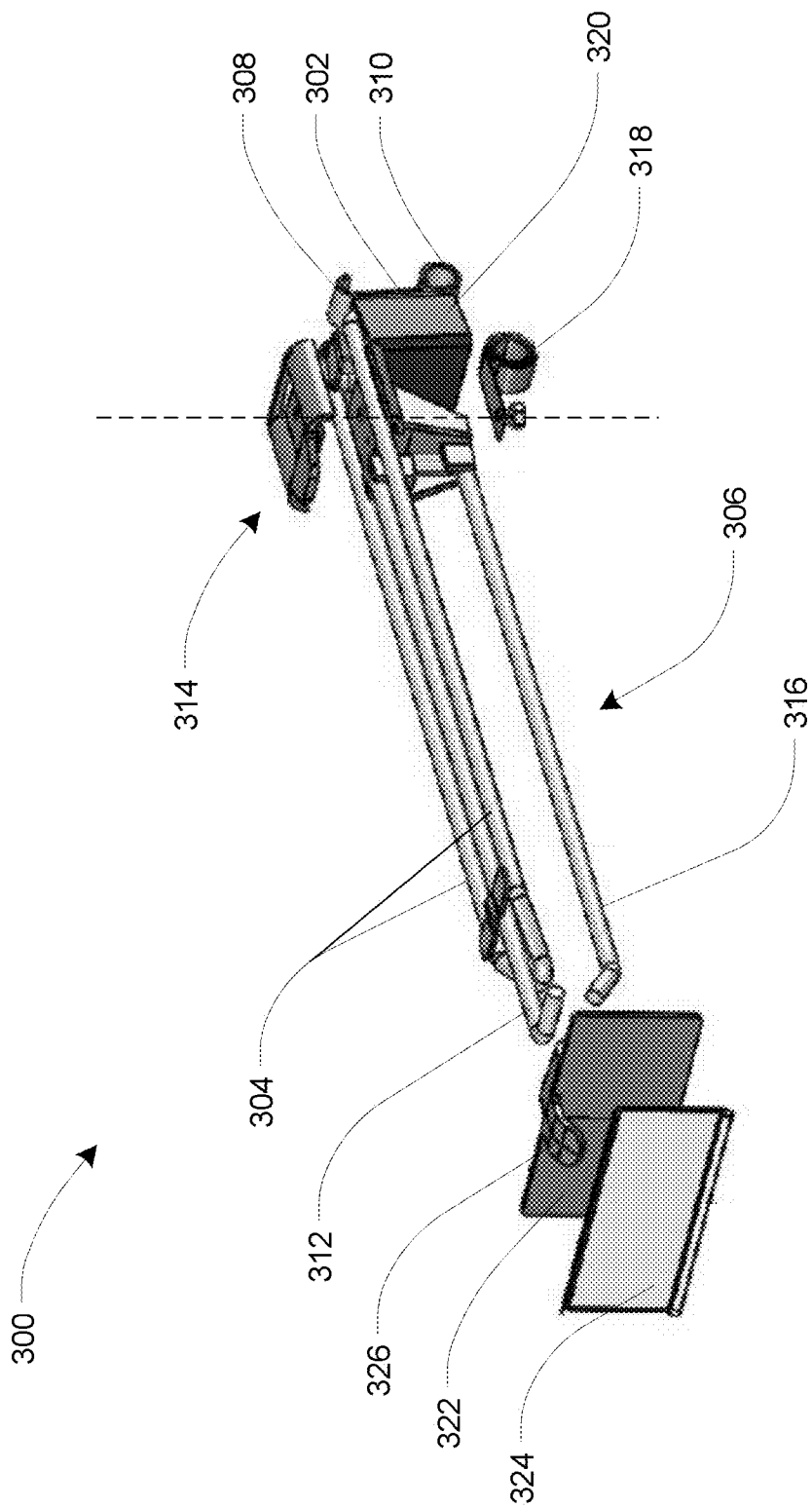


FIG. 3

EXTENDABLE DISPLAY HANGER

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims priority to U.S. Provisional Patent Application Ser. No. 62/182,976, filed Jun. 22, 2015, the entirety of which is incorporated herein by reference.

BACKGROUND

[0002] Conventional arrangements for displaying products for retail sale include hangers or peg hooks upon which products are hung. Such peg hooks often include a horizontal or slightly inclined bar protruding from a wall or other display surface. The product is hung on the bar, e.g., via a hole or other feature included in the product packaging, such that the forward most product is visible to a shopper and other products on the hook are aligned behind the visible product.

[0003] At many retail establishments, space is at a premium. While the peg hook allows for hanging more product, i.e., because it provides depth to the display area, it still may be necessary to hang non-identical products on the same hook. Specific items that come in a variety of colors or that feature different designs, for example, may be hung on the same hook. Accordingly, a shopper desiring to purchase a certain model toothbrush in pink, may have to inspect toothbrushes arranged behind a forward-most blue or green toothbrush until she locates her pink toothbrush. In some instances the shopper can visually inspect the row of toothbrushes by swinging the forward-most products from vertical (and sometimes similarly displacing product on adjacent hooks), but often, a user will remove toothbrushes until she finds the desired pink toothbrush. The toothbrushes the shopper removed and does not want are frequently incorrectly restocked by that shopper, e.g., because she puts them on a different peg hook or she places them backward on the peg hook. In other instances, the shopper merely leaves the unwanted product on any nearby surface without attempting to re-stock them. Each of these scenarios leads to an unsightly display area, which requires store employees to be mindful of the displays at all times, and to spend time re-stocking the toothbrushes correctly.

[0004] Thus, there is a need in the art for a display hanger that allows a user to visually inspect product hanging on a peg hook or the like without removing product from the peg hook.

[0005] This disclosure is directed at overcoming one or more problems set forth above and/or other problems of the prior art.

BRIEF SUMMARY

[0006] This application describes improved hangers for displaying products. In some embodiments, a display hanger may include a telescoping mechanism that allows a shopper to pull a peg hook from a retracted display position to an extended position. In the extended position, the shopper may view the contents of the peg hook, without removing the contents from the peg hook. In implementations, the peg hook is biased to return to the retracted display position when the shopper lets go or otherwise releases the peg hook.

[0007] In aspects of this disclosure, a display hanger includes a post extending in an axial direction from a base to a distal end; a product support arm configured to move

generally in the axial direction relative to the post between a retracted display position proximate the base of the post, and an extended position relatively farther from the base; and a biasing member biasing the product support arm toward the display position.

[0008] In another aspect, the display hanger of the preceding paragraph further includes a sled configured to move on the post and the product support is fixed on the sled.

[0009] In another aspect, in the display hanger of any of the preceding paragraphs the sled comprises at least one sleeve receiving the post therein.

[0010] In another aspect, the display hanger of any of the preceding paragraphs further includes a post extender fixed relative to the product support and movable in the axial direction relative to the post.

[0011] In another aspect, in the display hanger of any of the preceding paragraphs the post extender comprises a sleeve sized to receive the post.

[0012] In another aspect, in the display hanger of any of the preceding paragraphs the post defines a sleeve and the post extender is sized to be received in the sleeve.

[0013] In another aspect, in the display hanger of any of the preceding paragraphs the post extender includes a plate at a distal end.

[0014] In another aspect, the display hanger of any of the preceding paragraphs further includes a pull disposed at a distal end of the post extender.

[0015] In another aspect, in the display hanger of any of the preceding paragraphs the product support comprises an upturned distal end.

[0016] In another aspect, in the display hanger of any of the preceding paragraphs the base comprises a pair of spaced apart members joining at a distal end.

[0017] In another aspect, the display hanger of any of the preceding paragraphs further includes a pull disposed at a distal end of the product support.

[0018] In another aspect, in the display hanger of any of the preceding paragraphs the biasing member comprises a retractable spring.

[0019] In another aspect, the display hanger of any of the preceding paragraphs further includes a base from which the post depends.

[0020] In another aspect, in the display hanger of any of the preceding paragraphs the base comprises a fixed portion, fixed to the post, and an adapter configured to releasably receive the fixed portion.

[0021] In another aspect, the display hanger of any of the preceding paragraphs further includes a retention mechanism for retaining the product support arm in the extended position.

[0022] In other aspects of this disclosure, a display hanger includes a base; a post extending from the base in an axial direction; an elongate sleeve receiving the post and movable relative to the post in the axial direction between a display position proximate the base and an extended position spaced from the display position, relatively farther from the base; a product support arm fixed relative to the elongate sleeve and configured to support a plurality of similarly packaged products; and a biasing member biasing the elongate sleeve toward the display position.

[0023] In another aspect, the display hanger of the preceding paragraph further includes a plate disposed at a distal end of the elongate sleeve.

[0024] In another aspect, the display hanger of any of the preceding paragraphs further includes a label disposed on the plate, the label comprising at least one of a UPC code, a product identification, an advertisement, and a price.

[0025] In another aspect, in the display hanger of any of the preceding paragraphs the product support comprises an upturned distal end.

[0026] In another aspect, in the display hanger of any of the preceding paragraphs the product support is disposed vertically below the elongate sleeve.

[0027] In another aspect, the display hanger of any of the preceding paragraphs further includes a grip disposed at a distal end of the elongate sleeve or the product support

[0028] In another aspect, in the display hanger of any of the preceding paragraphs the biasing member comprises a retractable spring.

[0029] In another aspect, in the display hanger of any of the preceding paragraphs the base comprises a fixed portion, fixed to the post, and an adapter configured to releaseably receive the fixed portion.

[0030] Further areas of applicability of the present disclosure will become apparent from the detailed description provided hereinafter. It should be understood that the detailed description and specific examples, while indicating the preferred embodiment of the invention, are intended for purposes of illustration only and are not intended to limit the scope of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0031] The present invention will become more fully understood from the detailed description and the accompanying drawings, wherein:

[0032] FIG. 1A is a perspective exploded view of an extendable hanger device, in a retracted position, according to an example implementation of this disclosure;

[0033] FIG. 1B is a side view of the hanger device illustrated in FIG. 1A, in a retracted position;

[0034] FIG. 1C is a side view of the hanger device illustrated in FIG. 1A, in an extended position;

[0035] FIG. 2A is a side view of an extendable hanger device, in an extended position, according to another example implementation of this disclosure;

[0036] FIG. 2B is a side view of the extendable hanger device illustrated in FIG. 2A, in a retracted position;

[0037] FIG. 3 is partially-exploded perspective view of an extendable hanger device according to additional implementations of this disclosure;

[0038] FIG. 4A is a partially-exploded perspective view of an extendable hanger device according to other implementations of this disclosure; and

[0039] FIG. 4B is an exploded, perspective view of features of the extendable hanger device illustrated in FIG. 4A.

DETAILED DESCRIPTION

[0040] The following description of the preferred embodiments is merely exemplary in nature and is in no way intended to limit the disclosure, its application, or uses.

[0041] As used throughout, ranges are used as shorthand for describing each and every value that is within the range. Any value within the range can be selected as the terminus of the range. In addition, all references cited herein are hereby incorporated by referenced in their entireties. In the

event of a conflict in a definition in the present disclosure and that of a cited reference, the present disclosure controls.

[0042] This disclosure relates generally to displaying merchandise, and more particularly to retail merchandise displays in which products are hung from peg hooks or the like. Although certain embodiments and benefits will be described, other implementations, modifications, and/or benefits will be appreciated those having ordinary skill in the art, with the benefit of this disclosure.

[0043] FIGS. 1A-1C illustrate a display hanger 100 according to an embodiment of this disclosure. The display hanger 100 includes a base 102. The base 102 is illustrated as being a substantially rectangular plate, although it may take other shapes. A hook 104 is disposed to extend from the base 102, such as by forming a bent section of the base 102. The hook 104 is provided as a mount that promotes attachment of the device 100 to a display or wall (not shown). Depending upon the display type, the mount may include features additional to or instead of the hook 104. For example, the mount may be one or more pegs sized to be received in a pegboard, as is conventionally known. Other mounts may also be known or appreciated by those having ordinary skill in the art. As noted above, the mount is generally included to promote attachment of the base 102 to a display, such as a substantially vertical surface. The mount may be integral with the base, connected to the base, or some combination of integrated and combined. In still other embodiments, the mount may not be necessary, as the base 102 may be directly fixed or otherwise retained on a surface, such as a wall. In some embodiments, the base 102 may be screwed, nailed, adhered, or otherwise retained on the display surface.

[0044] As also illustrated in FIG. 1A, a post 106 extends from a front surface or face of the base 102. The post 106 is illustrated as a pair of parallel, spaced-apart cylindrical or wire members 106a, 106b extending generally along parallel axes 108. The axes 108 define an axial direction. Proximate a distal end of the post 106, the members 106a, 106b are angled or otherwise bend such that the members 106a, 106b meet at a junction 110. The junction 110 forms the distal end of the post 106. As illustrated, the junction 110 may be formed below the axis of the members 106a, 106b which will be described in more detail below. The junction is illustrated as forming a v-shape, although the junction 110 could more closely resemble a u-shape or some other shape. As illustrated, the post 106 extends from the base 102 such that the axes 108 are slightly inclined relative to horizontal when the base is retained on a vertical surface. In other embodiments, the axes 108 may be horizontal, or they may be at some angle relative to horizontal other than illustrated. The post 106 may be formed from any rigid material, including, but not limited to, metal, plastics, or the like. In some implementations, the post is formed by bending a slender cylindrical metal rod.

[0045] An extender 112 is disposed to move relative to the post 106. In FIGS. 1A-1C, the extender 112 generally includes a post extender 114, a sled 116, and a product support arm 118. The extender 112 acts with the post 106 to create a telescoping member.

[0046] The post extender 114 is generally an elongate member fixed to and extending from the sled 116. The sled 116 is disposed to move on the post 106 from a retracted position, illustrated in FIG. 1B to an extended position illustrated in FIG. 1C. The sled 116 includes parallel sleeves

120, sized to receive the members **106a**, **106b** with some clearance between the sleeves and the members. Thus, the sled is configured move along the members **106a**, **106b**. The sled **116** may also provide a connection point or location to which a distal end of a biasing member **122** is attached. An opposite end of the biasing member **122** preferably is fixed relative to the base **102**. The biasing member **122** biases the sled **116** toward the base **102**. As will be appreciated, because the post extender **114** is fixed relative to the sled **116**, the post extender **114** also is biased toward the base **102**. Accordingly, the device **100** is biased to the retracted position illustrated in FIG. 1B.

[0047] The biasing member may be any conventional device that biases the extender **112** toward the base **102**. A flat retractable spring is schematically illustrated in FIG. 1 as the biasing member **122** and it may be contained in a housing or pocket **124** that prevents detachment of the biasing member **122** from the base **102** and/or constrains movement of the biasing member to the axial direction. Other types of springs, such as helical springs, as well as elastic members, or the like may be used as the biasing member **122**.

[0048] As illustrated, the post extender **114** and the product support arm **118** extend from the sled **116** generally in the axial direction, with the post extender **114** being spatially above the product support arm **118**. Although not required, in the illustrated embodiment, the post extender is contained within the v-shaped junction **110** of the post **106**. This arrangement may promote alignment of the extender **112** with the post **106** as well as provide support for the product support arm **118** in the extended position.

[0049] As illustrated, the product support arm **118** is fixed relative to the post extender **114**. In FIGS. 1A-1C the product support arm **118** is illustrated as fixed to the sled **116**, although it may alternatively be fixed to the post extender **114**. Because the product support arm **118** is fixed relative to the post extender **114** and the sled **116**, the product support arm **118** moves with those components. The product support arm **118** illustrated generally includes a cylindrical post or rod, much like a conventional peg hook.

[0050] As illustrated, the product support arm **118** may also include an upturned distal end **126**. The upturned distal end **126** may prevent product hanging on the product support arm **118** from accidentally falling off the distal end of the product support arm **118**. The illustrated product support arm **118** is shown as angled relative to horizontal, although such is not required. In other embodiments, the product support arm **120** may be substantially horizontal, or even angled relatively below horizontal. Moreover, the product support arm may be angled relative to the post extender **114**. For example, the product support arm **120** may be substantially horizontal, whereas the post extender **114** is configured as illustrated in the figures.

[0051] FIGS. 1A-1C also illustrate a display plate **128** disposed at a distal end of the post extender **114**. The plate **128** may be a conventional display mechanism, upon which a UPC code, a price tag, a product description, an advertisement, or the like, may be placed. The plate **128** is wider than the distal end of the post extender **112**. Accordingly, the plate **128** may provide a convenient grip for a consumer, allowing her to extend the post extender **114** and the product support arm **118** from the retracted position. More specifically, a consumer may grasp the sides and/or back of the plate **128** and, by pulling the plate **128** toward them against

the force of the biasing member **122**, extend the post extender **114** and the product support arm **118** from the retracted position. As will be appreciated, upon releasing the plate **128**, the post extender **114** and the product support arm **118** will automatically return to the retracted position, i.e., under the action of the biasing member **122**.

[0052] Although a shopper may use the plate **128** as a means for extending the device **100**, a pull **130** also is illustrated in FIGS. 1A-1C. The illustrated pull **130** generally comprises a tab depending from the plate **128**. The pull **130** may be sized to allow a consumer to place one or more fingers behind the pull **130**. Alternatively, the consumer may grip the pull **130** between two fingers. This disclosure is not limited to the illustrated pull **130**. In fact, FIG. 3, described below, illustrates another example pull. Those having ordinary skill in the art, with the benefit of this disclosure, will appreciate alternative pulls or gripping features. Without limitation, the pull **130** may be replaced by or incorporate a ring, a knob, a handle, an aperture through the plate **124**, a flange, or the like. In use, a consumer may grip the pull **130** or similar feature and pull the post extender from the non-extended position to an extended position. As noted above, the shopper may also or alternatively use the plate **128** as the pull.

[0053] The device **100** normally remains in the retracted position. The biasing member **122** maintains the sled **116**, post extender **114**, product support arm **118**, and features disposed thereon, proximate the base **102**, so the post extender **114** is not telescoped relative to the post **106**. In some implementations, this non-extended position is a display position. In this display position, the device **100** has an affect very similar to that of a conventional display hook. For instance, a plurality of products may be retained on the product support arm **120** as in conventional peg hook applications. Unlike conventional applications, however, the user may extend the product support arm **118** from this display position to an extended position in which product retained on the product support arm is distanced from the base **102**. An implementation in which a plurality of devices **100** are arranged on a vertical surface, extending the device **100** will pull the product retained on the product support arm **118** in front of product retained on other, adjacent devices **100**. In this manner, a user may more easily visually inspect the product retained on the product support arm **120**, without the need to physically touch or remove any product.

[0054] When the consumer has finished visually inspecting the product on the product support arm **118**, she may release the device **100**. The biasing member **122** will then return the product to the retracted, display position.

[0055] The device **100** may include additional features. For example, it may be desirable to ensure that the post extender **112** cannot be easily removed from the post **106**. In some embodiments, the biasing member **118** may be sufficiently strong (or of a limited length) that a consumer would be unable to remove the extender **112** absent a significant force.

[0056] In addition or alternatively, the post **106** and/or the extender **112** may include one or more features that inhibit separation. For example, FIGS. 1A-1C include a stop **132** extending between the members **106a**, **106b** of the post. When the extender **112** is pulled to the extended position, the sled **116** contacts the stop **132** to prohibit further extension. Alternate mechanisms for preventing separation of the post extender **112** from the post **106** will be within the knowledge

and skill in the art, with the benefit of this disclosure. For example, a diameter of one or both of the post members **106a**, **106b** may be increased, such as by a cuff, flange, or taper, for example, to interfere with continued movement of the sleeves **120** along the members **106a**, **106b**.

[0057] Modifications to the device **100** also are contemplated. For example, FIG. 2 shows an alternative telescoping hanger device **200**. Similar to the device **100**, the device **200** includes a base **202** and a post **204** extending from the base **202** along an axis **206**. In this embodiment, however, the post **106** includes a single cylindrical member. That is, the post **204** is a generally elongate finger that extends along the axis **206** from a proximal or base end (connected to the base **202**) to a distal end (not visible in the figures). Although not illustrated, the base **202** may also include a mount, like the hook **104** discussed above.

[0058] The device **200** also includes a post extender **208** movable relative to the post **204**, generally along the axis **206**. However, instead of a sled or similar member, the post extender **208** defines a sleeve which is an elongate opening therein, sized to receive the post **204**. In FIG. 2A, the post extender **208** is shown as extended relative to the post **204**. In this extended position, much of the post **106** is exposed. In contrast, in FIG. 2B, the post extender is in a retracted position, such that a majority (or all) of the post **204** is disposed in the sleeve post extender **208**. Although in the device **200** the post extender **208** includes the sleeve and the post extender **208** slides over the post **204**, in other embodiments, the post **204** may comprise a sleeve and the post extender **208** may be extended from and retracted to a position within the sleeve. In these implementations, the post extender **208** and the post **204** act as a telescopic post.

[0059] The post **204** and sleeve arrangement is one example implementation that allows for relative movement of the post **204** and the post extender **208**. In other implementations, the sleeve may not be included. For instance, one of the post or the extender may include a track or similar feature in which the other of the post and the post extender is retained and slides. In still other embodiments, the post extender may otherwise be disposed to move relative to the post.

[0060] The device **200** may also include a flange **210** at a proximate end of the post extender **208**. Although the flange **210** is illustrated as a rectangular plate, the flange may take other forms, shapes and sizes. In some embodiments, the flange **210** may contact the base **202** when the post extender **208** is in the retracted position. The flange **210** may also provide a connection point or location to which a distal end of a biasing member **212** is attached. An opposite end of the biasing member **212** preferably is fixed relative to the base **202**. The biasing member **212** biases the post extender **208** toward the base **202**. As will be appreciated, because the post extender **208** is fixed relative to the flange **210**, the post extender **208** also is biased toward the base **202**. Accordingly, as with the device **100**, the device **200** is biased to the retracted position.

[0061] The biasing member may be any conventional device that biases the post extender **208** toward the base **202**. A retractable helical spring is schematically illustrated in FIGS. 2A and 2B as the biasing member **212**. Other types of springs, such as flat springs, as well as elastic members, or the like, may be used as the biasing member **122**.

[0062] The post **204** and/or the extender **208** may include one or more features that inhibit separation. In some imple-

mentations, the biasing member **212** may be sufficiently rigid that a force in excess of what a shopper would generally apply would be required to remove the extender **208**. Alternatively, or additionally, the post **204** and the post extender **208** may be keyed relative to each other. In one example, the post **204** may include a channel on its outer surface and the post extender **208** includes a protrusion on a surface of the sleeve formed therein that slides in the channel. The channel may be formed along less than the entire length of the post **204**, such that the end of the channel acts as a hard stop for the protrusion. Keying the post **204** and the post extender **208** may have the further benefit of maintaining a consistent rotational alignment between the post **204** and the post extender **208**. In other embodiments, in which the post slides in a sleeve, separation may be inhibited by tapering an external surface of the post **204** and/or an internal surface of the sleeve. In these embodiments, the outer surface of the post **204** and the inner surface of the sleeve contact with extension of the post extender **208** relative to the post **204**, and, after a predetermined extension, interfere to prohibit further extension. Alternate mechanisms for preventing separation of the post extender **208** from the post **204** will be within the knowledge and skill in the art, with the benefit of this disclosure.

[0063] As in the device **100**, the device **200** also includes a plate **214** at a distal end of the post extender **208**, and a pull **216** on the plate **214**. The plate **214** and the pull **216** may take the forms and/or include the modifications described above with respect to the plate **128** and the pull **130**, and are therefore not discussed further herein.

[0064] The device **200** also includes a product support arm **218**. The product support arm **214** is substantially the same as the product support arm **118** described above, and may be modified as described above.

[0065] The device **200** normally remains in the retracted position. The biasing member **212** maintains the post extender **208**, the product support arm **218**, and features associated therewith proximate the base **202**, so the post extender **208** is not telescoped relative to the post **204**. In some implementations, this non-extended position is a display position. In this display position, the device **200** has an affect very similar to that of a conventional display hook. For instance, a plurality of products may be retained on the product support arm **218** as in conventional peg hook applications. Unlike conventional applications, however, the shopper may extend the product support arm **218** from this display position to an extended position in which product retained on the product support arm is distanced from the base **202**. An implementation in which a plurality of devices **200** are arranged on a vertical surface, extending the device **200** will pull the product retained on the product support arm **218** in front of product retained on other, adjacent devices **200**. In this manner, a user may more easily visually inspect the product retained on the product support arm **218**, without the need to physically touch or remove any product.

[0066] When the consumer has finished visually inspecting the product on the product support arm **218**, she may release the device **200**. The biasing member **212** will then return the product to the retracted, display position.

[0067] Additional modifications to the illustrated embodiments and the embodiments and modifications described above also are contemplated. For example, although each of the devices **100**, **200** includes a post extender and a product support arm, in some embodiments, only the product support

arm may be provided. For instance, in the device 100, only the product support arm 118 may extend from the sled 116. The plate 128 may be provided on the distal end of the product support arm in this example, or on the post. When provided on the post, the user may instead grasp the distal end of the product support arm to extend the arm, as the post is not movable. A pull may be provided at the distal end of the support arm to assist in extending the arm. When the device 200 does not include a separate product support arm, the post extender 208 may function as the product support arm. The post extender may include an upturned end in this embodiment. A shopper may grasp the upturned end to exert a force on the post extender 208 to extend the device 200. Although not illustrated, a gripping feature, e.g., a finger grip, a knob, a hole, a ring, a pull, or the like may be provided proximate the distal end of the post extender 208. The gripping feature may be in addition to the upturned end 210 or as alternative to the upturned end 210.

[0068] FIG. 3A illustrates a partially-exploded view of another example embodiment of a display hanger 300. The display hanger has similarities to the device 100 illustrated in FIGS. 1A-1C. For instance, the hanger 300 includes a base 302, a post 304 extending from the base 302, and an extender 306 disposed to move relative to the base 302. As in the device 100, the base 302 is illustrated as being a substantially rectangular plate having a hook 308 disposed to extend from the base 302, such as by forming a bent section of the base 302. The hook 308 is provided as a mount that promotes attachment of the hanger 300 to a display or wall (not shown). The mount may also include features additional to or instead of the hook 308, such as a support 310 that supports and/or spaces the base 302 from a mounting surface. The base 302, hook 308 and spacer 310 may be provided as a means to attach the hanger 300 to a specific type of display. Those having ordinary skill in the art will appreciate that different types of displays may require different features on the base 302 to promote attachment of the hanger 300 thereto. This disclosure is not limited to any one type of display or attachment mechanism. For example, the hanger 300 could instead include one or more pegs sized to be received in a pegboard, as is conventionally known.

[0069] The extender 306 generally includes a post extender 312, a sled 314, and a product support arm 316. The hanger 300 also includes a biasing member 318 biasing the sled 314 relative to the base 302. The biasing member may be any conventional device that biases the extender 306 toward the base 302. A flat, retractable spring is illustrated in FIG. 3 as the biasing member. For clarity, the spring is shown detached from the sled. The spring may be contained in a housing 320 that prevents detachment of the biasing member 318 from the base 302 and/or constrains movement of the biasing member 318 to the axial direction. The housing 320 is illustrated as being disposed on the base 302, below the post 304 and sled 314. In this manner, unlike the embodiment illustrated in FIGS. 1A-1C, the biasing member 318 and the housing 320 do not protrude above the sled 314, for example.

[0070] FIG. 3 also shows a display plate 322 disposed at a distal end of the post extender 312. The plate 322 may be a conventional display mechanism, upon which a UPC code, a price tag, a product description, an advertisement, and/or the like may be placed. Data may be placed directly on the display plate 322, e.g., using an adhesive, a magnet, or the like, or, as illustrated, a data holder 324 may be attached to

the display plate 322. The data holder 324 may comprise a sleeve, pocket, channel, or other device capable of releasably retaining data, such as a UPC code, a price tag, a product description, an advertisement, and/or the like. The data holder 324 may be secured to the display plate 322, e.g., using adhesives, magnets, welding, or the like. In some embodiments, the data holder 324 may be removable from the display plate 322.

[0071] The display plate 322 may provide a convenient grip for a consumer, allowing her to extend the post extender 312 and the product support arm 316 from the retracted position, as in the embodiments described above. A pull 326 is also provided on the display plate 322. The pull 326 generally comprises a tab depending substantially perpendicularly, i.e., toward the user, from the display plate 322. Thus, the pull 326 is differently shaped than the pull 130 illustrated above. However, the function is substantially the same. A consumer may use the pull 326 as a convenient mechanism to grasp when extending the extender 306.

[0072] FIGS. 4A and 4B illustrate another example display hanger 400. Many of the features of the display hanger 400 are similar to or the same as features illustrated in and described in connection with the hangers 100, 200, 300. Moreover, the display hanger 400 is operated in substantially the same manner as which the hangers 100, 200, 300 are operated. Those features and operations will not be described in further detail here.

[0073] The display hanger 400 includes a different base 402 than the hangers illustrated previously. Specifically, the base 402 comprises a fixed member 404 and an adapter 406. The fixed member 404 is illustrated as generally including a rear plate 408. As illustrated best in FIG. 4B, the rear plate 408 may comprise a rear portion that cooperates with a front portion 410 to form a housing 412. For example, as in the hanger 300 described above, a spring may be disposed in a cavity defined by the housing 412 to bias an extender 414 to a retracted position. In the example of FIGS. 4A and 4B, the fixed member 404 may also include a guide 416 or similar feature to constrain movement of the spring disposed in the housing 412. The guide 416 is illustrated as a downturned tab or flange that extends in a direction substantially perpendicular to the rear plate 408. The housing 412 may be formed by welding or otherwise securing the front portion 410 to the rear plate 408. Moreover, ends of a post 418 may be welded or otherwise affixed to one or both of the rear plate 408 and the front portion 410 of the housing 412.

[0074] The fixed member 404 of the base 402 is intended to be removably received in the adapter 406. More specifically, lateral edges 420 of the rear plate 408 preferably extend wider than the front portion 410 and the post 418, and the adapter 406 has channels 422 spaced and configured to receive the lateral edges 420. In the embodiment of FIG. 1A, the channels 422 are formed by turned-in edges 424 of a planar member 426 of the adapter 406.

[0075] In this embodiment, the display hanger is assembled by sliding the fixed portion 404 of the base 402 into the adapter 406, from above the adapter 406. To prevent the fixed member from sliding through adapter, the adapter 406 also may be provided with a bottom 424 upon which the base 402 may abut upon insertion. The bottom 428 is illustrated as a protrusion extending from the planar member 426, between the turned-in edges 424. In other embodiments, the bottom 428 may extend from edge-to-edge. In still other embodiments, in addition to or instead of the

bottom **428**, the channels **422** may be configured to narrow from top to bottom. In this manner, an interference fit between inner surfaces of the channels **422** and outer surfaces of the lateral edges **420** may hold the fixed member **404** in place.

[0076] The adapter **404** includes attachment features **430** that promote attachment of the adapter **404** to an existing display. In the example of FIG. **4**, the attachment features include a pair of L-shaped pegs that promote attachment of the adapter **404** to a peg board. As should be appreciated, according to this embodiment different adapters **404** may allow attachment of the hanger **400** to a number of different, pre-existing displays. In this manner, for example, a retailer is not required to buy all new hangers when the type of display is changed. Only new adapters, with different attachment features **430**, may be required.

[0077] As will be appreciated, other structures and configurations of the base **402** are contemplated. For example, although the rear plate **408** and the planar member **426** are illustrated as being substantially planar and rectangular, any cooperating size and/or shape may be used without departing from the scope of this disclosure.

[0078] The hanger **400** also illustrates another feature not shown in previously-described embodiments. Specifically, a sled **432**, which is substantially identical in form and operations to the sleds described above, also includes a retaining mechanism that promotes retaining of the extender **414** in the extended position. Such a feature may be helpful to a person placing product on the hanger **400**, for example. In FIG. **4A**, the retaining mechanism includes a retention aperture **434** extending vertically through a tab **436**. The tab extends from the sled **432** in a direction toward the distal end of the post **418**. The tab **436** may be formed integrally with a portion of the sled **432** and of a material that allows for some flexibility of the tab **436**. As in previous embodiments, a stop **438** also is provided on the post **418**, to prevent over-extension of the extender **414**. In this embodiment, the stop **438** also includes a retention protrusion **440** extending upwardly from a top surface of the stop **438**. Also in this embodiment, the under-side of the protrusion **440** comprises a guide that approximates an outer surface of a portion of the extender **414**.

[0079] In operation, as the sled **432** approaches the stop **438**, i.e., upon extension of the extender **414**, the tab **436** flexes relative to the sled **432** so as to travel over a top of the stop until the protrusion **440** is captured in the retention aperture **434** on the sled **432**. The tab **436** is sufficiently rigid that the extender **414** will remain in the extended position, with the protrusion **440** being retained in the retention aperture **434**. To return the extender **414** to the retracted position, a user may apply an upward force to a distal, front edge of the tab **436**, to release the retention aperture **434** and the retention protrusion **440**.

[0080] As will be appreciated, the tab **436** and protrusion **440** are not the only manner in which the extender **414** may be retained in the extended position. Other features could also be used. For example, the sled **432** could instead include a hook or similar latching feature that contacts the stop **438**. In that example, the stop **438** may not include the protrusion **440**.

[0081] Although example embodiments have been described in language specific to the structural features and/or methodological acts, the claims are not necessarily limited to the specific features or acts described. Rather, the

specific features and acts are disclosed as illustrative forms of implementing the example embodiments. Moreover, although certain features are illustrated in certain embodiments, different combination of features will be readily appreciated by those having ordinary skill in the art. For example, the base with adapter of FIG. **4** may be used in combination with the biasing members illustrated in any other Figure. These and other combinations are intended to be a part of this disclosure.

1. A display hanger comprising:
 - a post extending in an axial direction from a base to a distal end;
 - a product support arm configured to move generally in the axial direction relative to the post between a retracted display position proximate the base of the post, and an extended position relatively farther from the base; and
 - a biasing member biasing the product support arm toward the display position.
2. The display hanger of claim 1, further comprising a sled configured to move on the post, wherein the product support is fixed on the sled.
3. The display hanger of claim 2, wherein the sled comprises at least one sleeve receiving the post therein.
4. The display hanger of any one of claims 1 to 3 claim 1, further comprising a post extender fixed relative to the product support and movable in the axial direction relative to the post.
5. The display hanger of claim 4, wherein the post extender comprises a sleeve sized to receive the post.
6. The display hanger of claim 4, wherein the post defines a sleeve and the post extender is sized to be received in the sleeve.
7. The display hanger of claim 4, wherein the post extender includes a plate at a distal end.
8. The display hanger of claim 4, further comprising a pull disposed at a distal end of the post extender.
9. The display hanger of claim 1, wherein the product support comprises an upturned distal end.
10. The display hanger of claim 1, wherein the base comprises a pair of spaced apart members joining at a distal end.
11. The display hanger of claim 1, further comprising a pull disposed at a distal end of the product support.
12. The display hanger of claim 1, wherein the biasing member comprises a retractable spring.
13. The display hanger of claim 1, further comprising a base from which the post depends.
14. The display hanger of claim 13, wherein the base comprises a fixed portion, fixed to the post, and an adapter configured to releaseably receive the fixed portion.
15. The display hanger of claim 1, further comprising a retention mechanism for retaining the product support arm in the extended position.
16. A display hanger comprising:
 - a base;
 - a post extending from the base in an axial direction;
 - an elongate sleeve receiving the post and movable relative to the post in the axial direction between a display position proximate the base and an extended position spaced from the display position, relatively farther from the base;
 - a product support arm fixed relative to the elongate sleeve and configured to support a plurality of similarly packaged products; and

a biasing member biasing the elongate sleeve toward the display position.

17. The display hanger of claim **16**, further comprising a plate disposed at a distal end of the elongate sleeve.

18. The display hanger of claim **17**, further comprising a label disposed on the plate, the label comprising at least one of a UPC code, a product identification, an advertisement, and a price.

19. The display hanger of claim **16**, wherein the product support comprises an upturned distal end.

20. The display hanger of claim **16**, wherein the product support is disposed vertically below the elongate sleeve.

21. The display hanger of claim **16**, further comprising a grip disposed at a distal end of the elongate sleeve or the product support

22. The display hanger of claim **16**, wherein the biasing member comprises a retractable spring.

23. The display hanger of claim **6**, wherein the base comprises a fixed portion, fixed to the post, and an adapter configured to releaseably receive the fixed portion.

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