



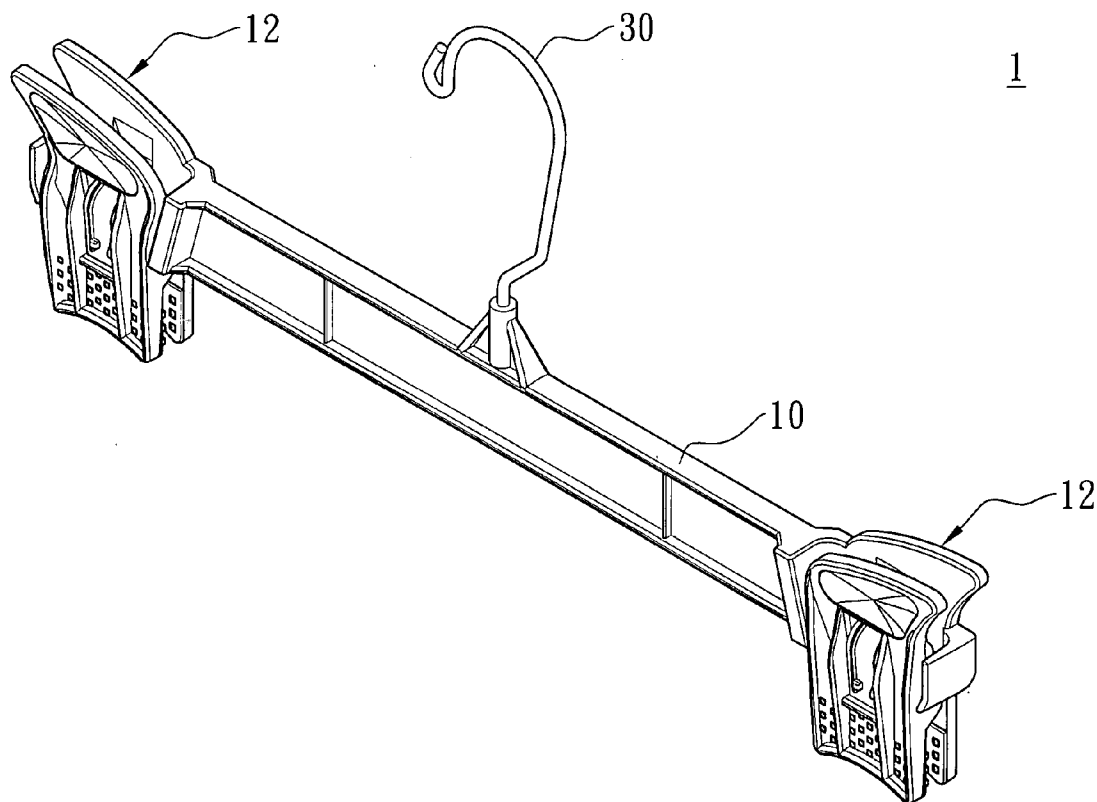
US 20070215655A1

(19) **United States**(12) **Patent Application Publication**
Wu(10) **Pub. No.: US 2007/0215655 A1**(43) **Pub. Date: Sep. 20, 2007**(54) **GARMENT HANGER**(52) **U.S. Cl. 223/85**(76) Inventor: **Raymond Wu**, Lynwood, CA (US)

Correspondence Address:
TROXELL LAW OFFICE PLLC
SUITE 1404
5205 LEESBURG PIKE
FALLS CHURCH, VA 22041 (US)

(21) Appl. No.: **11/373,972**(22) Filed: **Mar. 14, 2006****Publication Classification**(51) **Int. Cl.**
A41D 27/22 (2006.01)(57) **ABSTRACT**

A garment hanger includes a crosspiece formed with a pair of clothespins and with a hook extending upward therefrom. Each of the clothespins includes a first jaw and a second jaw arranged oppositely, with each jaw having a distal end and a proximal end and having an inner gripping surface formed at the distal end. Furthermore, the first jaw has a plurality of holes defined in the gripping surface thereof, while the second jaw has a plurality of blunt protuberances projecting from the gripping surface thereof in positions corresponding to the holes and entering the latter when the clothespin is in the second position, thereby to provide an increased friction of the jaws.



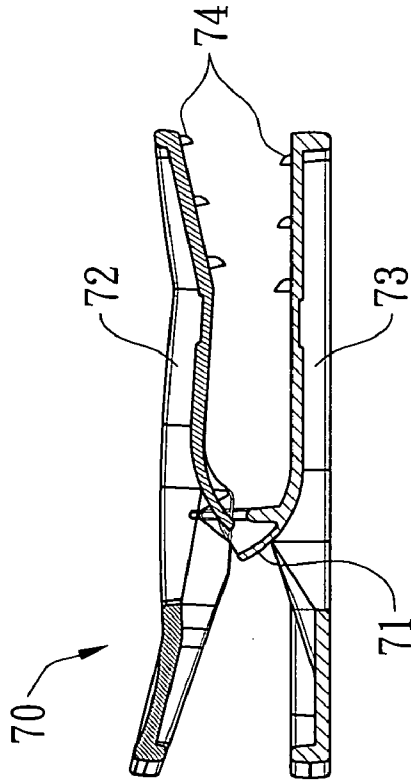


FIG. 1A
(Prior Art)

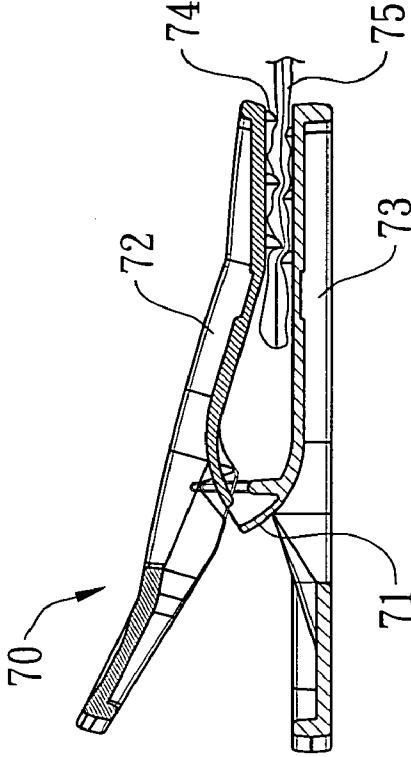


FIG. 1B
(Prior Art)

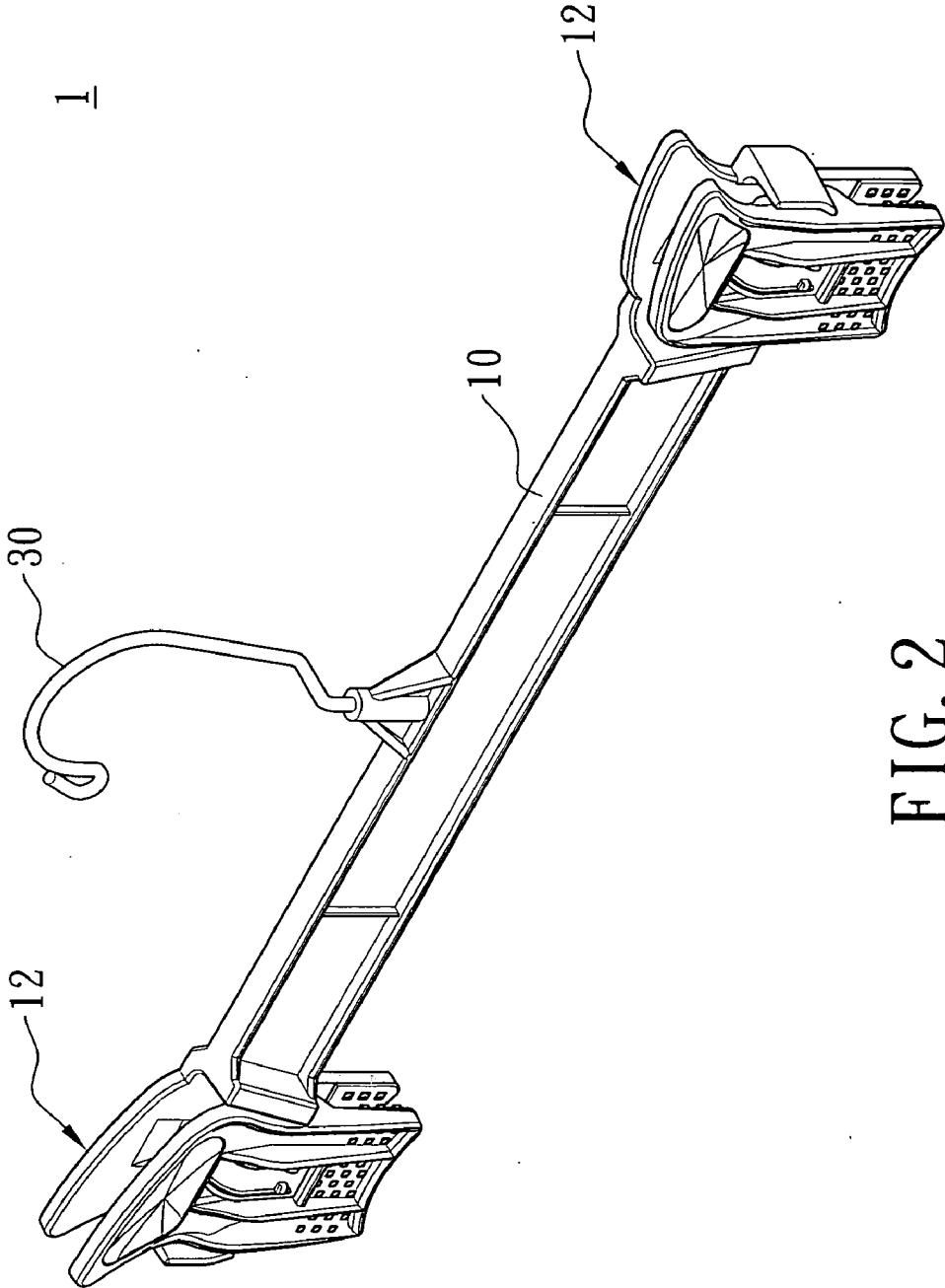


FIG. 2

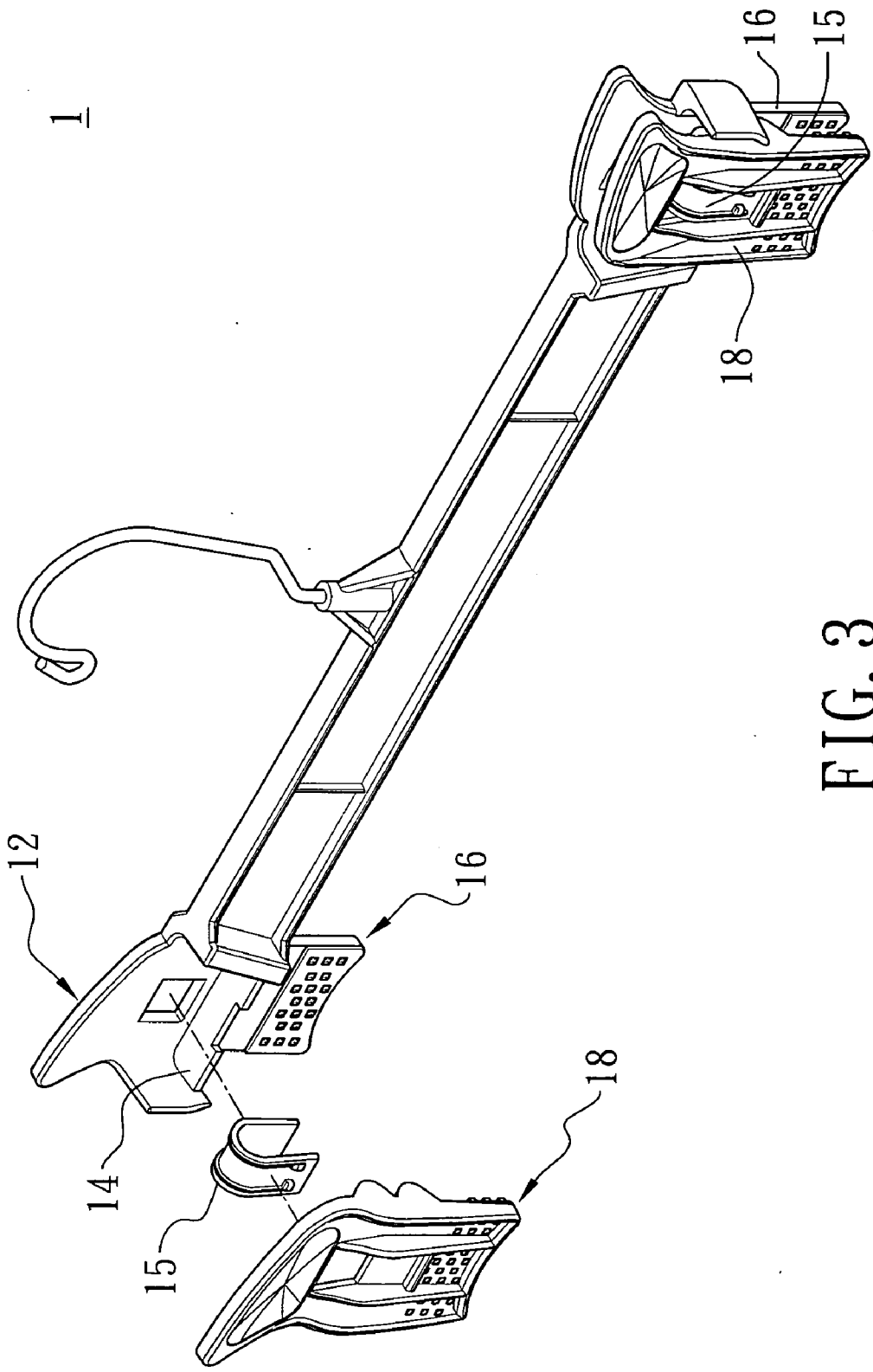


FIG. 3

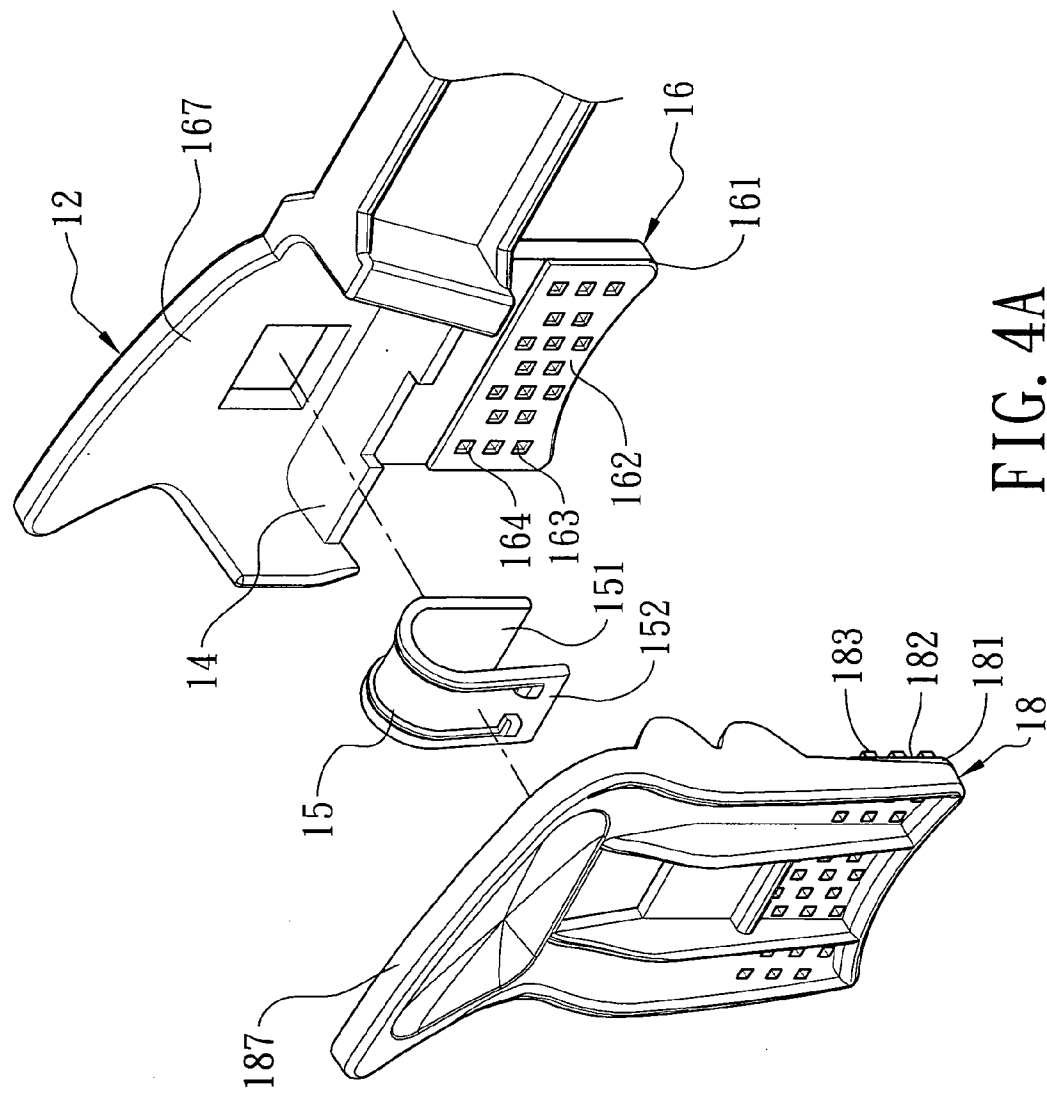


FIG. 4A

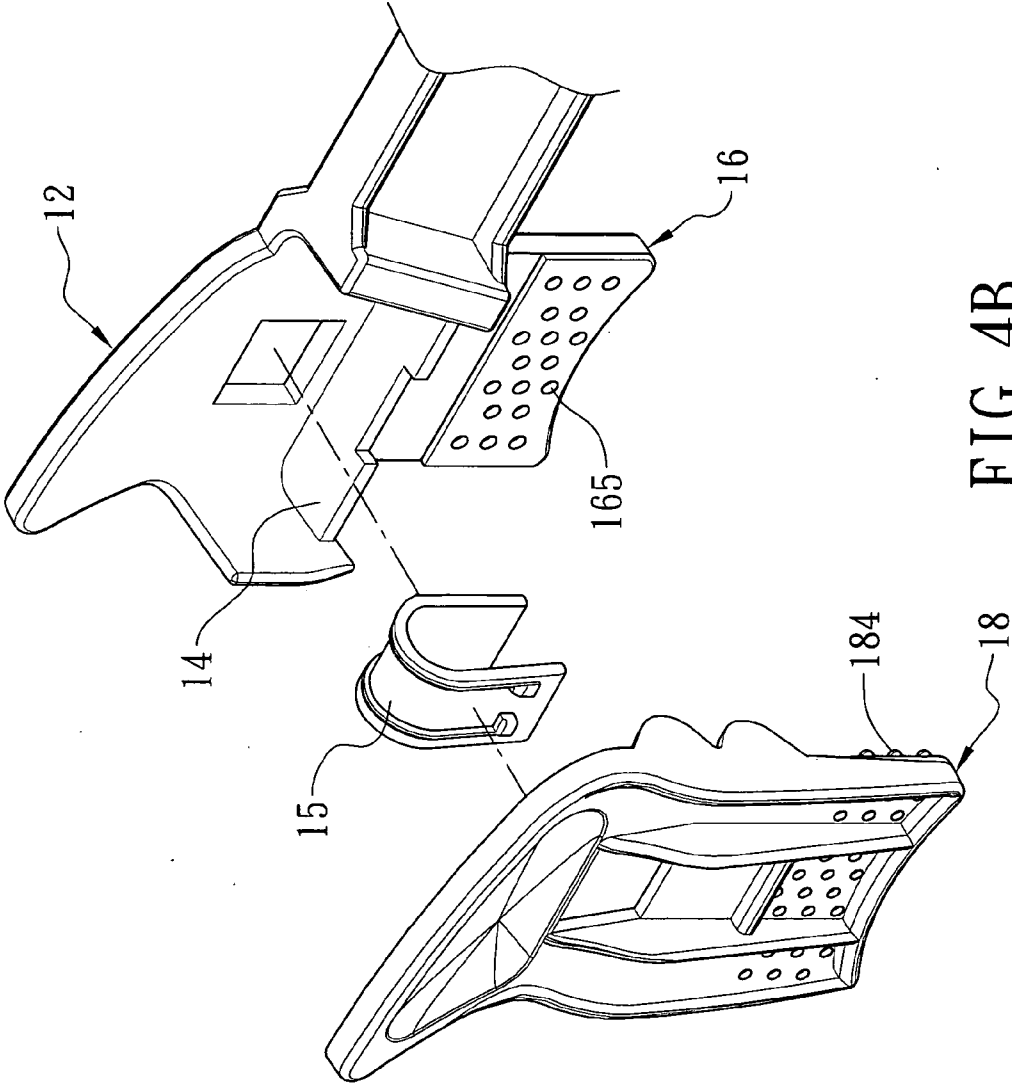


FIG. 4B

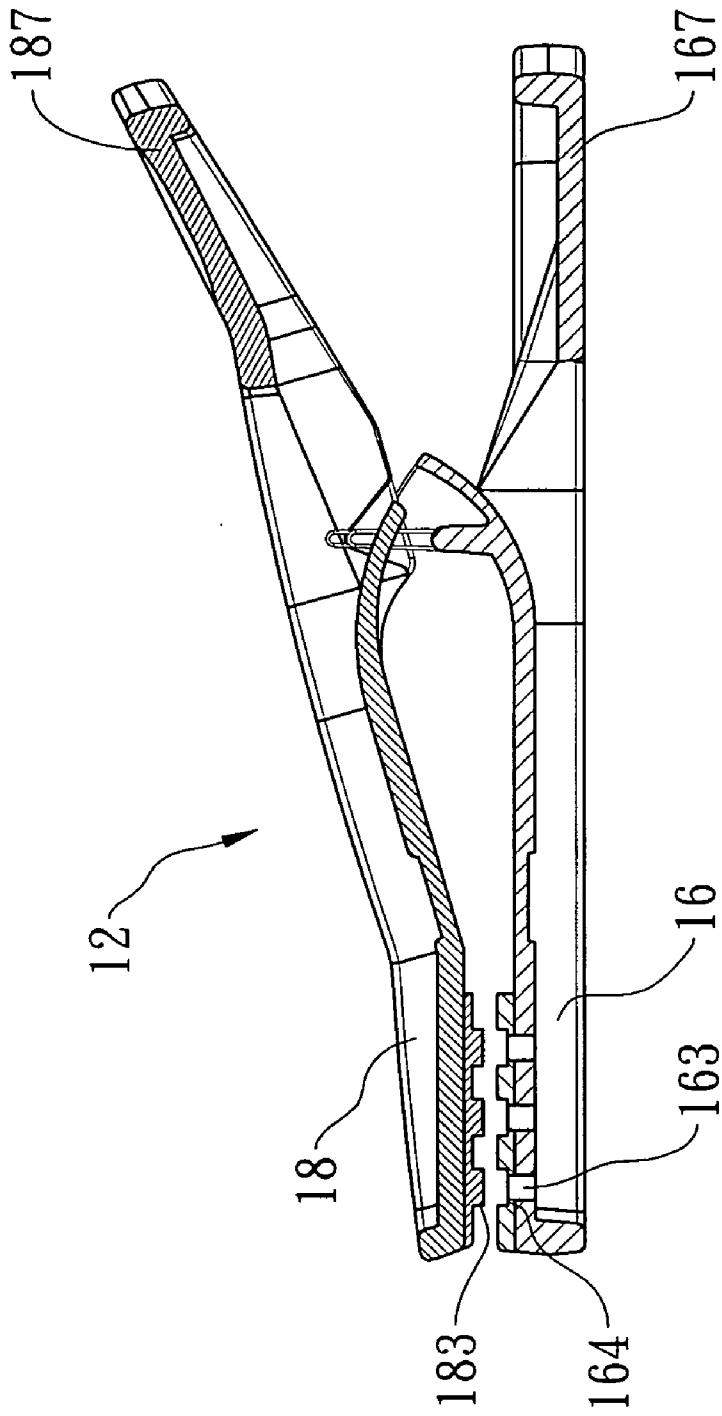


FIG. 5

GARMENT HANGER

FIELD OF THE INVENTION

[0001] The present invention relates to a garment hanger and, more particularly, to a garment hanger which is formed with at least one clothespin adapted to securely hold an article of clothing without causing any damages.

BACKGROUND OF THE INVENTION

[0002] Various garment hangers are now available. One of them is formed with clothespins at ends to hold more articles of clothing or even a suit of garments on the same hanger.

Such clothespins are different one from one. Yet they always has a pair of spring-loaded jaws tightly held together in a manner as teeth are clenched.

[0003] FIG. 1A shows a front sectional view of a conventional clothespin 70. As can be seen, the clothespin 70 includes a U-shaped spring 71 used to hold a pair of jaws 72 and 73 tightly together. Generally, the opposite jaws 72 and 73 are provided with sharp, canine-like protuberances 74 so as to securely grip and hold up garment made of heavy material, such as jeans. The cruel grip, however, usually does damage to the garment 75 and leaves permanent marks on it, as shown in FIG. 1B, and so the clothespin 70 is not suitable for garment made of light and soft material, such as silk.

[0004] Therefore, there is a need for an improved garment hanger to overcome the shortcomings of the prior art.

SUMMARY OF THE INVENTION

[0005] It is an object of the present invention to provide a garment hanger which is formed with at least one clothespin adapted to securely hold an article of clothing without causing any damage.

[0006] To achieve the aforementioned objects, the present invention provides a garment hanger including a crosspiece formed with at least one clothespin and with a hook extending upward therefrom. The clothespin includes a first jaw and a second jaw arranged oppositely, with each jaw having a distal end and a proximal end and having an inner gripping surface formed at the distal end. The jaws are pivotally connected to each other in a place between the distal end and the proximal end and is pivotal relative to each other between a first position in which the inner gripping surfaces are brought apart and a second position in which the inner gripping surfaces are brought closer. The jaws are spring-loaded so as to tend to pivot to the second position. Furthermore, the first jaw has a plurality of holes defined in the gripping surface thereof, while the second jaw has a plurality of blunt protuberances projecting from the gripping surface thereof in positions corresponding to the holes. The protuberances enter the holes when the clothespin is in the second position, thereby providing an increased friction for securely holding an article of clothing between the jaws.

[0007] As one aspect of the present invention, the blunt protuberances each have a substantially hemispherical terminal and the holes are shaped correspondingly to receive the protuberances in such shape, thus securely holding the article of clothing without causing any damage.

[0008] Other objects, advantages and novel features of this invention will become more apparent from the following detailed description when taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] FIGS. 1A and 1B are front sectional view of a clothespin of prior art;

[0010] FIG. 2 is a perspective view of a garment hanger in accordance with the present invention, with a pair of clothespins being formed at ends of the hanger;

[0011] FIG. 3 is an exploded perspective view of the garment hanger of FIG. 2;

[0012] FIG. 4A is an enlarged, exploded perspective view of one of the clothespins shown in FIG. 2;

[0013] FIG. 4B is an enlarged, exploded perspective view of an alternative embodiment of the clothespin; and

[0014] FIG. 5 is a sectional view of the clothespin of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0015] FIGS. 2 and 3 show perspective and exploded perspective views of a garment hanger 1 in accordance with the present invention, respectively. The inventive garment hanger 1 includes a crosspiece 10 formed with a hook 30 extending upward therefrom. The hook 30 can be made of plastic, aluminum or any other material suitable for this purpose. The hook 30 may be made separately and have a threaded lower end (not shown) threadedly connected to the crosspiece 10, or, alternatively, may be made integrally with the crosspiece 10.

[0016] The crosspiece 10 is formed with a pair of clothespins 12 at its ends. The clothespins 12 can be made of the same material as the crosspiece 10 is made of, and preferably made integrally with the crosspiece 10. It is to be noticed that a single clothespin 12 may be really required though two are illustrated.

[0017] Referring to FIG. 4A, each of the clothespins 12 includes a first jaw 16 and a second jaw 18 arranged oppositely. Each of the jaws 16 and 18 has a distal end 161 or 181 and a proximal end 167 or 187, with an inner gripping surface 162 or 182 being formed at the distal end 161 or 181. The first jaw 16 further includes a wing 14 extending inward from a place between the ends 161 and 167 with its extremity being engaged with a pair of opposite V-shaped notches (only one is shown) of the second jaw 18. The combination of the wing 14 and the notches here serves as a hinge which pivotally connects the jaws 16 and 18 to each other. The pivotal connection enables the jaws 16 and 18 to be pivotal relative to each other between a first position in which the inner gripping surfaces 162 and 182 are brought apart, and a second position in which the inner gripping surfaces 162 and 182 are brought closer.

[0018] Furthermore, the two jaws 16 and 18 are spring-loaded by a U-shaped spring 15 which, as shown, has a pair of legs 151 and 152 extending outward through openings (not numbered) of the jaws 16 and 18 and pressed against respective outsides of the same jaws 16 and 18, making the

jaw 16 and 18 tend to pivot to the second position, as well as preventing the two jaw 16 and 18 from separating.

[0019] Under the action of the spring 15, an article of clothing can be held by the clothespin 12 between the gripping surfaces 162 and 182. The article of clothing can be released simply by pressing the proximal ends 167 and 187 until the jaws 16 and 18 are pivoted to their first position.

[0020] In the present invention, the first jaw 16 further includes a plurality of holes 163 defined in its gripping surface 162, while the second jaw 18 includes a plurality of blunt protuberances 183 projecting from its inner gripping surface 182 in positions corresponding to the holes 163. These protuberances 183 enter the holes 163 when the clothespin 12 is in the second position, so as to provide an increased friction for holding the article of clothing between the jaws 16 and 18. The friction can also be adjusted by changing the arrangement of the holes 163, which can be arranged either randomly or regularly.

[0021] As best shown in FIG. 5, the holes 163 may be formed with respective inner steps 164, so that the protuberances 183 are pressed against them when the clothespin 12 is in the second position. In additionally, the blunt protuberances 183 may have a predetermined shape in cross-section, such as a round, as shown in FIG. 4B, or a square, as shown in FIG. 4A, while the holes 163 are shaped to mate with the protuberances 183. In a highly preferred embodiment, as also shown in FIG. 4B, each of the protuberances 183 has a substantially hemispherical terminal 184 and the holes 163 are shaped correspondingly to receive the protuberances 183 in such shape.

[0022] It is preferable that the jaws 16 and 18 are each formed integrally by injection of a material selected from a group consisting of polystyrene, polypropylene, and polyethylene.

[0023] From the foregoing, it is apparent that the clothespins 12 can securely hold the article of clothing without causing any damaging, due to the holes and the blunt protuberances.

[0024] Although embodiments together with structures and functions of the present invention have been described in detail, many modifications and variations may be made from the teachings disclosed hereinabove. For example, the jaws can be pivotally connected to each other in a way other than the combination of the wing and notches. Therefore, it should be understood by those skilled in the art that any modification and variation equivalent to the spirit of the present invention be regarded to fall into the scope covered by the appended claims.

1. A garment hanger comprising a crosspiece formed with at least one clothespin and with a hook extending upward therefrom; and

said clothespin comprising a first jaw and a second jaw arranged oppositely, each of said jaws having a distal end and a proximal end and having an inner gripping surface formed at said distal end, said jaws being pivotally connected to each other in a place between said distal end and said proximal end and being pivotal

relative to each other between a first position in which said inner gripping surfaces are brought apart and a second position in which said inner gripping surfaces are brought closer, said jaws being spring-loaded so as to tend to pivot to said second position;

wherein said first jaw has a plurality of holes defined in said inner gripping surface thereof, while said second jaw has a plurality of blunt protuberances projecting from said inner gripping surface thereof in positions corresponding to said holes, and said protuberances are configured to both enter and be surrounded by said holes when said clothespin is in said second position, thereby providing an increased friction for securely holding an article of clothing between said jaws.

2. The garment hanger as claimed in claim 1, wherein said holes are formed with respective inner steps, and wherein said protuberances are pressed against said inner steps when said clothespin is in said second position.

3. The garment hanger as claimed in claim 1, wherein said blunt protuberances have a predetermined shape in cross-section, and wherein said holes are shaped to mate with said blunt protuberances.

4. The garment hanger as claimed in claim 1, wherein said blunt protuberances each have a substantially hemispherical terminal, and wherein said holes are shaped correspondingly to receive said protuberances in such shape.

5. A clothespin comprising a first jaw and a second jaw arranged oppositely, each of said jaws having a distal end and a proximal end and having an inner gripping surface formed at said distal end, said jaws being pivotally connected to each other in a place between said distal end and said proximal end and being pivotal relative to each other between a first position in which said inner gripping surfaces are brought apart and a second position in which said inner gripping surfaces are brought closer, said jaws being spring-loaded so as to tend to pivot to said second position; and

wherein said first jaw has a plurality of holes defined in said inner gripping surface thereof, while said second jaw has a plurality of blunt protuberances projecting from said inner gripping surface thereof in positions corresponding to said holes, and said protuberances are configured to both enter and be surrounded by said holes when said clothespin is in said second position, thereby providing an increased friction for securely holding an article between said jaws.

6. The clothespin as claimed in claim 5, wherein said holes are formed with respective inner steps, and wherein said protuberances are pressed against said inner steps when said clothespin is in said second position.

7. The clothespin as claimed in claim 5, wherein said blunt protuberances have a predetermined shape in cross-section, and wherein said holes are shaped to mate with said blunt protuberances.

8. The clothespin as claimed in claim 5, wherein said blunt protuberances each have a substantially hemispherical terminal, and wherein said holes are shaped correspondingly to receive said protuberances in such shape.

* * * * *