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(54) **FRAMEWORK STRUCTURE**

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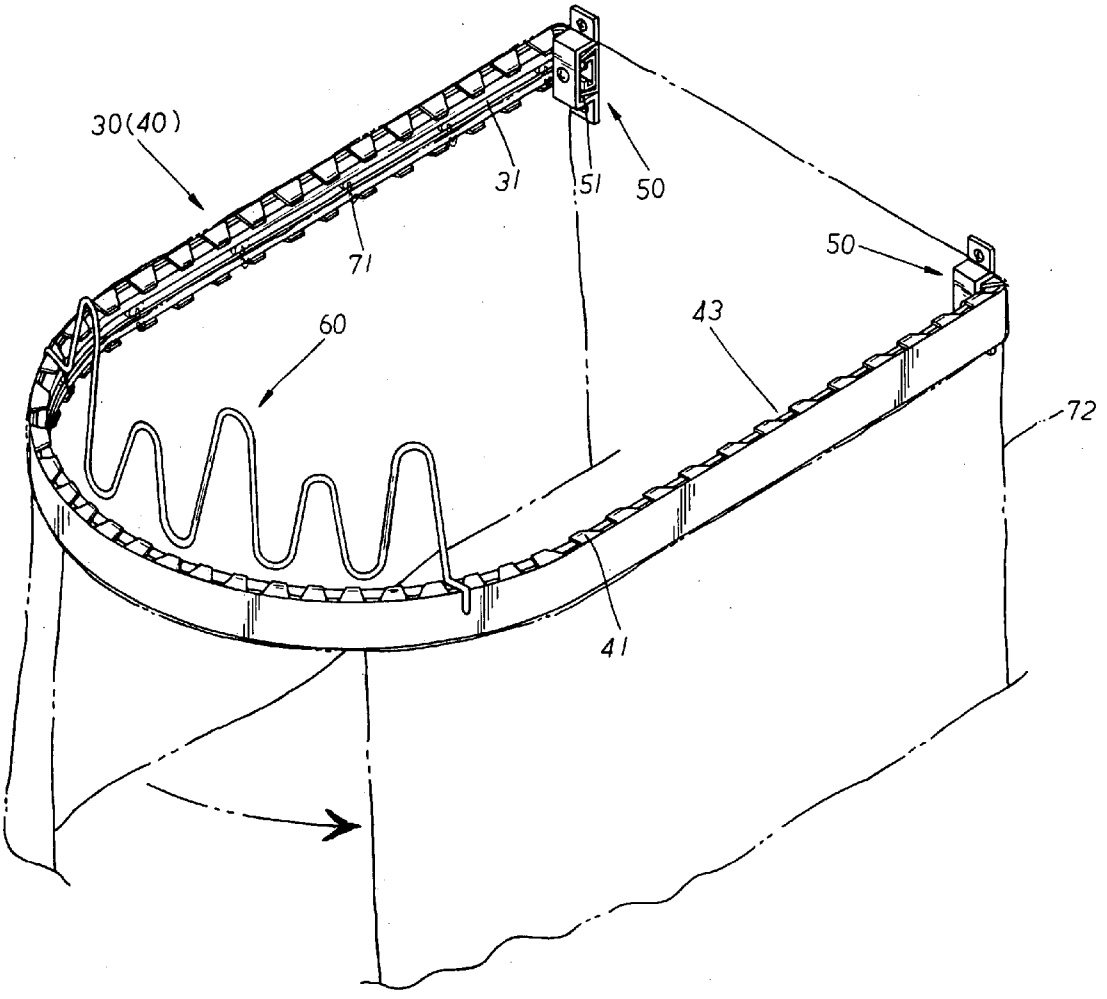
(57) **ABSTRACT**

A framework structure includes a guide track, a rack body, and locking members wherein the guide track has a guide groove properly indented therein, and the rack body is equipped with a plurality of toothed protrusive flanges correspondingly tilting inwards at both lateral sides thereon to define a retaining space there-between and a plurality of clamping recesses alternatively arranged among the toothed protrusive flanges thereof. The locking member is provided with a receiving cavity properly defined thereon, and a through hole disposed at a preset position in communication with the receiving cavity thereof. Thus, in assembly, the guide track and the rack body are mutually engaged for a screen body to be mounted thereto, facilitating an easy and convenient opening/closing operation of the screen body thereof. Besides, the coupled guide track and the rack body are capable of being flexibly bent and properly arched into matched shapes relative to various kinds of the screen body such as a canopy, a mosquito net, or a blind drapery, etc., achieving widespread use of the present invention thereof.



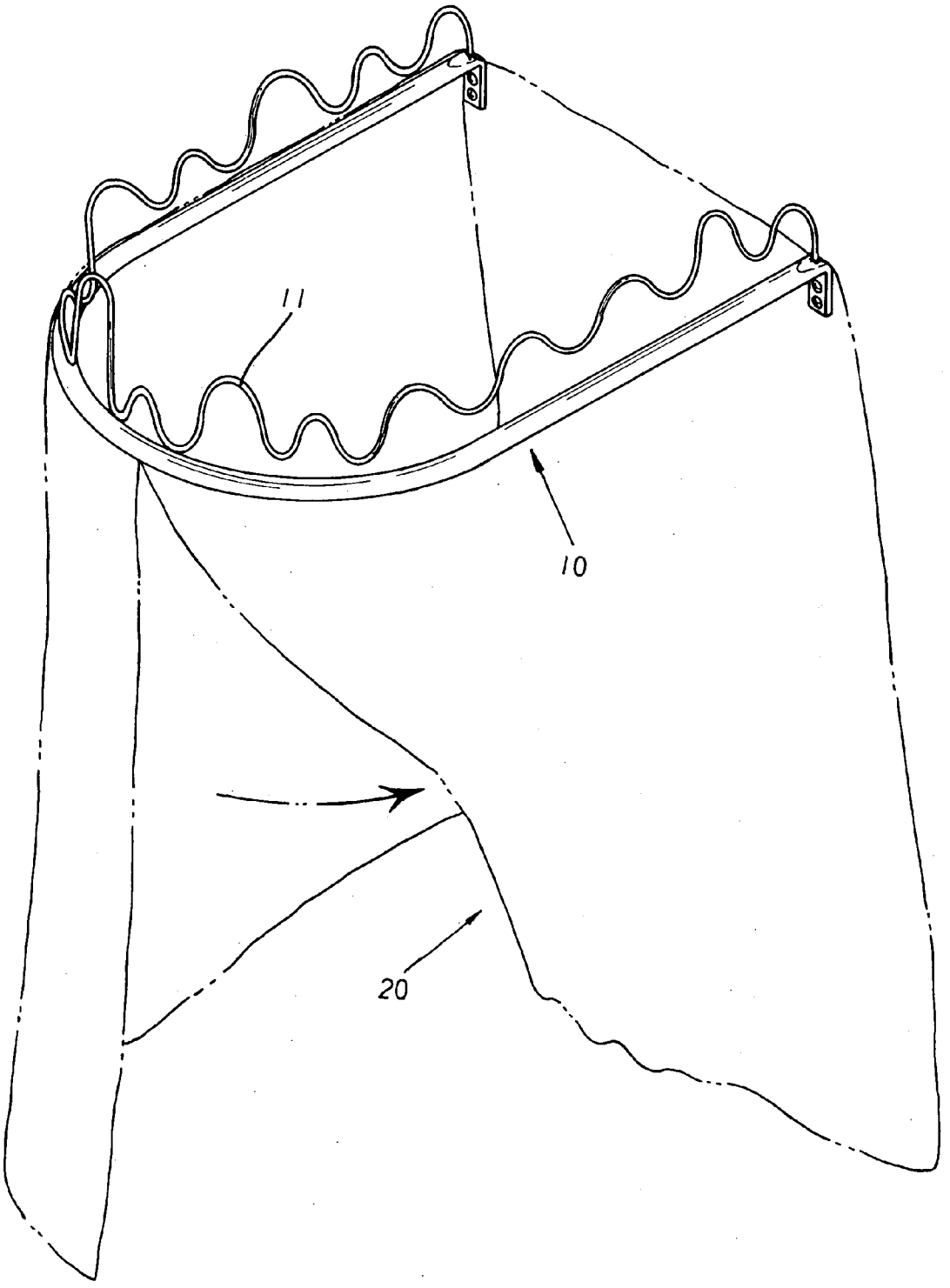


FIG. 1
PRIOR ART

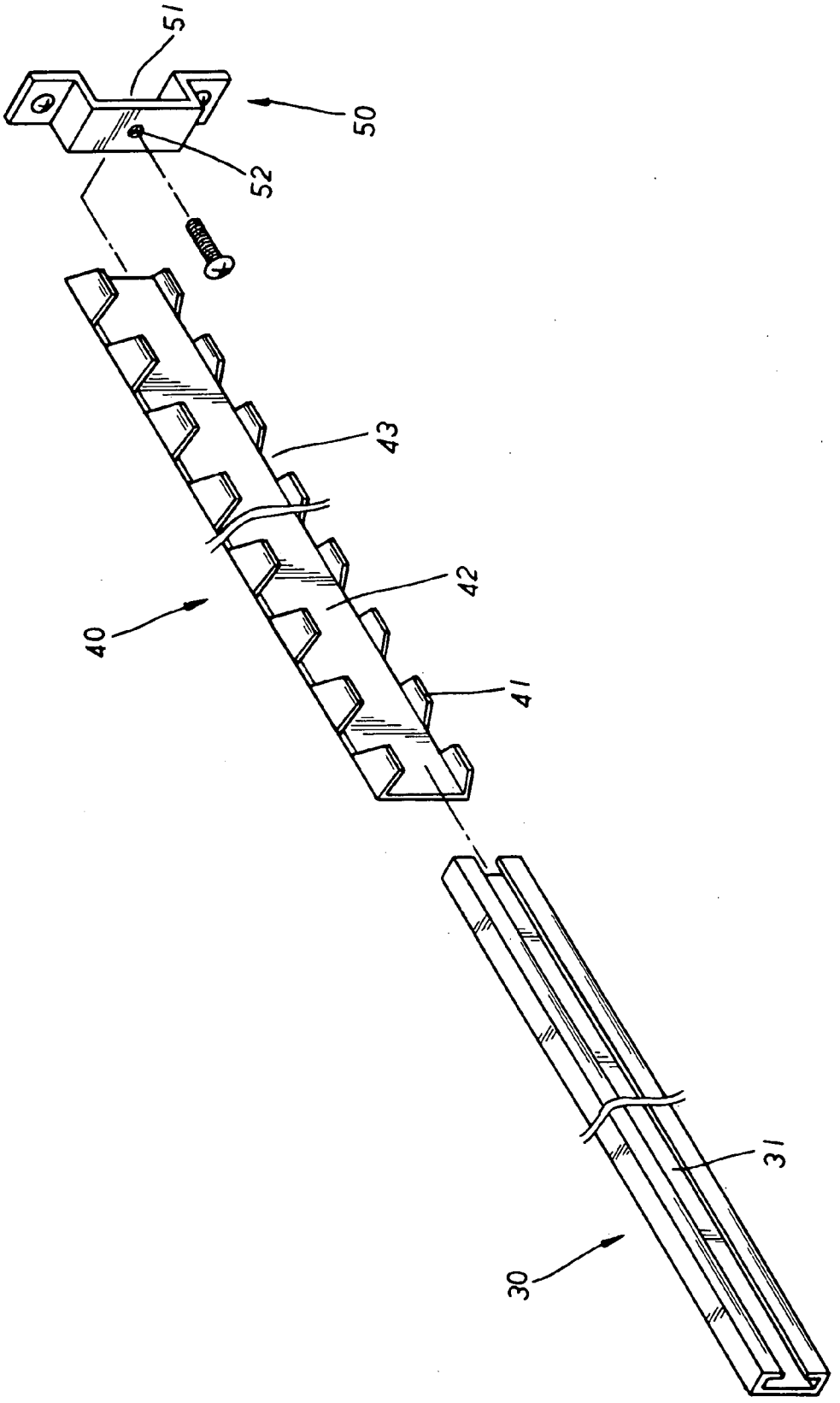


FIG. 2

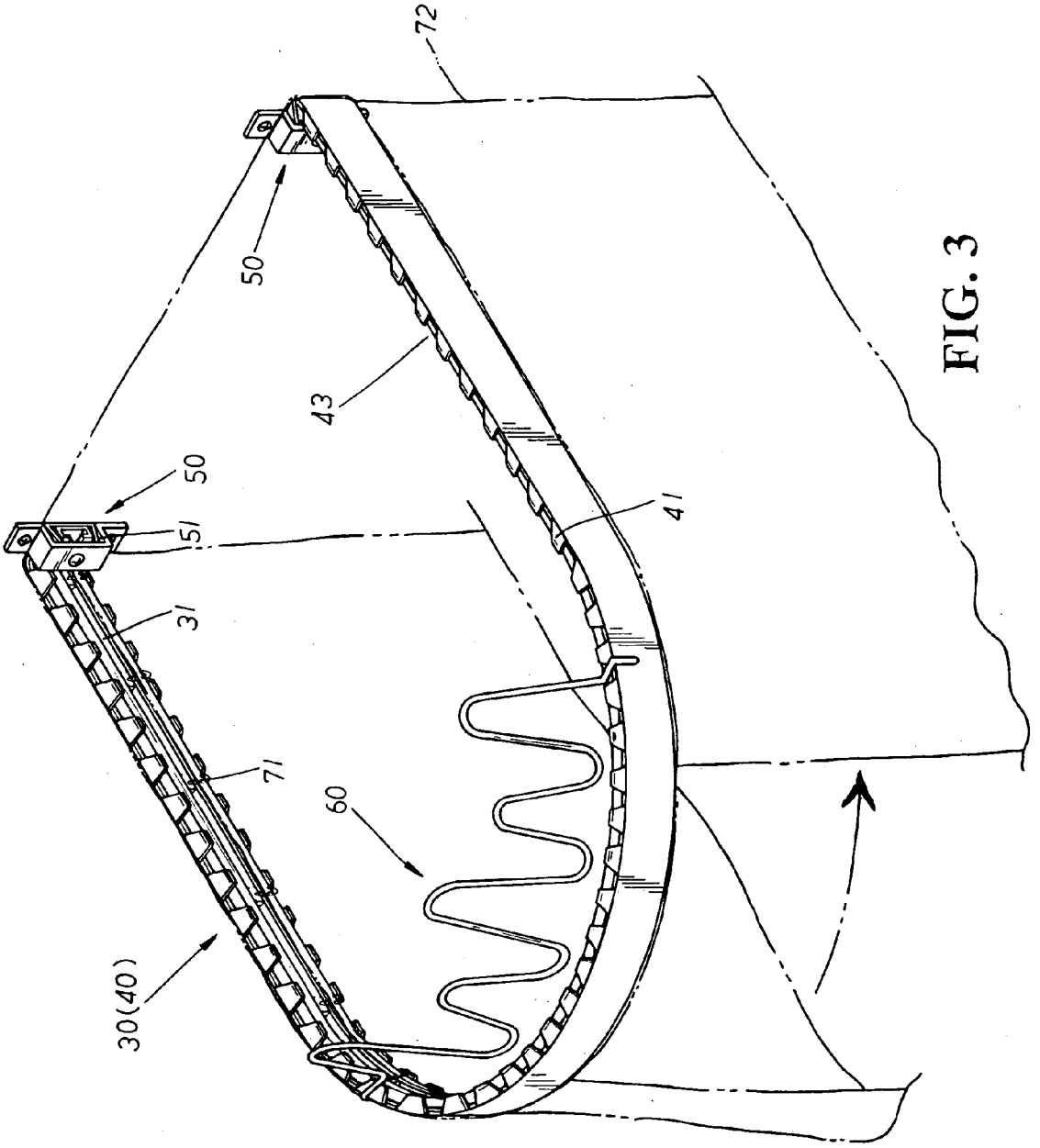


FIG. 3

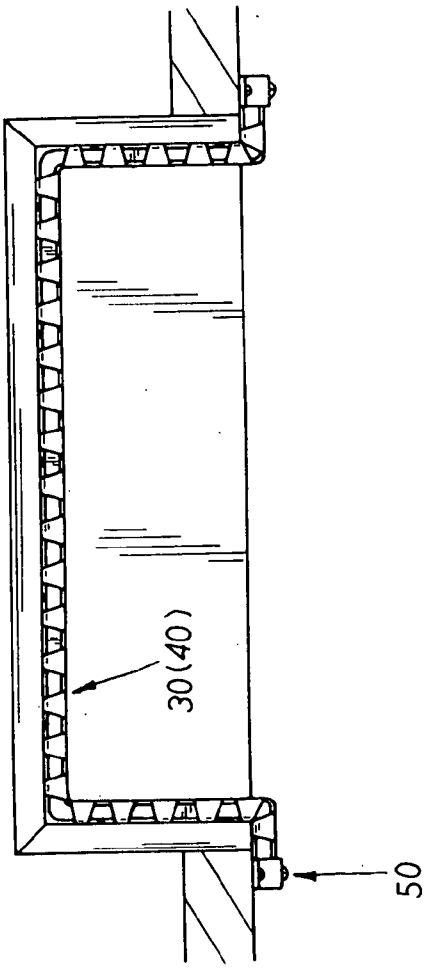


FIG. 6

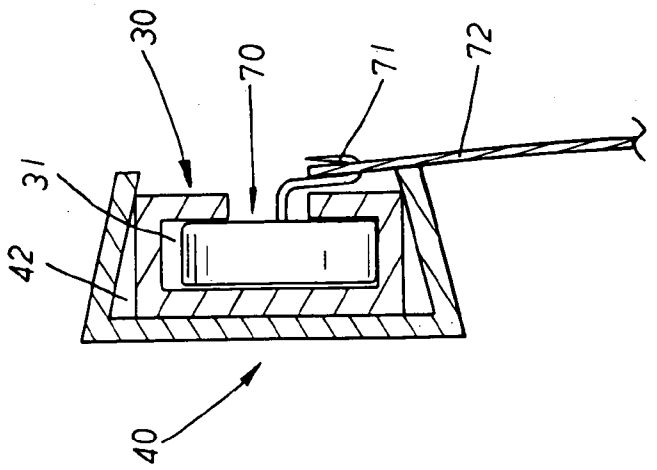


FIG. 4

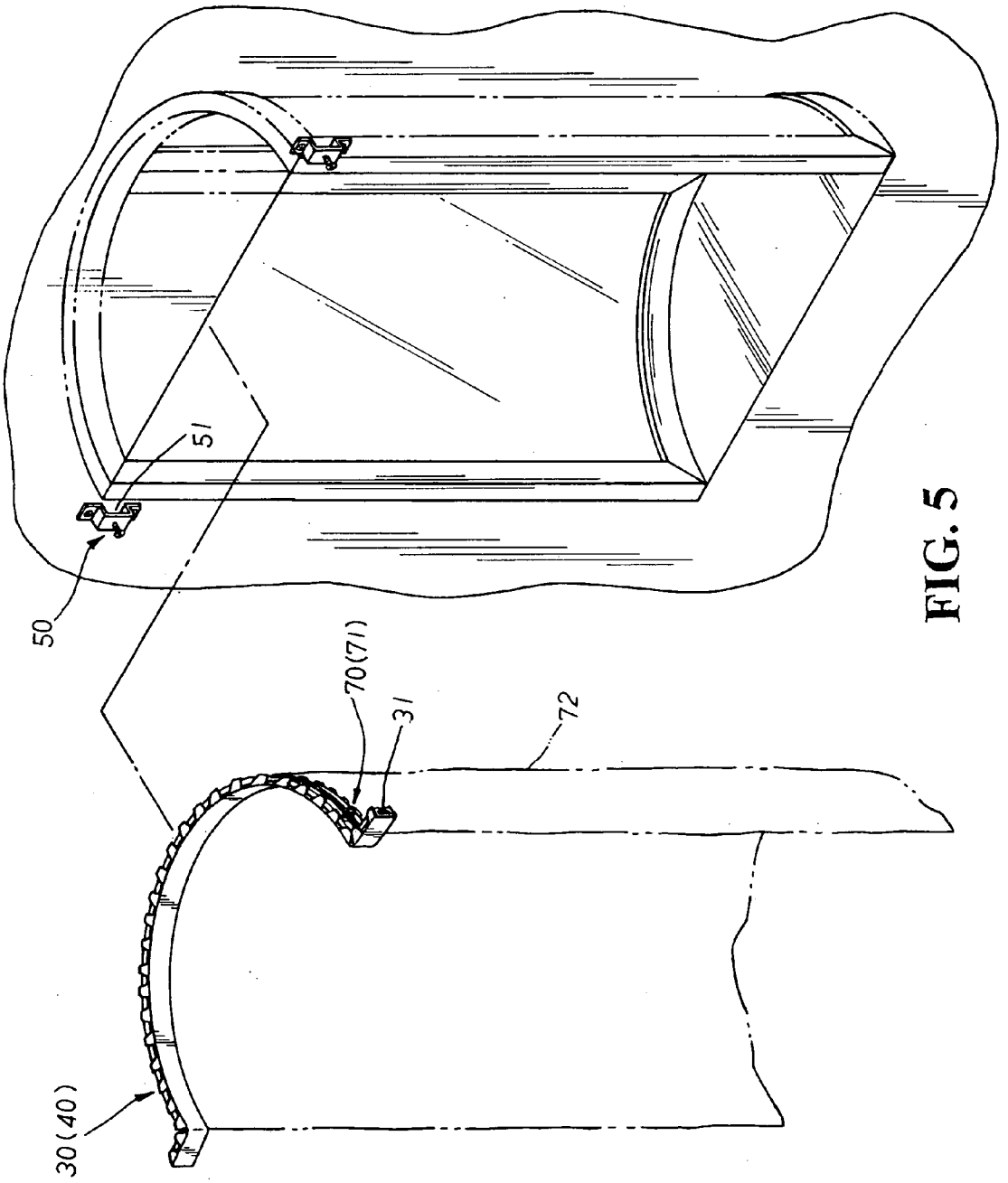


FIG. 5

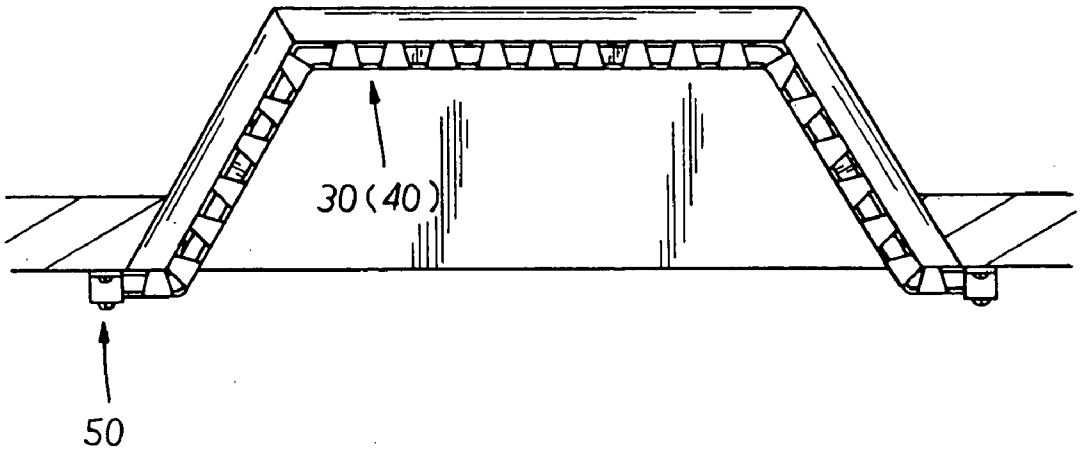


FIG. 7

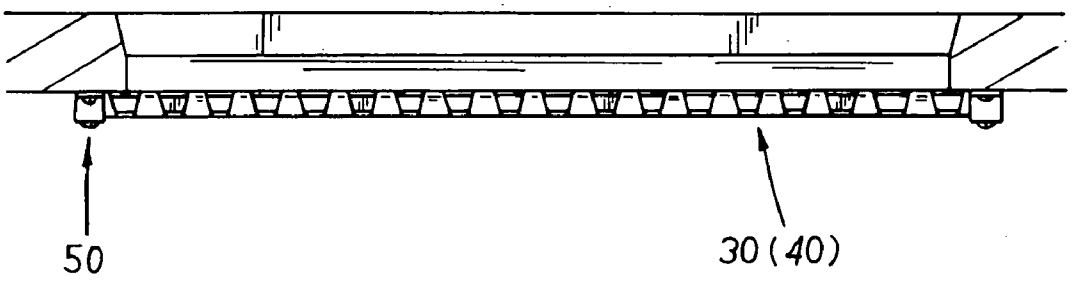


FIG. 8

FRAMEWORK STRUCTURE

BACKGROUND OF THE INVENTION

[0001] The present invention is related to a framework structure, including a guide track, a rack body, and locking members wherein the guide track has a guide groove properly indented therein and the rack body is equipped with a plurality of toothed protrusive flanges tilting inwards at both lateral sides thereon to define a retaining space therebetween for the guide track to be securely located therein. The locking member is provided with a receiving cavity for holding each end of the coupled guide track and the rack body thereby. In assembly, the mutually engaged guide track and the rack body are cooperatively matched to a screen body, facilitating an easy and speedy opening/closing operation of the screen body thereof. Besides, the coupled guide track and the rack body are capable of being flexibly bent or arched into matched shapes relative to various kinds of the screen body such as a canopy, a mosquito net, or a blind drapery, etc., efficiently achieving widespread use of the framework thereof.

[0002] Please refer to **FIG. 1**. A conventional framework for a canopy/mosquito net is made up of an integral-made and U-shaped frame body **10**, a patterned decoration article **11** securely fixed at the upper side of the frame body **10** thereon, and a canopy/mosquito net **20** fixedly attached at the underside of the frame body **10** thereof. At one side of the canopy/mosquito net **20** is preset with an opening that is slightly lifted sideways to reveal an exit or entrance in practical use. However, it's quite inconvenient to go into and out of the canopy/mosquito net **20** through the small area defined by the opening thereof. Besides, the frame body **10** is integrally molded with the patterned decoration article **11** fixedly attached thereto that is unable to be flexibly replaced by a new one as desired. And due to the large volume thereof, the conventional framework tends to occupy a lot of space in the loading and delivery process. Thus, it is not only troublesome to load and deliver the framework thereof but also quite limited in the amount loaded for delivery thereof.

SUMMARY OF THE PRESENT INVENTION

[0003] It is, therefore, the primary purpose of the present invention to provide a framework structure, including a guide track, a rack body, and locking members wherein the guide track having a guide groove defined therein is mutually registered with the rack body, and the coupled guide track and the rack body thereof are capable of being flexibly bent or properly arched into matched shapes relative to various kinds of the screen body such as a canopy, a mosquito net, or a blind drapery, etc., efficiently achieving widespread use of the framework thereof.

[0004] It is, therefore, the second purpose of the present invention to provide a framework structure wherein the guide track, the rack body, and the locking members thereof are individually made and respectively provided with smaller volume, facilitating an easier and effort-saving loading and delivery process thereof as well as occupying less space to increase the loading amount for delivery thereof.

[0005] It is, therefore, the third purpose of the present invention to provide a framework structure wherein a patterned decoration article can be detachably locked up onto the framework thereof, and the decoration article can be easily replaced with a new one of different design as desired, or simply omitted in the assembly thereof.

[0006] It is, therefore, the fourth purpose of the present invention to provide a framework structure wherein sliding units can be mounted to the guide groove of the guide track therein to cooperatively work with the screen body of various kinds so that the screen body can be adjusted to open up and locate at a certain wideness as desired, facilitating the practical use of the framework in an easier way.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] **FIG. 1** is a diagram showing the operation of a conventional framework with a canopy/mosquito net mounted thereto in practical use.

[0008] **FIG. 2** is a perspective exploded view of the present invention.

[0009] **FIG. 3** is a diagram showing the operation of the present invention in assembly.

[0010] **FIG. 4** is a cross sectional view of the present invention in assembly.

[0011] **FIG. 5** is a perspective view of another embodiment of the present invention mounted onto a window frame in assembly.

[0012] **FIG. 6** is a cross sectional view of a third embodiment of the present invention mounted onto a window frame in assembly.

[0013] **FIG. 7** is a cross sectional view of a fourth embodiment of the present invention mounted onto a window frame in assembly.

[0014] **FIG. 8** is a cross sectional view of a fifth embodiment of the present invention mounted onto a window frame in assembly.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0015] Please refer to **FIG. 2**. The present invention is related to a framework structure, including a guide track **30**, a rack body **40**, and locking members **50** wherein the guide track **30**, an elongated rectangular plastic body, has a T-shaped guide groove **31** indented at a preset position therein, and the rack body **40**, made of metallic material of a proper thickness to be correspondingly registered with the guide tack **30** thereby, is equipped with a plurality of toothed protrusive flanges **41** correspondingly tilting inwards at both lateral sides thereon to define a retaining space **42** therebetween, and a plurality of clamping recesses **43** alternatively arranged among the toothed protrusive flanges **41** thereof. The locking member **50** is provided with a receiving cavity **51** defined at a proper position thereon, and a through hole **52** disposed at a preset position in communication with the receiving cavity **51** thereof.

[0016] Please refer to FIGS. **3** to **4** inclusive. In assembly, the locking member **50** is securely fixed onto a wall at a proper position thereon, and the guide track **30** is led through the rack body **40** from one side thereof and properly located at the retaining space **42** therein. Via the toothed protrusive flanges **41** correspondingly tilted into a tapered angle at both lateral sides of the rack body **40** thereof, the guide track **30** is precisely clamped tight and limited at the retaining space

41 therein for secure location thereby as shown in **FIG. 4**. The coupled guide track **30** and the rack body **40** are properly arched at preset positions to form a U-shaped framework with both ends thereof bent inwards for a certain length to be respectively registered with the receiving cavity **51** of the locking member **50** thereof and fixedly screwed up thereto via the through hole **52** thereof. A patterned decoration article **60** is properly attached at one side of the coupled guide track **30** and the rack body **40** thereof, and sliding units **70** are mounted at the guide groove **31** of the guide track **30** therein. The sliding unit **70** is provided with a hook **71** for a screen body **72** such as a canopy or a mosquito net to be hanged thereon. In practical use, the screen body **72** of a canopy or a mosquito net is activated by the sliding units **70** to open up and locate at a proper wideness as desired, facilitating a convenient going in or out of the screen body **72** there-through as well as the opening/closing operation thereof in an easy and speedy manner.

[**0017**] Please refer to **FIG. 5**. The locking member **50** can also be securely fixed onto a sidewall of a window frame at a proper position thereon, and the guide track **30** engaged with the rack body **40** thereof is bent in matched arch relative to the window frame thereof. The sliding units **70** are then mounted at the guide groove **31** of the guide track **30** therein, and the screen body **72** is hanged onto the hooks **71** thereof to suspend downwards like a window drapery. Both ends of the coupled guide track **30** and rack body **40** are respectively bent into a proper angle and for a certain length to be fixedly screwed up to the receiving cavity **51** of the locking member **50** for location therein.

[**0018**] Please refer to **FIG. 6**. The mutually engaged guide track **30** and the rack body **40** can also be bent into a matched square U-shape relative to a window frame and securely mounted thereto via the locking members **50** thereof.

[**0019**] Please refer to **FIG. 7**. The coupled guide track **30** and the rack body **40** thereof can also be bent into a U-shaped frame with both arms slantingly expanding outwards in match to a window frame and securely mounted thereto via the locking members **50** thereof.

[**0020**] Please refer to **FIG. 8**. The guide track **30** and the rack body **40** thereof can also be formed into a straight line in match to a window frame and securely mounted thereto via the locking members **50** thereof.

What is claimed is:

1. A framework structure, including a guide track, a rack body, and locking members wherein the guide track has a guide groove properly indented therein, and the rack body is equipped with a plurality of protrusive flanges disposed at both lateral sides thereon to define a retaining space therebetween and a plurality of clamping recesses alternatively arranged among the protrusive flanges thereof; the locking member is provided with a receiving cavity properly defined thereon, and a through hole disposed at a preset position in communication with the receiving cavity thereof; in assembly, the guide track and the rack body are mutually engaged and properly bent or arched into matched shapes relative to various screen bodies to achieve widespread use of the present invention thereof.

2. The framework structure as claimed in claim 1 wherein the guide track thereof is preferably made of an elongated rectangular plastic body.

3. The framework structure as claimed in claim 1 wherein the guide groove of the guide track thereof is made in a T-shaped form.

4. The framework structure as claimed in claim 1 wherein the rack body thereof is preferably made of metallic material of a proper thickness to be correspondingly registered with the guide track thereby.

5. The framework structure as claimed in claim 1 wherein the protrusive flanges disposed at both lateral sides of the rack body thereof are correspondingly tilted inwards into a tapered angle thereof.

6. The framework structure as claimed in claim 1 wherein the protrusive flanges of the rack body thereof are preferably made in toothed shapes.

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