A clothing storage apparatus suspended from the ceiling of a room. The invention includes at least first and second rods mounted to the ceiling by flexible members, such as wire or decorative chain. A third rod is suspended below the first and second rods by flexible members, such as wire, extending from the first and second rods and attaching to the third rod. Clothing can be hung on the rods, such as by hanging the garments on hangers and hooking the hangers' hooks over the rods. The arrangement of the rods and flexible members prevents twisting of the rods.
SUSPENDED BABY CLOTHES HANGER

(b) CROSS-REFERENCES TO RELATED APPLICATIONS

[0001] This application claims the benefit of U.S. Provisional Application No. 60/649,856 filed Feb. 2, 2005.

(c) STATEMENT REGARDING FEDERALLY-SPONSORED RESEARCH AND DEVELOPMENT

[0002] (Not Applicable)

(d) REFERENCE TO AN APPENDIX

[0003] (Not Applicable)

(e) BACKGROUND OF THE INVENTION

[0004] 1. Field of the Invention

[0005] This invention relates generally to a device for hanging clothing.

[0006] 2. Description of the Related Art

[0007] Clothing storage is a requirement for any home or extended stay facility. Conventional clothing storage requires the clothing to be folded flat and placed in drawers or on shelves. An alternative to flat storage is a conventional clothing hanger over which each garment is hung, and then the hook portion of the hanger is placed around a rod or hook.

[0008] In typical homes using hangers for hanging clothing, the hangers are either hung on a rod in a closet or armoire. However, both closets and armoires must be opened in order to access the garments. This is especially difficult when a user is changing the clothing of a baby, someone in a wheelchair or other person who must be monitored at all times. In this situation, the person dressing the other person must use one hand to open the closet or armoire door, reach into the cavity thereof, and remove a garment. Often closets are not close to baby changing tables so that the user can avoid walking dangerously far from the table to obtain the clothing. Instead, the user must leave the proximity of the baby to obtain the clothing, thereby creating an opportunity for the child to roll off the table and be injured. Additionally, baby or toddler clothing takes up a very small amount of space below a closet rod, because it is so small relative to adult clothing, and there may be no closet space for any more clothing. Therefore, a substantial amount of wasted space exists in a closet used to hold children’s clothing. Finally, furniture is costly, and there may not be sufficient floor space for additional furniture.

[0009] Therefore, the need exists for a clothing storage apparatus that can be placed in a location that is convenient to the user, and also effectively stores clothes.

(f) BRIEF SUMMARY OF THE INVENTION

[0010] The invention is a clothes-hanging apparatus upon which clothing can be hung. The apparatus is mounted within an enclosed room having a ceiling. The apparatus comprises a first rod disposed below the ceiling and connected to the ceiling. The first rod is preferably connected to the ceiling by a first pair of flexible members extending downwardly from a first fastener in the ceiling to ends of the first rod. A second rod is disposed below the ceiling and connected to the ceiling by a second pair of flexible members extending downwardly from a second fastener in the ceiling to ends of the second rod. A third rod is disposed below the first and second rods. The third rod connects to the first rod by a third flexible member extending downwardly from the first rod. The third rod connects to the second rod by a fourth flexible member extending downwardly from the second rod. Preferably the flexible members are wires or other flexible material.

[0011] In one embodiment of the invention, the clothes-hanging apparatus has a fifth flexible member extending from the first rod to the third rod, and a sixth flexible member extending from the second rod to the third rod. This prevents twisting of the first and second rods. In a more preferred embodiment, the first and second rods are aligned substantially along a line that is substantially parallel to the third rod. Furthermore, a first end of the third rod is aligned substantially below a first end of the first rod and a second end of the third rod is aligned substantially below a first end of the second rod.

[0012] In another embodiment of the invention, the clothes-hanging apparatus has a support bar connecting the first rod to the second rod to maintain the first and second rods at preferred relative positions. The third flexible member in this embodiment is preferably mounted to the first rod substantially intermediate the first rod’s ends, and the fourth flexible member is mounted to the second rod substantially intermediate the second rod’s ends.

(g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

[0013] FIG. 1 is a front view illustrating an embodiment of the present invention.

[0014] FIG. 2 is a front view illustrating an embodiment of the present invention with clothing hanging thereon.

[0015] FIG. 3 is a front view illustrating another embodiment of the present invention.

[0016] FIG. 4 is a top view illustrating the embodiment of FIG. 3, and showing the angle between the upper rods.

[0017] FIG. 5 is a view in perspective illustrating the embodiment of FIG. 3 mounted in an operable position.

[0018] FIG. 6 is a front view illustrating another embodiment of the present invention.

[0019] In describing the preferred embodiment of the invention which is illustrated in the drawings, specific terminology will be resorted to for the sake of clarity. However, it is not intended that the invention be limited to the specific term so selected and it is to be understood that each specific term includes all technical equivalents which operate in a similar manner to accomplish a similar purpose. For example, the word connected or term similar thereto are often used. They are not limited to direct connection, but include connection through other elements where such connection is recognized as being equivalent by those skilled in the art.

(h) DETAILED DESCRIPTION OF THE INVENTION

[0020] One embodiment of the invention is shown in FIG. 1. The apparatus 10 includes a first flexible member, such as
the pair 22 of flexible members 24 and 26. The term “flexible member” is defined, for the purposes of this invention, as a member that can be bent by the average person. Flexible members include, but are not limited to wire, cable, string, rope, chain and straps. The term “flexible member” also includes a member that cannot be bent by the average person, but is connected at its opposing ends by means that permit latching motion that can be initiated by the average person. Such flexible members include, but are not limited to dowels connected at ends by screw eyelets, chains or other latching structures.

The flexible members 24 and 26 are thin wires that connect to a first fastener 28 mounted to the ceiling 12, preferably by fastening directly to a first ring 29. The ring 29 is then hung on the fastener 28. The fastener 28 is a screw eyelet or swag hook, but could be any fastener that mounts in a conventional ceiling. Preferably, the flexible members 24 and 26 extend through the ring 29 and either wrapped around the long section of wire or soldered or crimped to ensure that the wire does not come loose or have sharp ends. Alternatively, the flexible members 24 and 26 can be a single wire that is attached intermediate its length to the ring 29.

The flexible members 24 and 26 extend downwardly from the fastener 28 to opposing ends of a first rod 20. The flexible members 24 and 26 preferably mount to the first rod 20 at screw eyelets 25 and 27, respectively, in the same manner as to the fastener 28, but could mount using any conventional structure. The first rod 20 is preferably a wooden dowel, but could be any structure rigid enough to be suspended at or near opposing ends by the flexible members 24 and 26 and remain substantially straight when clothes are hung thereon, as described in more detail below. Examples of alternative rods include hollow metal tubes, composite (e.g., fiberglass in an epoxy matrix) rods, wooden boards and plastic tubes (e.g., poly vinyl chloride “PVC” pipes). Preferably, but not necessarily, a ball knot is mounted to the outer end of the rod 20 in order to beautify the rod 20 and prevent hangers placed outside of the eyelet 27 from sliding off of the rod 20.

The second rod 30 is mounted to the ceiling 12 using a second flexible member, such as the pair 32 of flexible members 34 and 36. The flexible members 34 and 36 are preferably substantially identical to the flexible members 24 and 26, and attach to the fastener 38 through the ring 39 and in a similar manner. The flexible members 34 and 36 attach to the second rod 30 at screw eyelets 35 and 37, respectively, in a similar manner as the flexible members of the rod 20. The second rod 30 is preferably substantially identical to the first rod 20, and preferably has a ball knot on the outer end.

A third rod 50 is mounted below the first and second rods, preferably with one end of the first rod 20 disposed directly above one end of the third rod 50, and with one end of the second rod 30 disposed directly above one end of the third rod 50, as shown in FIG. 1. This provides a pleasing appearance. The flexible member 52 extends downwardly from the first rod 20 and mounts to the third rod 50. The flexible member 56 extends downwardly from the first rod 20 and mounts to the third rod 50, but does so from the end of the first rod 20 that is opposite the attachment end of the flexible member 52. The flexible members 52 and 56 mount at opposite ends to respective screw eyelets 51, 53, 55 and 57. As noted above, the flexible members can mount to the rods and ceiling by any conventional means. Similar flexible members 62 and 66 extend from the second rod 30 to the third rod 50, and attach at screw eyelets 61, 63, 65 and 67. It is possible to hang or tie decorative strips of cloth, such as the strips 70, 72 and 74, to the flexible members in order to cover the mounting structure, or simply add color and other decorative features to the invention. This also has functional benefits, because it prevents cuts or puncture wounds from the exposed wire ends. The soldering or crimping structures are not used to cover these wire ends. Ball knobs are also mounted to opposite ends of the third rod 150.
the invention to embodiments having more than the number of rods shown and described in detail.

[0030] In yet another alternative embodiment shown in FIG. 6, the apparatus 210 has an upper rod 220 and a lower rod 250 attached with flexible members 222, 224, 226 and 228 mounted to the rods as in the embodiment of FIG. 1. This embodiment shows that it is possible to have a single upper and a single lower rod, and still obtain some of the benefits of the invention.

[0031] The invention has the significant advantage that the rods upon which the garments are hung will not twist, which would lead to tangling of the flexible members, obstruction of the clothing and other problems. The upper rods 20 and 30 of the apparatus 10 will not twist, because the flexible members connecting them to the lower rod 50 prevent such twisting. In the apparatus 110, although there is only one flexible member connecting the upper rods 120 and 130 to the lower rod 150, the support bar 125 rigidly retains the rods 120 and 130 in the position desired. Therefore, no twisting is possible without substantial force.

[0032] In the embodiments shown, the upper rods are approximately 16 inches long each, and the lower rod is approximately 39 inches long, not including the ball knobs, which add about two inches of length each. The lower rod hangs approximately 36 inches below the upper rods. Thus, approximately six linear feet of hanging space is created without the need for an enclosed closet. Of course, the length of each rod, and the spacing between rods, can vary substantially according to space restrictions or aesthetic purposes.

[0033] Because the invention can be suspended anywhere desired in a room, it can be placed directly adjacent, for example, a baby changing table. This avoids the danger of having to leave a baby on the table momentarily to obtain a change of clothing in a dresser, closet or armoire nearby. Even this brief moment is sufficient for a baby to roll off the table and be harmed, and the invention avoids this danger.

[0034] While certain preferred embodiments of the present invention have been disclosed in detail, it is to be understood that various modifications may be adopted without departing from the spirit of the invention or scope of the following claims.

The invention claimed is:

1. A clothes-hanging apparatus from which clothing can be suspended, the apparatus mounted within an enclosed room having a ceiling, the apparatus comprising:

   (a) a first rod disposed substantially horizontally below the ceiling and connected to the ceiling by at least a first flexible member;

   (b) a second rod disposed below the ceiling and connected to the ceiling by at least a second flexible member;

   (c) a third rod disposed below the first and second rods, the third rod connected to the first rod by at least a third flexible member and connected to the second rod by at least a fourth flexible member.

2. The clothes-hanging apparatus in accordance with claim 1, further comprising a fifth flexible member extending from the first rod to the third rod, and a sixth flexible member extending from the second rod to the third rod.

3. The clothes-hanging apparatus in accordance with claim 2, wherein the first and second rod are aligned substantially along a line that is substantially parallel to the third rod, and a first end of the third rod is aligned substantially below a first end of the first rod and a second end of the third rod is aligned substantially below a first end of the second rod.

4. The clothes-hanging apparatus in accordance with claim 2, wherein the first flexible member further comprises a pair of flexible members, each of said pair of flexible members mounted at one end to a first fastener in the ceiling, and at an opposing end to an end of the first rod.

5. The clothes-hanging apparatus in accordance with claim 4, wherein the second flexible member further comprises a pair of flexible members, each of said pair of flexible members mounted at one end to a second fastener in the ceiling, and at an opposing end to an end of the second rod.

6. The clothes-hanging apparatus in accordance with claim 1, further comprising a support bar connecting the first rod to the second rod to maintain the first and second rods at preferred relative positions.

7. The clothes-hanging apparatus in accordance with claim 6, wherein the third flexible member is mounted to the first rod substantially intermediate the first rod’s ends, and the fourth flexible member is mounted to the second rod substantially intermediate the second rod’s ends, and the first and second rods are substantially askew to the third rod.

8. The clothes-hanging apparatus in accordance with claim 7, wherein the first flexible member further comprises a pair of flexible members, each of said pair of flexible members mounted at one end to a first fastener in the ceiling, and at an opposing end to an end of the first rod.

9. The clothes-hanging apparatus in accordance with claim 8, wherein the second flexible member further comprises a pair of flexible members, each of said pair of flexible members mounted at one end to a second fastener in the ceiling, and at an opposing end to an end of the second rod.

10. A clothes-hanging apparatus from which clothing can be suspended, the apparatus mounted within an enclosed room having a ceiling, the apparatus comprising:

    (a) a first rod disposed substantially horizontally below the ceiling and connected to the ceiling by a first flexible member and a second flexible member;

    (b) a second rod disposed below the first rod, the second rod connected to the first rod by a third flexible member and a fourth flexible member.

11. The clothes-hanging apparatus in accordance with claim 10, further comprising a fifth flexible member and a sixth flexible member extending from the first rod to the second rod.

12. The clothes-hanging apparatus in accordance with claim 11, wherein the first and second rods are substantially parallel.

13. A clothes-hanging apparatus upon which clothing can be hung, the apparatus mounted within an enclosed room having a ceiling, the apparatus comprising:

    (a) a first rod disposed substantially horizontally below the ceiling and connected to the ceiling by a first pair of flexible members extending downwardly from a first fastener in the ceiling to ends of the first rod;

    (b) a second rod disposed substantially horizontally below the ceiling and connected to the ceiling by a second pair
of flexible members extending downwardly from a second fastener in the ceiling to ends of the second rod;

(c) a third rod disposed below the first and second rods, the third rod connected to the first rod by a third flexible member extending downwardly from the first rod and the third rod is connected to the second rod by a fourth flexible member extending downwardly from the second rod.

14. The clothes-hanging apparatus in accordance with claim 13, further comprising a fifth flexible member extending from the first rod to the third rod, and a sixth flexible member extending from the second rod to the third rod.

15. The clothes-hanging apparatus in accordance with claim 14, wherein the first and second rods are aligned substantially along a line that is substantially parallel to the third rod, and a first end of the third rod is aligned substantially below a first end of the first rod and a second end of the third rod is aligned substantially below a first end of the second rod.

16. The clothes-hanging apparatus in accordance with claim 13, further comprising a support bar connecting the first rod to the second rod to maintain the first and second rods at preferred relative positions.

17. The clothes-hanging apparatus in accordance with claim 16, wherein the third flexible member is mounted to the first rod substantially intermediate the first rod’s ends, and the fourth flexible member is mounted to the second rod substantially intermediate the second rod’s ends, and the first and second rods are substantially askew the third rod.