Title: A DEVICE FOR ORGANIZING OBJECTS

Abstract: This invention relates to a novel device for organizing objects containing at least one aperture there through and an accompanying efficient method for storing the objects using the device. In one of its embodiments, this invention comprises an elongated strand comprising a first end and a second end, a support member integral with or attached to the first end, and a retention member integral with or attached to the second end. Furthermore, the retention member is sized and configured so that the retention member may be threaded through the aperture of each of the objects in a manner in which at least a portion of the elongated strand also is threaded through the aperture of each of the objects and thereafter at least one dimension of the retention member is of a sufficient magnitude relative to a largest diameter of the aperture formed by a last one of the objects through which the retention member is threaded that the retention member is inhibited from threading back through the aperture formed by the last one of the objects.
A DEVICE FOR ORGANIZING OBJECTS

TECHNICAL FIELD
[0001] This invention relates to devices for organizing a plurality of objects, the objects defining at least one aperture there through, and related methods for storing objects.

BACKGROUND
[0002] Conventional approaches to organizing objects have varied greatly in the past depending on the type and size of the objects and the purpose for organizing the objects. Popular solutions to the organization of objects include the placement of objects in bins or other like compartments within a partially enclosed structure. However, particular problems may arise if the objects are of certain dimensions, need to be inspected or counted quickly, or transported on short notice. Additionally, the organized objects may not be easily accessible and may require substantial time to access particular objects when they are stored amongst a plurality of different objects. This is especially true for objects which, by their nature, share common characteristics but come in a wide variety of shapes and sizes. Some of the many examples of such objects are hardware fittings, pipe fittings, sockets, gaskets, o-rings, washers, nuts, seals, bushings, tape rolls, wrenches and the like.

[0003] Thus, a need exists for a low cost device for organizing objects to allow a person to easily and efficiently inspect and, if necessary, access the organized objects. Furthermore, a need also exists for a device for organizing objects which is easily transportable in case the objects needed to be moved from one location to another, while retaining the capacity to be used for storage in a primary location.

SUMMARY OF THE INVENTION
[0004] The present invention addresses these needs by providing, in one embodiment, a device for organizing a plurality of objects, the objects containing at least one aperture there through. The device allows one to easily and efficiently inspect and access the organized objects. Additionally, certain embodiments this invention enable a user to transport the organized objects
effectively from one location to another and may also enable a user to store the objects in a primary location.

[0005] Specifically, in one of its embodiments, this invention comprises an elongated strand comprising a first end and a second end, a support member integral with or attached to the first end, and a retention member integral with or attached to the second end. The retention member is sized and configured so that the retention member may be threaded through the aperture of each of the objects in a manner in which at least a portion of the elongated strand also is threaded through the aperture of each of the objects and thereafter at least one dimension of the retention member is of a sufficient magnitude relative to a largest diameter of the aperture formed by a last one of the objects through which the retention member is threaded that the retention member is inhibited from threading back through the aperture formed by the last one of the objects.

[0006] In another embodiment, this invention comprises a plurality of elongated strands, each elongated strand comprising a first end and a second end, a support member integral with or attached to the first ends of the plurality of elongated strands in a fixed arrangement, and for each of the strands, a retention member integral with or attached to the second end. The retention member is sized and configured so that the retention member may be threaded through the aperture of each of the objects in a manner in which at least a portion of the elongated strand also is threaded through the aperture of each of the objects and thereafter at least one dimension of the retention member is of a sufficient magnitude relative to a largest diameter of the aperture formed by a last one of the objects through which the retention member is threaded that the retention member is inhibited from threading back through the aperture formed by the last one of the objects.

[0007] Another embodiment of this invention is a method for organizing objects, each of the objects forming at least aperture there through, the method comprises providing a device comprising an elongated strand comprising a first end and a second end, a support member integral with or attached to the first end respectively, and a retention member integral with or attached to the second end respectively; inserting the retention member and at least a portion of
the elongated strand through the at least one aperture of each of the objects; and disposing the retention member so that at least one dimension of the retention member is greater than the largest diameter of the at least one aperture of a last object to thereby retain a plurality of the objects on the elongated strand.

[0008] Still further, in an alternate embodiment, this invention is a method for organizing objects, each of the objects forming at least aperture there through, the method comprises providing a device comprising a plurality of elongated strands, each elongated strand comprising a first end and a second end, a support member integral with or attached to the first ends of the plurality of elongated strands in a fixed arrangement, and a plurality of retention members, each integral with or attached to a respective second end of one of the plurality of elongated strands; inserting at least one of the retention members and at least a portion of the elongated strand through the at least one aperture of each of the objects; and disposing the at least one of the retention members so that at least one dimension of the retention member is greater than the largest diameter of the at least one aperture of a last object to thereby retain a plurality of the objects on the elongated strand.

[0009] The above and other embodiments will be apparent from the ensuing description and the appended claims.

**BRIEF DESCRIPTION OF THE DRAWINGS**

[0010] Figure 1 is a side view of one embodiment of the present invention.

[0011] Figure 2 is a side view of an alternate embodiment of the present invention.

[0012] Figure 3 is a side view of another alternate embodiment of the present invention.

[0013] Figure 4 is a side view of the retention member of an alternative embodiment of the invention.

[0014] Figure 5 is a side view of the retention member of another alternate embodiment of the invention.

[0015] Figure 6 is a side view of yet another embodiment of the present invention.

[0016] Like reference numbers or letters are used in the figures to reference like parts or
components amongst the several figures.

**FURTHER DETAILED DESCRIPTION OF THE INVENTION**

[0017] As stated above, this invention comprises a device for organizing objects containing at least one aperture there through. Figure 1 shows the invention generally comprising an elongated strand 10, a support member 12, and a retention member 14. Elongated strand 10 comprises a first end 16 and a second end 18. Support member 12 is either integral with or attached to first end 16. Retention member 14 is either integral with or attached to second end 18. Retention member 14 is sized and configured so that retention member 14 may be threaded through the aperture 20 of each of objects 22 in a manner in which at least a portion of elongated strand 10 also is threaded through aperture 20 of each of objects 22 and thereafter at least one dimension (shown by line A-A) of retention member 14 is of a sufficient magnitude relative to a largest diameter (shown by line B-B) of aperture 20 formed by a last one of objects 22 through which retention member 14 is threaded that retention member 14 is inhibited from threading back through aperture 20 formed by the last one of the objects 22.

[0018] The elongated strand can be of any length desired with consideration given to, among other factors, the quantity of objects to be organized, the size of the objects, and the total weight of the objects. The diameter of the elongated strand may also vary and is dependent on similar factors as the length of the elongated string. Although elongated strand 10 in Figure 1 is a rope, the material of the elongated strand may vary and should be chosen based on the object organized. The strength of the material should be sufficient to support the objects and the retention member. Suitable materials for the elongated strand include rope, nylon, and metal wire, as well as a wide variety of materials which may be chosen with consideration to the objects organized, the retention member and support member used, the manner of formation, and its intended use.

[0019] First end 16 of elongated strand 10 is integral with or attached to support member 12 as shown in Figure 1. In Figure 1, first end 16 of elongated strand 10 is integral with support member 12. Support member 12 is inserted through first end 16 of strand 10 in such a manner as
to become integral with strand 10. Although first end 16 is integral with support member 12 in Figure 1, first end 16 may be attached to support member 12 in a variety of ways, including taping, gluing, tying, or any like attachment means to produce a firm joint-like attachment 24 of first end 16 and support member 12. The term "attaching" may also be construed to include such means as inserting the first end of the elongated strand through the support member and thereafter tying the first end in a knot-like form to restrict the elongated strand from separating from the support member. Attachment 24 of first end 16 and support member 12 is such that elongated strand 10 is free to pivot about joint-like attachment 24 in any direction with the only constraint occurring from support member 12. Second end 18 of elongated strand 10 is integral with or attached to retention member 14. In Figure 1, retention member 14 is inserted through second end 18 of elongated strand 10. Although second end 18 is integral with retention member 14 in Figure 1, and as such, is attached in the same manner as first end 16, the second end may be attached in a different manner. The manners of attachment available to the second end are the same as the attachments listed above with respect to the first end. The term "attaching" with respect to the second end and the retention member may be construed in the same manner as defined above with respect to the support member. The ability of the second end to form a joint-like attachment to the retention member is an essential aspect of this invention.

[0020] The support member 12 as shown in Figure 1 is integral with or attached to first end 16 of elongated strand 10. The support member may be made from a variety of objects. An important factor in choosing the material constituting the support member is the strength of the material with respect to the amount of weight the support member will be supporting. Suitable materials for the support member include plastic, metal, or wood. Such a list of materials is nonlimiting as the support member may be made from any material that is of sufficient strength to support the weight of the elongated strand, retention member, and the objects organized. As shown in Figure 1, support member 12 is a cylindrical rod. The structure of the support member may vary and may include tubes, cylinders, pipes, or like structures. The support member may also comprise a structure suitable for transporting this invention from one location to another. Such a suitable structure may include a curved surface suitable for gripping the support member.
As shown in Figure 1, retention member 14 is integral with or attached to second end 18 of elongated strand 10. The retention member is sized and configured so that the retention member may be threaded through the aperture of each of the objects in a manner in which at least a portion of the elongated strand also is threaded through the aperture of each of the objects and thereafter at least one dimension of the retention member is of a sufficient magnitude relative to a largest diameter of the aperture formed by a last one of the objects through which the retention member is threaded that the retention member is inhibited from threading back through the aperture formed by the last one of the objects. In Figure 1, retention member 14 is a tube with a first arm 26 and a second arm 28. Although retention member 14 is a tube in Figure 1, the structure of the retention member may vary given consideration to the objects organized and its intended use.

In alternate embodiments of Figure 2 and 3, retention member 14 is characterized by having at least one narrow form having a maximum width dimension (shown by line C-C) and at least one extended form having a maximum width dimension (shown by line D-D) which is greater than the maximum width dimension C-C of the narrow form, retention member 14 being sized and configured so that retention member 14 in a form with narrow width C-C may be threaded through at least one aperture 20 in a manner in which at least a portion of elongated strand 10 is threaded through at least one aperture 20 and retention member 14 in a form with extended width D-D thereafter extends beyond largest diameter B-B of at least one aperture 20 formed by a last object 22 through which retention member 14 was threaded. In Figure 2, retention member 14 comprises a stem base end 32 and a dome-shaped end 34. The dome-shaped end is preferably made from a temporarily compressible material. The stem base end and dome-shaped end are preferably a one-piece component. The narrow form comprises the dome-shaped end having pressure applied to its surface in such a manner as to minimize the surface area of the dome-shaped end to allow for easier passage of the retention member and at least a portion of the elongated strand through the at least one aperture. The extended form comprises the dome-shaped end having no external forces applied to its surface beyond normal atmospheric conditions.

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[0023] In Figure 3, retention member 14 comprises a central member 36 attached to a first collapsible arm 38 and a second collapsible arm 40. The central member and the first collapsible arm are preferably attached by hinged means, but may be attached by other like means. The central member and the second collapsible arm are attached in the same manner as the central member and first collapsible arm. The form of retention member 14 having narrow width C-C in Figure 3 comprises first collapsible arm 38 and second collapsible arm 40 rotating inward from an applied external force towards central member 36 about a pivot position 42 created by the hinged means or other like means in such a manner as to allow for easier passage of retention member 14 and at least a portion of elongated strand 10 through at least one aperture 20. The extended form of retention member 14 having extended width D-D in Figure 3 comprises first collapsible arm 38 and second collapsible arm 40 expanded to the normal quiescent shape with no external forces applied to their surfaces beyond those of normal atmospheric conditions.

[0024] In an alternate embodiment shown in Figure 6, this invention comprises a support member, wherein the support member is a retention member 14. In this embodiment, each retention member is sized and configured so that each retention member may be threaded through the aperture of each of the objects in a manner in which at least a portion of the elongated strand also is threaded through the aperture of each of the objects and thereafter at least one dimension of each retention member is of a sufficient magnitude relative to a largest diameter of the aperture formed by a last one of the objects through which each retention member is threaded that each retention member is inhibited from threading back through the aperture formed by the last one of the objects. It should be appreciated that the retention members may be of the same type or may be different. As shown in Figure 6, each retention member 14 retains objects 22; however, it should be appreciated that at least one retention member 14 may function as a support member. Elongated strand 10 is folded at a pivot point 56 as shown in Figure 6 to facilitate storage or transport. It should be appreciated that the elongated strand of this embodiment may be kept taut or folded at any angle desired.

[0025] The method for organizing objects, each of the objects forming at least one aperture there through, comprises providing a device comprising an elongated strand comprising a first end and
a second end, a support member integral with or attached to the first end respectively, and a retention member integral with or attached to the second end respectively. The retention member and at least a portion of the elongated strand is inserted through the at least one aperture of each of the objects. The retention member is then disposed so that at least one dimension of the retention member is greater than the largest diameter of the at least one aperture of a last object to thereby retain a plurality of the objects on the elongated strand.

[0026] In the alternate embodiments of Figure 2 and 3, retention member 14 in a form with narrowed width C-C is threaded through at least one aperture 20 in a manner in which at least a portion of elongated strand 10 is threaded through at least one aperture 20. Retention member 14 is then disposed so that the extended form of retention member 14 with width D-D thereafter extends beyond largest diameter B-B of aperture 20 formed by a last object 22 through which retention member 14 was threaded to thereby retain a plurality of the objects 22 on elongated strand 10.

[0027] In an alternate embodiment shown in Figure 4, this invention comprises a plurality of elongated strands 44, each elongated strand 10 comprising first end 16 and second end 18, support member 12 integral with or attached to first ends 16 of plurality of elongated strands 44 in a fixed arrangement 46, and for each of the strands 10, retention member 14 is integral with or attached to second end 18. In Figure 4, plurality of elongated strands 44 comprises five elongated strands 10. However, the plurality of elongated strands may comprise a different number of elongated strands limited only by the support member. The elongated string can be of any length desired with consideration given, among other factors, to the quantity of objects to be organized, the size of the objects, and the total weight of the objects. The diameter of the elongated string may also vary and is dependent on similar factors as the length of the elongated string. Although the material of the elongated strands 10 is rope in Figure 4, the material of the elongated strands may vary and should be chosen based on the object organized. The strength of the material should be sufficient to support the objects and the retention member. Suitable materials for the elongated strand include rope, nylon, and metal wire, as well as a wide variety of materials which may be chosen with consideration to the objects organized, the retention
member and support member used, the manner of formation, and its intended use.

[0028] First end 16 of each elongated strand 10 is integral with or attached to support member 12 as shown in Figure 4. In Figure 4, first end 16 of each elongated strand 10 is attached by means of inserting first end 16 through an opening 48 in support member 12 and tying first end 16 in a knot 50. Although this is the preferred attachment means in Figure 4, the first end may be attached in a variety of manners including taping, gluing, tying, or any like attachment means to produce a firm joint-like attachment of the first end and the support member. The first end may also be inserted through an opening into the support member and then inserted back through a different opening in the support member as an attachment means whereby a portion of the elongated strand remains in the support member. The attachment of the first end and the support member is such that each elongated strand is free to pivot about the joint-like attachment in any direction with the only constraint occurring from the support member. In Figure 4, each elongated strand 10 is integral with or attached to support member 12 in fixed arrangement 46. Fixed arrangement 46 comprises five substantially similar spaced openings 48 in which first ends 16 of elongated strands 10 are inserted. However, the fixed arrangement may vary depending on the spacing of the openings and the objects organized and intended use. The second end of each elongated strand is integral with or attached to the retention member. In Figure 4, second end 18 is attached by means of inserting second end 18 through an orifice 52 in retention member 14 and tying second end 18 in knot 50. Although this is the method of attachment in Figure 4, and is the same manner of attachment as the first end, the second end may be attached in a different manner. The manners of attachment available to the second end are the same as the attachments listed above with respect to the first end. The ability of the second end to form a joint-like attachment to the retention member is an essential aspect of this invention.

[0029] The support member 12 as shown in Figure 4 is integral with or attached to the first end 16 of each elongated strand 10. The support member may be made from a variety of objects. An important factor in choosing the material constituting the support member is the strength of the material with respect to the amount of weight the support member will be supporting. Suitable materials for the support member include plastic, metal, or wood. Such a list of materials is
nonlimiting as the support member may be made from any material that is of sufficient strength to support the weight of the elongated strand, retention member, and the objects organized. As shown in Figure 2, support member 12 is a cylindrical pipe. The structure of the support member may vary and may include tubes, cylinders, pipes, or like structures. The support member may also contain a structure suitable for transporting this invention from one location to another. Such a suitable structure may include a curved surface suitable for gripping the support member.

[0030] In an alternate embodiment shown in Figure 5, this invention further comprises support member 12, wherein support member 12 is an intertwinement 54 of first ends 16. Intertwinement 54 in Figure 5 is shown to be a knot formed by a tying means but may be formed by other like means such as splicing.

[0031] As shown in Figs. 4 and 5, retention member 14 is integral with or attached to respective second end 18 of one of plurality of elongated strands 44. The retention member is sized and configured so that the retention member may be threaded through the aperture of each of the objects in a manner in which at least a portion of the elongated strand also is threaded through the aperture of each of the objects and thereafter at least one dimension of the retention member is of a sufficient magnitude relative to a largest diameter of the aperture formed by a last one of the objects through which the retention member is threaded that the retention member is inhibited from threading back through the aperture formed by the last one of the objects. In Figs. 4 and 5, retention member 14 is a tube with first arm 24 and second arm 26. Although retention member 14 is a tube in Figure 1, the structure of the retention member may vary given consideration to the objects organized and its intended use.

[0032] The retention member in Figures 4 and 5 may comprise the alternate embodiments of Figure 2 and 3. In Figures 2 and 3, retention member 14 is characterized by having at least one narrow form with narrow width C-C and at least one extended form with extended width D-D, retention member 14 being sized and configured so that retention member 14 in narrowed form may be threaded through at least one aperture 20 in a manner in which at least a portion of
elongated strand 10 is threaded through at least one aperture 20 and retention member 14 in extended form thereafter has an extended width D-D which extends beyond largest diameter B-B of at least one aperture 20 formed by a last object through which retention member 14 was threaded. In Figure 2, retention member 14 comprises stem base end 32 and dome-shaped end 34. The dome-shaped end is preferably made from a temporarily compressible material. The stem base end and dome-shaped end are preferably a one-piece component. The narrow form comprises the dome-shaped end having pressure applied to its surface in such a manner as to minimize the surface area of the dome-shaped end to allow for easier passage of the retention member and at least a portion of the elongated strand through the at least one aperture. The extended form comprises the dome-shaped end having no external forces applied to its surface beyond atmospheric conditions.

[0033] In Figure 3, retention member 14 comprises central member 36 attached to first collapsible arm 38 and second collapsible arm 40. The central member and the first collapsible arm are preferably attached by hinged means, but may be attached by other like means. The central member and the second collapsible arm are attached in the same manner as the central member and first collapsible arm. Narrow form retention member 14 with width C-C in Figure 3 comprises first collapsible arm 38 and second collapsible arm 40 rotating inward from an applied external force towards central member 36 about pivot position 42 created by the hinged means or other like means in such a manner as to allow for easier passage of retention member 14 and at least a portion of elongated strand 10 through at least one aperture 20. Extended form of retention member 14 with extended width D-D in Figure 3 comprises first collapsible arm 38 and second collapsible arm 40 having no external forces applied to its surface beyond normal atmospheric conditions.

[0034] In an alternate embodiment, this invention comprises a method for organizing objects, each of the objects forming at least one aperture through, comprises providing a device comprising a plurality of elongated strands, each elongated strand comprising a first end and a second end, a support member integral with or attached to the first ends of the plurality of
elongated strands in a fixed arrangement, and a plurality of retention members, each integral with or attached to a respective second end of one of the plurality of elongated strands. At least one of the retention members and at least a portion of at least one of the elongated strands is inserted through the at least one aperture of at least one of the objects. The retention member is then disposed so that at least one dimension of the retention member is greater than the largest diameter of the at least one aperture of a last object to thereby retain a plurality of the objects on the at least one of the elongated strands.

[0035] In the alternate embodiments of Figure 2 and 3, retention member 14 in narrowed form with width C-C is threaded through at least one aperture 20 in a manner in which at least a portion of elongated strand 10 is threaded through at least one aperture 20. Retention member 14 is then disposed so that the extended form with width D-D thereafter extends beyond largest diameter B-B of aperture 20 formed by a last object 22 through which retention member 14 was threaded to thereby retain a plurality of the objects 22 on elongated strand 10.

[0036] Except as may be expressly otherwise indicated, the article "a" or "an" if and as used herein is not intended to limit, and should not be construed as limiting, the description or a claim to a single element to which the article refers. Rather, the article "a" or "an" if and as used herein is intended to cover one or more such elements, unless the text expressly indicates otherwise.

[0037] While it is apparent that the invention herein disclosed fulfills the objects previously described, it will be appreciated that numerous modifications and embodiments of this invention will be evident or may be devised by those skilled in the art, and it is intended that the appended claims cover all such modifications, embodiments, and all equivalents thereof, as fall within the true spirit and scope of the present invention.
Claims:

1. A device for organizing or storing a plurality of objects, each object forming at least one aperture through, the device comprising:
   
   (a) an elongated strand comprising a first end and a second end;
   
   (b) a support member integral with or attached to the first end; and
   
   (c) a retention member integral with or attached to the second end,

   the retention member being sized and configured so that the retention member may be threaded through the aperture of each of the objects in a manner in which at least a portion of the elongated strand also is threaded through the aperture of each of the objects and thereafter at least one dimension of the retention member is of a sufficient magnitude relative to a largest diameter of the aperture formed by a last one of the objects through which the retention member is threaded that the retention member is inhibited from threading back through the aperture formed by the last one of the objects.

2. A device for organizing objects according to claim 1, wherein the retention member is characterized at least by having at least one narrow form and at least one extended form, the retention member being sized and configured so that the retention member in the narrowed form may be threaded through the at least one aperture in a manner in which at least a portion of the elongated strand is threaded through the at least one aperture and the retention member in the extended form thereafter extends beyond the largest diameter of the at least one aperture formed by the last object through which the retention member was threaded.

3. A device for organizing objects according to claim 1 or 2, wherein the support member is a retention member.

4. A device for organizing objects according to claim 1 or 2 wherein the elongated strand is a rope.
5. A device for organizing objects according to claim 4, wherein the retention member is a tube.

6. A device for organizing objects according to claim 5, wherein the support member is a cylindrical rod.

7. A device for organizing objects, the objects each forming at least one aperture there through, the device comprising:
   (a) a plurality of elongated strands, each elongated strand comprising a first end and a second end;
   (b) a support member integral with or attached to the first ends of the plurality of elongated strands in a fixed arrangement; and
   (c) for each of the strands, a retention member integral with or attached to the second end,

the retention member being sized and configured so that the retention member may be threaded through the aperture of each of the objects in a manner in which at least a portion of the elongated strand also is threaded through the aperture of each of the objects and thereafter at least one dimension of the retention member is of a sufficient magnitude relative to a largest diameter of the aperture formed by a last one of the objects through which the retention member is threaded that the retention member is inhibited from threading back through the aperture formed by the last one of the objects.

8. A device for organizing objects according to claim 7, wherein the retention member is characterized at least by having at least one narrow form and at least one extended form, the retention member being sized and configured so that the retention member in the narrow form may be threaded through the at least one aperture in a manner in which at least a portion of the elongated strand is threaded through the at least one aperture and at least one dimension of the retention member in the extended form thereafter is greater than the largest diameter of the at least one aperture formed by a last object through which the retention member was threaded.
9. A device for organizing objects according to claim 7 or 8, wherein each of the plurality of elongated strands is rope.

10. A device for organizing objects according to claim 9, wherein the retention member is a tube.

11. A device for organizing objects according to claim 10, wherein the support member is a cylindrical pipe.

12. A device for organizing objects according to claim 10, wherein the support member is an intertwinement of the first ends.

13. A method for organizing objects, each of the objects forming at least one aperture there through, the method comprising:
   providing a device comprising:
   (a) an elongated strand comprising a first end and a second end;
   (b) a support member integral with or attached to the first end respectively; and
   (c) a retention member integral with or attached to the second end respectively;
   inserting the retention member and at least a portion of the elongated strand through the at least one aperture of each of the objects; and
   disposing the retention member so that at least one dimension of the retention member is greater than the largest diameter of the at least one aperture of a last object to thereby retain a plurality of the objects on the elongated strand.

14. A method for organizing objects, each of the objects forming at least one aperture there through, the method comprising:
providing a device comprising:

(a) a plurality of elongated strands, each elongated strand comprising a first end and a second end;

(b) a support member integral with or attached to the first ends of the plurality of elongated strands in a fixed arrangement; and

(c) a plurality of retention members, each integral with or attached to a respective second end of one of the plurality of elongated strands;

inserting at least one of the retention members and at least a portion of at least one of the elongated strands through the at least one aperture of at least one of the objects; and

disposing the at least one of the retention members so that at least one dimension of the retention member is greater than the largest diameter of the at least one aperture of a last object to thereby retain a plurality of the objects on the at least one of the elongated strands.
**INTERNATIONAL SEARCH REPORT**

International application No
PCT/ISA/2008/060889

**A. CLASSIFICATION OF SUBJECT MATTER**

*B65D 69/00(2006.01)i, B65D 63/00(2006.01)i*

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 8 B65D, B65B, A47H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean Utility Models and Applications for Utility Models since 1975
Japanese Utility Models and Applications for Utility Models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
eKIPASS(KIPO internal) & Keywords thread, organize, store, aperture

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

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<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim</th>
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<td>US 5321931 A (YVES J BLUTEAU) 21 June 1994 See Figure 2 and Column 6 Line 19 - Column 7 Line 42</td>
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<td>A</td>
<td>JP 2002-238736 A (MIYAKE JUICHI) 27 August 2002 See Figure 1 and Abstract</td>
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Further documents are listed in the continuation of Box C

See patent family annex

*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

*X* document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

*Y* document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

*"&" document member of the same patent family

Date of the actual completion of the international search
22 AUGUST 2008 (22 08 2008)

Date of mailing of the international search report
22 AUGUST 2008 (22.08.2008)

Name and mailing address of the ISA/KR
Korean Intellectual Property Office
Government Complex-Daejeon, 139 Seoansa-ro, Seogu, Daejeon 302-701, Republic of Korea
Facsimile No 82-42-472-7140

Authorized officer
KIM, Tae Soo
Telephone No 82-42-481-8468

Form PCT/ISA/210 (second sheet) (My 2008)
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