MODULAR HOOK STRIP

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ABSTRACT
A modular hook strip includes a strip and a plurality of hooks. The strip is adapted to be mounted on a support, and has a top edge and a plurality of grooves that are indented from the top edge. Each of the hooks has a main body that has a back side confronting the strip, and a front side opposite to the back side; a first hook element that extends from the front side of the main body, and a first engaging element that projects from the back side of the main body and that detachably engages a respective one of the grooves.
MODULAR HOOK STRIP

CROSS-REFERENCE TO RELATED APPLICATION

[0001] This application claims priority of Taiwanese application no. 097217743, filed on Oct. 3, 2008.

BACKGROUND OF THE INVENTION

[0002] 1. Field of the Invention
[0003] This invention relates to a hook strip, more particularly to a modular hook strip that includes detachable hooks.
[0004] 2. Description of the Related Art
[0005] Referring to FIG. 1, a conventional hook strip 1 includes a strip 11 and three hooks 12. The strip 11 has two opposite ends and two first screw holes 111 that are respectively formed on the two opposite ends. Each of the hooks 12 has a second screw hole 121 that is formed therein. When the hook strip 1 is assembled, three of five screws 2 are respectively inserted into the second screw holes 121 of the hooks 12 so as to fixedly attach the hooks 12 to the strip 11. When the assembled hook strip 1 is installed, the remaining two of the five screws 2 are respectively inserted into the first screw holes 111 in order to fixedly mount the strip 11 on a support such as a jewelry cabinet, a kitchen cabinet, or an indoor wall.

[0006] However, the hook strip 1 has the following drawbacks. Assembly of the hook strip 1 is complicated since the screws 2 are required to fix the hooks 12 to the strip 11, and to fix the strip 11 on the support, thereby leading to inconvenience of using the hook strip 1.

[0007] To facilitate the use of the hook strip 1, if the hooks 12 are fixed to the strip 11 by manufacturers during production of the hook strip 1, and the assembled hook strip 1 is subsequently packaged, transported, and supplied in the market, since the assembled hook strip 1 is bulky and may take up more space upon transport, the transport cost for the hook strip 1 may be increased.

SUMMARY OF THE INVENTION

[0008] Therefore, the object of the present invention is to provide a modular hook strip that can overcome the aforesaid drawbacks of the prior art.

[0009] According to this invention, a modular hook strip includes a strip and a plurality of hooks. The strip is adapted to be mounted on a support, and has a top edge and a plurality of grooves that are indented from the top edge. Each of the hooks has a main body that has a back side confronting the strip, and a front side opposite to the back side, a first hook element that extends from the front side of the main body, and a first engaging element that projects from the back side of the main body and that detachably engages a respective one of the grooves.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] Other features and advantages of the present invention will become apparent in the following detailed description of the preferred embodiments of this invention, with reference to the accompanying drawings, in which:
[0011] FIG. 1 is a perspective view of a conventional hook strip;
[0012] FIG. 2 is an exploded perspective view of the first preferred embodiment of a modular hook strip according to this invention;
[0013] FIG. 3 is a perspective view of the first preferred embodiment in an assembled state;
[0014] FIG. 4 is a side view of the first preferred embodiment illustrating a second engaging element of a hook before its engagement with a shoulder of a strip;
[0015] FIG. 5 is the same view as FIG. 4 but illustrating the second engaging element of the hook after its engagement with the shoulder of the strip;
[0016] FIG. 6 is a perspective view of the second preferred embodiment of the modular hook strip according to this invention;
[0017] FIG. 7 is a partly sectional schematic side view illustrating that an enlarged head of the second engaging element is passed through a large hole section of a positioning hole according to the second preferred embodiment; and
[0018] FIG. 8 is the same view as FIG. 7 but illustrating that a positioning neck portion of the second engaging element is retained in a small hole section of the positioning hole according to the second preferred embodiment.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0019] Referring to FIGS. 2 and 3, the first preferred embodiment of a modular hook strip 3 according to the present invention is adapted to hang jewelry (not shown), and includes a strip 31 and a plurality of hooks 32.

[0020] The strip 31 is adapted to be mounted on a support, and has a top edge 30 and a plurality of grooves 314 that are indented from the top edge 30. In this embodiment, the strip 31 further has a bottom wall 311 that extends in a first direction, a top wall 312 that extends in a first direction above the bottom wall 311 and that is offset from the bottom wall 311, and a shoulder 313 that extends forwardly from the bottom wall 311 to the top wall 312 so as to interconnect the bottom and top walls 311, 312. The top wall 312 has the top edge 30 and the grooves 314.

[0021] Each of the hooks 32 has a main body 321 that has a back side confronting the strip 31, and a front side opposite to the back side, a first hook element 322 that is adapted to hang the jewelry and that extends from the front side of the main body 321, and a first engaging element 324 that projects from the back side of the main body 321 and that detachably engages a respective one of the grooves 314. Preferably, the first engaging element 324 of each of the hooks 32 projects rearwardly from the back side of the main body 321 into the respective one of the grooves 314, and thereafter extends curvily and downwardly behind the strip 31 (best shown in FIGS. 4 and 5).

[0022] In this embodiment, each of the hooks 32 further has a second hook element 323 that is adapted to hang the jewelry as well, and that extends from the front side of the main body 321 above the first hook element 322, and a second engaging element 325 that projects from the back side of the main body 321 below the first engaging element 324 and that engages the strip 31. Particularly, the second engaging element 325 of each of the hooks 32 projects rearwardly from the back side of the main body 321 and inclines upwardly to engage a bottom face of the shoulder 313 (best shown in FIG. 5).

[0023] Assembly and installation of the modular hook strip 3 are described as follows. Referring to FIGS. 2 and 4, the first engaging element 324 is inserted into the respective groove 314 so as to engage the same. Afterward, the second engaging element 325 is moved in a direction of arrow (A) in FIG. 4. Referring to FIGS. 3 and 5, the second engaging element 325...
engages the shoulder 313. Therefore, each of the hooks 32 is securely attached to the strip 31. Through a plurality of screws (not shown) or other methods, the strip 31 can be firmly mounted on a surface of a support, such as a jewelry cabinet, a kitchen cabinet, or an indoor wall, thereby accomplishing installation of the assembled modular hook strip 3. The jewelry can be hung by virtue of the modular hook strip 3.

[0024] Referring to FIG. 6, the second preferred embodiment of the modular hook strip 3 according to the present invention is similar to the first preferred embodiment except that the strip 31 further has a plurality of positioning holes 315, and that the second engaging element 326 of each of the hooks 32 is retained in a respective one of the positioning holes 315. Specifically, the positioning holes 315 are provided in the top wall 312.

[0025] In this embodiment, the second engaging element 326 of each of the hooks 32 has a positioning neck portion 327 and an enlarged head 328 that is formed on one end of the positioning neck portion 327. Each of the positioning holes 315 has a large hole section 316 that permits the enlarged head 328 to extend therethrough, and a small hole section 317 that is connected to the large hole section 316 and that retains the positioning neck portion 327 therein.

[0026] In assembly, referring to FIGS. 6 and 7, the first engaging element 324 is inserted partially into the respective groove 314, and the enlarged head 328 of the second engaging element 326 is passed through the large hole section 316 of the respective positioning hole 315. Referring to FIGS. 6 and 8, when the first and second engaging elements 324, 326 are pressed downwardly, the first engaging element 324 engages the respective groove 314, and the positioning neck portion 327 of the second engaging element 326 is retained in the small hole section 317 of the respective positioning hole 315. Consequently, each of the hooks 32 is securely attached to the strip 31.

[0027] In view of the aforesaid, the modular hook strip 3 can be conveniently assembled. Furthermore, the hooks 32 and the strip 31 can be separated for packaging and shipping, thereby efficiently reducing total packaging volume. Compared to the conventional hook strip 1, an increased amount of the modular hook strips 3 can be packaged in one packaging box, and the transport cost of the modular hook strip 3 can thus be reduced.

[0028] While the present invention has been described in connection with what are considered the most practical and preferred embodiments, it is understood that this invention is not limited to the disclosed embodiments but is intended to cover various arrangements included within the spirit and scope of the broadest interpretation and equivalent arrangements.

What is claimed is:
1. A modular hook strip comprising:
a strip adapted to be mounted on a support, and having a top edge and a plurality of grooves that are indented from said top edge; and

a plurality of hooks, each of which has a main body that has a back side confronting said strip, and a front side opposite to said back side, a first hook element that extends from said front side of said main body, and a first engaging element that projects from said back side of said main body and that detachably engages a respective one of said grooves.

2. The modular hook strip as claimed in claim 1, wherein said first engaging element of each of said hooks projects rearwardly from said back side of said main body into the respective one of said grooves, and thereafter extends curvily and downwardly behind said strip.

3. The modular hook strip as claimed in claim 1, wherein each of said hooks further has a second engaging element that projects from said back side of said main body below said first engaging element and that engages said strip.

4. The modular hook strip as claimed in claim 3, wherein said strip further has a bottom wall that extends in a first direction, a top wall that extends in the first direction above said bottom wall and that is offset from said bottom wall, and a shoulder that extends forwardly from said bottom wall to said top wall so as to interconnect said top and bottom walls.

5. The modular hook strip as claimed in claim 4, wherein said second engaging element of each of said hooks projects rearwardly from said back side of said main body and inclines upwardly to engage said shoulder.

6. The modular hook strip as claimed in claim 3, wherein said strip further has a plurality of positioning holes, said second engaging element of each of said hooks being retained in a respective one of said positioning holes.

7. The modular hook strip as claimed in claim 6, wherein said second engaging element of each of said hooks has a positioning neck portion, and an enlarged head that is formed on one end of said positioning neck portion, said positioning hole having a large hole section that permits said enlarged head to extend therethrough, and a small hole section that is connected to said large hole section and that retains said positioning neck portion therein.

8. The modular hook strip as claimed in claim 1, wherein each of said hooks further has a second hook element that extends from said front side of said main body above said first hook element.

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