COLLAPSIBLE AND/OR ERECTABLE
SUBSTANTIALLY EGG-SHAPED
CONTAINER

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ABSTRACT

A collapsible and/or eretable, shape-sustaining substantially egg-shaped container is selectively moveable from a substantially erect condition to a substantially collapsed condition and/or from a substantially erect condition to a substantially collapsed condition. The collapsible and/or eretable, shape-sustaining, substantially egg-shaped container may include first and second portions, wherein at least one of the first and second portions is provided with at least one condition modifying element to facilitate erecting and/or collapsing the container. The collapsible and/or eretable, shape-sustaining, substantially egg-shaped container may also include a shape-sustaining member for maintaining the container in a substantially erect condition as well as a retaining member for maintaining the container is a substantially collapsed condition.
COLLAPSIBLE AND/OR ERECTABLE SUBSTANTIALLY EGG-SHAPED CONTAINER

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This application claims benefit under 35 U.S.C. 119(e) of U.S. Ser. No. 60/701,665, filed Jul. 22, 2005, the contents of which are hereby expressly incorporated herein in their entirety by reference.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING

[0002] FIG. 1 is a front elevational view of a collapsible and/or erectable substantially egg-shaped container constructed in accordance with the present invention shown in a substantially erected condition.

[0003] FIG. 2 is a partially cut-away exploded front elevational view of the collapsible and/or erectable substantially egg-shaped container of FIG. 1 shown in a substantially collapsed condition.

[0004] FIG. 3 is a front elevational view of the collapsible and/or erectable substantially egg-shaped container of FIG. 1 shown in a substantially erected condition.

[0005] FIG. 4 is another embodiment of a collapsible and/or erectable substantially egg-shaped container constructed in accordance with the present invention shown in a substantially erected condition.

[0006] FIG. 5 is a front elevational view of the collapsible and/or erectable substantially egg-shaped container of FIG. 4 shown in a substantially collapsed condition.

[0007] FIG. 6 is a partially cut-away front elevational view of another embodiment of a collapsible and/or erectable substantially egg-shaped container constructed in accordance with the present invention shown in a substantially erected condition showing a hinged connection of two rigid segments of the substantially egg-shaped container.

[0008] FIG. 7 is a perspective view of a lower portion of the collapsible and/or erectable substantially egg-shaped container of FIG. 6 shown in a closed, substantially erected condition.

[0009] FIG. 8 is a perspective view of the lower portion of the collapsible and/or erectable substantially egg-shaped container of FIG. 7 shown in an open, substantially erected condition.

[0010] FIG. 9 is a front elevational view of another embodiment of a collapsible and/or erectable substantially egg-shaped container constructed in accordance with the present invention shown in a closed, erected condition showing a hinged connection of two segments of the substantially egg-shaped container.

[0011] FIG. 10 is a side elevational view of the collapsible and/or erectable substantially egg-shaped container of FIG. 9 shown in an open, erected condition.

[0012] FIG. 11 is a front elevational view of the collapsible and/or erectable substantially egg-shaped container of FIG. 9 shown in a substantially collapsed condition.

[0013] FIG. 12 is a side elevational view of the collapsible and/or erectable substantially egg-shaped container of FIG. 9 shown in a second substantially collapsed condition.

[0014] FIG. 13 is a front elevational view of yet another embodiment of a collapsible and/or erectable substantially egg-shaped container constructed in accordance with the present invention shown in a substantially erected condition.

[0015] FIG. 14 is a partially cut-away exploded front elevational view of the collapsible and/or erectable substantially egg-shaped container of FIG. 13.

[0016] FIG. 15 is a front elevational view of the collapsible and/or erectable substantially egg-shaped container of FIG. 14 shown in a substantially collapsed condition.

[0017] FIG. 16 is a front elevational view of yet another embodiment of a collapsible and/or erectable substantially egg-shaped container constructed in accordance with the present invention shown in a substantially erected condition.

[0018] FIG. 17 is a front elevational view of the collapsible and/or erectable substantially egg-shaped container of FIG. 16 shown in a substantially collapsed condition.

[0019] FIG. 18 is a front elevational view of yet another embodiment of a collapsible and/or erectable substantially egg-shaped container constructed in accordance with the present invention shown in a substantially erected condition.

[0020] FIG. 19 is a front elevational view of the collapsible and/or erectable substantially egg-shaped container of FIG. 18 shown in a substantially collapsed condition.

[0021] FIG. 20 is a front elevational view of yet another embodiment of a collapsible and/or erectable substantially egg-shaped container constructed in accordance with the present invention shown in a substantially erected condition.

[0022] FIG. 21 is a front elevational view of the collapsible and/or erectable substantially egg-shaped container of FIG. 20 shown in a substantially collapsed condition.

DETAILED DESCRIPTION OF THE INVENTION

[0023] The present invention is directed to a collapsible and/or erectable shape-sustaining container and more particularly, but not by way of limitation, to a collapsible and/or erectable substantially egg-shaped shape-sustaining container (also referred to herein as a substantially egg-shaped container) and/or decorative egg. It is to be understood that while the terms “collapsible” or “erectable” may be used herein with respect to a particular embodiment of a substantially egg-shaped container and/or decorative egg, one of ordinary skill in the art would easily understand and could easily adapt the substantially egg-shaped containers and/or decorative eggs described herein to be “collapsible”, “erectable”, or both, and therefore such terms should be understood as being interchangeably herein. As such, collapsible substantially egg-shaped containers and/or decorative eggs, erectable substantially egg-shaped containers and/or decorative eggs, and collapsible and erectable substantially egg-shaped containers and/or decorative eggs are all fully within the scope of the present invention, and the use of the term “collapsible” should be understood to also include containers that are “erectable”, while use of the term “erectable” should be understood to also include containers that are “collapsible”.

[0024] The present invention is directed to an erectable and/or collapsible substantially egg-shaped container and/or
decriptive egg. The substantially egg-shaped container and/or decorative egg comprises a first portion and a second portion, wherein at least one of the first portion and the second portion are selectively moveable between a substantially erect condition and a substantially collapsed condition. The term “substantially erect condition” as used herein will be understood to include any condition in which the first portion and second portion are provided with a receiving space which is capable of receiving an item or object therein. The term “substantially collapsed condition” as used herein will be understood to include any condition that occupies less space and/or volume than the substantially erect condition, and therefore is not limited to a flattened or completely collapsed condition.

In one embodiment, the first portion of the erectable and/or collapsible substantially egg-shaped container and/or decorative egg has an upper end, a lower end, and a sidewall, at least a portion of the sidewall has at least one condition modifying element to facilitate erecting the first portion of the substantially egg-shaped container and/or decorative egg from the substantially collapsed condition to the substantially erect condition or to facilitate collapsing the first portion of the substantially egg-shaped container and/or decorative egg from the substantially collapsed condition; and the second portion of the erectable and/or collapsible substantially egg-shaped container and/or decorative egg has an upper end, a lower end, and a sidewall, at least a portion of the sidewall has at least one condition modifying element to facilitate erecting the second portion of the substantially egg-shaped container and/or decorative egg from the substantially collapsed condition to the substantially erect condition or to facilitate collapsing the second portion of the substantially egg-shaped container and/or decorative egg from the substantially erect condition to the substantially collapsed condition. In the substantially erect condition, the upper end of the second portion contacting engages the lower end of the first portion to form the erectable and/or collapsible substantially egg-shaped container.

The term “condition modifying element” as used herein will be understood to refer to any elements that are capable of facilitating erecting or collapsing of the substantially egg-shaped container and/or decorative egg. Examples of condition modifying elements that may be utilized in accordance with the present invention include, but are not limited to, score lines, hinges, concentric sections, interlocking concentric sections, pivotally interlocking sections, sections of material which are thinner than the remainder of the container, sections of material which are more flexible than the remainder of the container, pleats, folds, perforations, creases, voids, partially or wholly cut through areas, removed portions of material, a V-shaped or U-shaped member, excess material, flexible material, stretchable material, and combinations thereof.

The lower end of the first portion of the substantially egg-shaped container and/or decorative egg may further include at least one opening therein which may function as a drain opening therein.

While the condition modifying elements described herein facilitate erecting or collapsing of the substantially egg-shaped container and/or decorative egg of the present invention, they may or may not function to maintain the substantially egg-shaped containers and/or decorative eggs of the present invention in such a condition. Therefore, the substantially egg-shaped containers and/or decorative eggs of the present invention may further include at least one shape-sustaining member for maintaining the substantially egg-shaped containers and/or decorative eggs of the present invention in the substantially erect condition. The term “shape-sustaining member” includes any element that is capable of maintaining the substantially egg-shaped container and/or decorative egg in the substantially erect condition. The shape-sustaining member may be endogenously formed with any portion of the substantially egg-shaped container and/or decorative egg, such as the first portion or second portion (as will be described in further detail herein below). Examples of shape-sustaining members that may be utilized in accordance with the present invention includes, but are not limited to, non-scored areas, non-hinged areas, ringed areas, ratchets, rolled areas, hinged areas, domed areas, excess material, adhesive, cohesive, shrink material, stretch material, expandable material, offset condition modifying elements, and combinations thereof.

In addition, the substantially egg-shaped containers and/or decorative eggs of the present invention may further include at least one retaining member for maintaining the substantially egg-shaped containers and/or decorative eggs of the present invention in the substantially collapsed condition. The term “retaining member” includes any element that is capable of maintaining the substantially egg-shaped container and/or decorative egg in the substantially collapsed condition. The retaining member may be endogenously formed with any portion of the substantially egg-shaped container and/or decorative egg, such as the first portion or second portion (as will be described in further detail herein below). Examples of retaining members that may be utilized in accordance with the present invention includes, but are not limited to, adhesive, cohesive or other bonding material, a latch, a hook and eye assembly, a pair of ribbons, a pair of strings, Velcro, or any other retaining member capable of maintaining the substantially egg-shaped container and/or decorative egg in a substantially collapsed condition.

In one exemplary embodiment, the first portion and the second portion of the substantially egg-shaped container and/or decorative egg may be provided with a connecting assembly such as, for example, a male and female member for matingly connecting the first portion and the second portion of the substantially egg-shaped container and/or decorative egg. It should be understood, however, that any connecting assembly may be used for connecting the first portion and the second portion of the substantially egg-shaped container and/or decorative egg.

Further, in another exemplary embodiment, each of the first portion and the second portion of the substantially egg-shaped container and/or decorative egg may further include a first section and a second section connected by a joining assembly. Examples of the joining assembly include, but are not limited to, a latch, a hook and eye assembly, a pair of ribbons, a pair of strings, Velcro, or any other joining assembly capable of connecting the first section and the second section of each of the first portion and the second portion, respectively, of the substantially egg-shaped container and/or decorative egg. One example of a joining assembly that may be utilized in accordance with the present
The invention is disclosed in U.S. Pat. No. 4,124,135, entitled “HINGED PLASTIC EASTER EGG”, issued to Weder et al. on Nov. 7, 1998, the contents of which are hereby expressly incorporated herein by reference.

The collapsible and/or erectable substantially egg-shaped container and/or decorative egg may be provided with decorative patterns, designs and/or colors disposed on at least a portion thereof. For example but not by way of limitation, the collapsible and/or erectable substantially egg-shaped container and/or decorative egg may be provided with at least one of a printed pattern thereon, an embossed pattern thereon, a three-dimensional pattern thereon, a holographic image thereon, a printed pattern including shaded and highlighted areas which provide the printed pattern with a three-dimensional appearance, a substantially matte finish thereon, an iridescent finish thereon, a textured finish thereon, and combinations thereof. Further, when employing a combination of a printed and embossed pattern, the printed and embossed pattern may be in register with one another, out of register with one another, or partially in register and out of register with one another.

The first portion and the second portion of the substantially egg-shaped container and/or decorative egg of the present invention may be formed of a rigid or substantially flexible material. Any material that can be provided with at least one condition modifying element to facilitate in collapsing and/or erecting the substantially egg-shaped container and/or decorative egg may be utilized in accordance with the present invention. For example, but not by way of limitation, the substantially egg-shaped container and/or decorative egg may be constructed of natural polymers, synthetic polymers and plastic; foamed, cavitated, expanded, or other polymeric materials with differential densities, differential thicknesses or voids formed therein; paper; cardboard; cloth; metallized film; foil; metal; clay; feathers; peat moss; wood; or combinations, aggregates or laminations thereof or any other material capable of providing sufficient structural integrity to the first portion and the second portion such that the substantially egg-shaped container and/or decorative egg may be selectively moveable between a substantially erect position and a substantially collapsed position. Further, the substantially egg-shaped containers and/or decorative eggs of the present invention can be decorated in various colors, finishes and decorative designs, such as but not limited to, printing, embossing, texturing, matting, iridescent finishes, a three-dimensional pattern, a holographic image, a printed pattern including shaded and highlighted areas which provide the printed pattern with a three-dimensional appearance, and combinations thereof. Also, at least a portion of the sidewall of the first portion and/or the second portion of the substantially egg-shaped containers and/or decorative eggs of the present invention can be provided with a texture or appearance simulating the texture or appearance of one or more of the following materials: paper, cloth, metal, ceramic, wood, rock, cement, concrete, stone, and combinations thereof. Also, the first portion and/or the second portion may be substantially smooth, substantially textured, or combinations thereof.

The substantially egg-shaped containers and/or decorative eggs of the present invention may be provided singly, or the substantially egg-shaped containers and/or decorative eggs of the present invention may be provided in the form of an assembly of a plurality of erectable substantially egg-shaped containers and/or decorative eggs. When provided in such assembly, the substantially egg-shaped containers and/or decorative eggs may further include an assembly tab for connecting the plurality of erectable substantially egg-shaped containers and/or decorative eggs to form the assembly thereof.

The substantially egg-shaped containers and/or decorative eggs of the present invention may be produced by a thermoforming process, an injection-molding process, a blow-molding process, a casting process, a drawing process, a stamping process, a rolling process or combinations thereof. Such methods of production are well known in the art, and therefore it is clearly within the ability of a person having ordinary skill in the art to identify and utilize such known methods to produce the substantially egg-shaped containers and/or decorative eggs of the present invention.

Particular embodiments of the present invention are described herein after with respect to the Drawings. However, before explaining at least one embodiment of the invention in detail, it is to be understood that the invention is not limited in its application to the details of construction and the arrangement of the components set forth in the following description or illustrated in the appended drawings. The invention is capable of other embodiments or of being practiced or carried out in various ways that would be appreciated by one of ordinary skill in the art as being encompassed by the scope of the presently disclosed and enabled invention. Also, it is to be understood that the phraseology and terminology employed herein is for the purpose of description and should not be regarded as limiting.

It is also to be understood that various embodiments shown herein will be described as being provided with particular condition modifying elements, such as but not limited to, score lines, hinges and the like. However, it is to be understood that any of the condition modifying elements described herein may be substituted for the particular condition modifying elements described in conjunction with the Drawings, and therefore the scope of the present invention includes any of the embodiments illustrated in the Figures utilized with any of the condition modifying elements described herein.

Referring now to the drawings, and more particularly to FIGS. 1-3, shown therein is a substantially egg-shaped container and/or decorative egg 10 constructed in accordance with the present invention. The substantially egg-shaped container and/or decorative egg 10 includes a first portion 12 and a second portion 14, wherein the first portion 12 and second portion 14 are selectively moveable between a substantially erected condition (FIGS. 1 and 2) and a substantially collapsed condition (FIG. 3). The first portion 12 is characterized as having an upper end 16, a lower end 18, and a sidwall 20. The second portion 14 is characterized as having an upper end 22, a lower end 24, and a sidwall 26.

The first portion 12 is connectable to the second portion 14 via a connector assembly 28, shown in FIG. 2. The connector assembly 28 includes a male member 30 on the upper end 16 of the first portion 12 and a female member 32 on the adjacent disposed lower end 24 of the second portion 14. Thus, upon matingly engaging the male member
30 and the female member 32, the first portion 12 and the second portion 14 of the substantially egg-shaped container and/or decorative egg 10 are connectable, thereby forming the substantially egg-shaped container and/or decorative egg 10 which is selectively moveable between the substantially erect condition (FIGS. 1 and 2) and the substantially collapsed condition (FIG. 3).

[0040] The sidewall 20 of the first portion 12 defines a receiving space or first cavity 34 capable of holding at least one object therein; and the sidewall 26 of the second portion 14 further defines a receiving space or second cavity 36. In one embodiment, the first cavity 34 is capable of holding at least one object therein, while the second cavity 36 functions as a shield for the at least one object supported in the first cavity 34 of the first portion 12 of the substantially egg-shaped container and/or decorative egg 10. Alternatively, the object may be held in the second cavity 36 while the first cavity 34 acts as a shield to an upper portion of the object.

[0041] The sidewall 20 also includes a plurality of condition modifying elements such as score lines 38 which permit the first portion 12 to be selectively moveable between the substantially erect condition (FIGS. 1 and 2) and the substantially collapsed condition (FIG. 3). The sidewall 26 further includes a plurality of condition modifying elements such as score lines 40 which permit the second portion 14 to be selectively moveable between the substantially erected condition (FIGS. 1 and 2) and the substantially collapsed condition (shown in FIG. 3).

[0042] Shown in FIGS. 1-3, the plurality of score lines 38 and 40 are aligned in a manner such that the entire substantially egg-shaped container and/or decorative egg 10 is selectively moveable between the substantially erected condition (FIGS. 1 and 2) and the substantially collapsed condition (FIG. 3). However, it is to be understood that the plurality of score lines 38 and 40 may not be aligned, as will be described in more detail hereinafter, and still fall within the scope of the present invention. In addition, while the plurality of score lines 38 and 40 are depicted as extending generally vertically across the substantially egg-shaped container and/or decorative egg 10, it is to be understood that the plurality of score lines 38 and 40 may extend at any angle along each of the sidewalls 20 and 26, respectively, such as but not limited to, horizontally or diagonally, so long as the plurality of score lines 38 and 40 can function in accordance with the present invention. In addition, while the plurality of score lines 38 and 40 are shown as extending across the entire sidewalls 20 and 26 from an upper end to a lower end thereof, it is to be understood that the plurality of score lines 38 and 40 may only extend over a portion of the sidewalls 20 and 26, respectively.

[0043] In one embodiment of the present invention, the substantially collapsed substantially egg-shaped container and/or decorative egg 10 of FIG. 3 is also capable, by virtue of the characteristics of the score lines 38 and 40, of returning to the substantially erect condition shown in FIG. 1. In another embodiment, the substantially collapsed substantially egg-shaped container and/or decorative egg 10 of FIG. 3 is not capable of assuming the prior substantially erect condition.

[0044] Referring now to FIGS. 4 and 5, shown therein is another embodiment of a substantially egg-shaped container and/or decorative egg 42 constructed in accordance with the present invention. The substantially egg-shaped container and/or decorative egg 42 includes a first portion 44 and a second portion 46. The first portion 44 and the second portion 46 of the substantially egg-shaped container and/or decorative egg 42 are selectively moveable between a substantially erected condition (FIG. 4) and a substantially collapsed condition (FIG. 5). The first portion 44 is characterized as having an upper end 48, a lower end 50, and a sidewall 52; and the second portion 46 is characterized as having an upper end 54, a lower end 56, and a sidewall 58.

[0045] The first portion 44 is connectable to the second portion 46 via a connector assembly 57 which is similar in both construction and function to the connector assembly 28 hereinbefore described in relation to FIGS. 1-3. That is, the connector assembly 57 includes a male member 59 on the upper end 48 of the first portion 44 and a female member 61 on the lower end 56 of the second portion 46. Thus, upon mutually engaging the male member 59 and the female member 61, the first portion 44 and the second portion 46 are connectable, thereby forming the substantially egg-shaped container and/or decorative egg 42 which is selectively moveable between the substantially erected condition (FIG. 4) and the substantially collapsed condition (FIG. 5).

[0046] The sidewall 52 of the first portion 44 of the substantially egg-shaped container and/or decorative egg 42 defines a receiving space or first cavity 60 capable of holding and/or retaining at least one object therein. The sidewall 58 of the second portion 46 further defines a receiving space or second cavity 62 which is aligned with the first cavity 60 such that, in a substantially erected condition, the second cavity 62 of the substantially egg-shaped container and/or decorative egg 42 functions as a shield for an upper portion of the at least one object retained within the first cavity 60. Alternatively, the object may be held in the second cavity 62 while the first cavity 60 acts as a shield to an upper portion of the object.

[0047] The substantially egg-shaped container and/or decorative egg 42 is further provided with a spring assembly 64 endogenously formed within the sidewall 52 of the first portion 44 and/or the lateral 58 of the second portion 46. The spring assembly 64 may be substantially helically shaped throughout each of the sidewalls 52 and 58 (as shown in FIG. 4), or the spring assembly 64 may be positioned horizontally, vertically, or any other arrangement within the first sidewall 52 and the second sidewall 58 such that the spring assembly 64 allows the first portion 44 and the second portion 46 to be collapsible in the manner shown in FIG. 5. While the spring assembly 64 is described herein as being endogenously formed within the sidewalls 52 and/or 58, it is to be understood that the spring assembly 64 may also be disposed adjacent the sidewalls 52 and/or 58 defining the first and second cavities, 60 and/or 62, respectively.

[0048] Referring now to FIGS. 6-8, shown therein is another embodiment of a substantially egg-shaped container and/or decorative egg 66 constructed in accordance with the present invention. The substantially egg-shaped container and/or decorative egg 66 includes a first portion 68 and a second portion 70 which are selectively moveable between a substantially erected condition (FIG. 6) and a substantially collapsed condition (in the same manner described hereinbefore in relation to either FIG. 3 or FIG. 5). The first portion 68 of the substantially egg-shaped container and/or decora-
The first portion 68 of the substantially egg-shaped container and/or decorative egg 66 is connectable to the second portion 70 via a connector assembly 84, shown in FIG. 6. The connector assembly 84 includes a male member 86 on the upper end 72 of the first portion 68 and a female member 88 on the lower end 80 of the second portion 70. Thus, upon matingly engaging the male member 86 and the female member 88, the first portion 68 and the second portion 70 are connectable, thereby forming the substantially egg-shaped container and/or decorative egg 66 which is selectively moveable between the substantially erected condition (FIG. 6) and the substantially collapsed condition (described hereinbefore in relation to FIG. 3 or FIG. 5).

The sidewalk 76 of the first portion 68 of the substantially egg-shaped container and/or decorative egg 66 defines a receiving space or first cavity 77 capable of holding and/or retaining at least one object therein. The sidewalk 82 of the second portion 70 further defines a second cavity 79 which is aligned with the first cavity 77 such that, in a substantially erected condition, the second cavity 79 of the substantially egg-shaped container and/or decorative egg 66 functions as a shield for an upper portion of the at least one object retained within the first cavity 77. Alternatively, the object may be held in the second cavity 79 while the first cavity 77 acts as a shield to an upper portion of the object.

The first portion 68 of the substantially egg-shaped container and/or decorative egg 66 and the second portion 70 of the substantially egg-shaped container and/or decorative egg 66 are similar in construction and function. Thus, only the first portion 68 will be described in detail hereinbelow. However, it is to be understood that the second portion 70 of the substantially egg-shaped container and/or decorative egg 66 will be provided with similar features as described herein below for the first portion 68.

The first portion 68 of the substantially egg-shaped container and/or decorative egg 66 includes a first section 90 and a second section 92 engagingly connected by one or more hinge assemblies for permitting opening and closing of the first section 90 and the second section 92, as shown in FIGS. 7 and 8. Shown in FIGS. 6-8, the first portion 68 includes a first hinge assembly 94 and a second hinge assembly 96; however, it should be understood that any number of hinge assemblies may be utilized to facilitate the opening and closing of the first section 90 and the second section 92, and the use of two hinge assemblies is simply for illustrative purposes only.

The second portion 70 of the substantially egg-shaped container and/or decorative egg 66 includes a first section (not shown) and a second section (not shown) engagingly connected by one or more hinge assemblies in a similar manner as described hereinbefore in relation to the first portion 68. Shown in FIG. 6, the second portion 70 includes a first hinge assembly 98 and a second hinge assembly 100; however, it should be understood that any number of hinge assemblies may be utilized to facilitate the opening and closing of the first section and second section of the second portion 70, and the use of two hinge assemblies is simply for illustrative purposes only.

The first portion 68 is further provided with at least one locking member 102 for securing the first section 90 of the first portion 68 to the second section 92 thereof. Shown in FIGS. 6-8, the locking member 102 is a latch; however, it should be understood that the locking member 102 may be a clasp assembly, a hook and eye assembly, a pair of ribbons, a pair of strings, Velcro, or any other locking member capable of connecting the first section 90 of the substantially egg-shaped container and/or decorative egg 66 to the second section 92 thereof to provide the substantially egg-shaped container and/or decorative egg 66.

In addition, it is to be understood that the first and/or second portions 68 and/or 70 may further collapse. For example but not by way of limitation, one of the first and second sections 90 and 92 may be formed of an elastic material that will allow the section to be moved from a concave structure to a convex structure, and such section may be disposed around the other section (as described in more detail hereinafter). Alternatively, the hinge assemblies may be removable, or may be designed so that one of the sections 90 and 92 may be rotated approximately 180° and then be disposed behind the other section. Any of these methods of collapsing may be used alone or in combination with any other method(s) of collapsing described herein.

Referring now to FIGS. 9-11, shown therein is another embodiment of a substantially egg-shaped container and/or decorative egg 104 constructed in accordance with the present invention. The substantially egg-shaped container and/or decorative egg 104 includes a first portion 106 and a second portion 108 (shown in FIG. 10) which are interconnected so that the first portion 106 and the second portion 108 are selectively moveable between a substantially erected condition (FIGS. 9 and 10) and a substantially collapsed condition (FIG. 11). The first portion 106 of the substantially egg-shaped container and/or decorative egg 104 is characterized as having an upper end 110, a lower end 112, and a sidewalk 114; and the second portion 108 of the substantially egg-shaped container and/or decorative egg 104 is characterized as having an upper end 116, a lower end 118, and a sidewalk 120.

The first portion 106 is connectable to the second portion 108 via a hinge assembly 122 which permits opening and closing of the first portion 106 of the substantially egg-shaped container and/or decorative egg 104 and the second portion 108 thereof as shown in FIGS. 9 and 10, respectively. While only a single hinge assembly 122 is shown in FIGS. 9-11, it should be understood that any number of hinge assemblies may be utilized to facilitate the opening and closing of the first portion 106 and relative to the second portion 108 thereof.

The first portion 106 and the second portion 108 is further provided with at least one locking assembly 123 for securing the first portion 106 to the second portion 108 thereof. Shown in FIGS. 9-11, the locking assembly 123 is a latch; however, it should be understood that the locking assembly 123 may be a clasp assembly, a hook and eye assembly, a pair of ribbons, a pair of strings, Velcro, or any other locking member capable of connecting the first section 106 of the substantially egg-shaped container and/or decorative egg 104 to the second portion 108 thereof to provide the substantially egg-shaped container and/or decorative egg 104.
The sidewall 114 of the first portion 106 of the substantially egg-shaped container and/or decorative egg 104 defines a receiving space or first cavity 124. The sidewall 120 of the second portion 108 of the substantially egg-shaped container and/or decorative egg 104 further defines a receiving space or second cavity 126. The first cavity 124 and the second cavity 126 may each be sized and dimensioned such that each cavity 124 and 126 is capable of holding and/or retaining at least one object therein when in the open condition, as shown in FIG. 10; optionally, the second cavity 126 may be aligned with the first cavity 124 such that, in a substantially erected condition, the second cavity 126 of the substantially egg-shaped container and/or decorative egg 104 functions as a shield for at least one object disposed in the first cavity 124, or vice-versa.

The sidewall 114 of the first portion 106 may further include a plurality of condition modifying elements such as score lines 128 which permit the first portion 106 to be selectively moveable between the substantially erected condition (FIGS. 9 and 10) and the substantially collapsed condition (FIG. 11). The sidewall 120 of the second portion 108 may further include a plurality of condition modifying elements such as score lines 130 which permit the second portion 108 of the substantially egg-shaped container and/or decorative egg 104 to be selectively moveable between the substantially erected condition (FIGS. 9 and 10) and the substantially collapsed condition (shown in FIG. 11). In addition, while the plurality of score lines 128 and 130 are depicted as extending generally across the substantially egg-shaped container and/or decorative egg 104, it is to be understood that the plurality of score lines 128 and 130 may extend at any angle along each of the sidewalls 114 and 120, respectively, such as but not limited to, horizontally or diagonally, so long as the plurality of score lines 128 and 130 can function in accordance with the present invention. In addition, while the plurality of score lines 128 and 130 are shown as extending across the entire sidewalls 114 and 120 from an upper end to a lower end thereof, it is to be understood that the plurality of score lines 128 and 130 may only extend over a portion of the sidewalls 114 and 120, respectively.

Shown in FIGS. 9-11, the plurality of score lines 128 and 130 are aligned in a manner such that the substantially egg-shaped container and/or decorative egg 104 is selectively moveable between the substantially erected condition (FIGS. 9 and 10) and the substantially collapsed condition (FIG. 11). Alternatively, as described hereinbefore in relation to FIGS. 4 and 5, the substantially egg-shaped container and/or decorative egg 104 may include a spring assembly (not shown) endogenously formed within the sidewall 114 of the first portion 106 and/or the sidewall 120 of the second portion 108. The spring assembly may be substantially helically shaped throughout each of the sidewalls 114 and 120 (as shown in FIG. 4) or the spring assembly may be positioned horizontally, vertically, or any other arrangement within the first sidewall 114 and the second sidewall 120 such that the spring assembly allows the first portion 106 and the second portion 108 to be collapsible and/or erectable in the manner shown in FIG. 5. The spring assembly may also be disposed adjacent the sidewalls 114 and 120 defining the first and second cavities, 124 and 126, respectively.

FIG. 12 illustrates another substantially collapsed condition of the substantially egg-shaped container and/or decorative egg 104 (FIG. 12A), as well as another method of collapsing the substantially egg-shaped container and/or decorative egg 104 (FIG. 12B). In the substantially collapsed condition of FIG. 12A, at least the second portion 108 of the substantially egg-shaped container and/or decorative egg 104 is formed of a flexible, elastic material that will allow the second portion to be turned "inside out"—i.e., moved from a concave shape to a convex shape. The hinge assembly 122 continues to pivot further from the structure shown in FIG. 10 while the shape of the second portion 108 is turned "inside out", until at least a portion of the first portion 106 is disposed adjacent and/or within the second portion 108. In another alternative, instead of constructing the second portion 108 from an elastic material, the plurality of score lines 130 may be utilized to turn the second portion 108 "inside out". In addition, this method of collapsing may be utilized in combination with any of the other methods of collapsing described herein. In yet another alternative, the second portion 108 rotates 180° (as shown in FIG. 12B), and then at least a portion thereof is disposed adjacent and/or within the first portion 106. In this embodiment, the substantially egg-shaped container and/or decorative egg 104 may be temporarily disconnected at the hinge assembly 122, or the hinge assembly 122 may be provided with a mechanism that will allow the hinge assembly 122 to pivot at least the 180° required for inverting the second portion 106 or 108, as described herein immediately above.

Referring now to FIGS. 13-15, shown therein is another embodiment of a substantially egg-shaped container and/or decorative egg 132 constructed in accordance with the present invention. The substantially egg-shaped container and/or decorative egg 132 includes a first portion 134 and a second portion 136 such that the first portion 134 and second portion 136 are selectively moveable between a substantially erected condition (FIGS. 13 and 14) and a substantially collapsed condition (FIG. 15). The first portion 134 of the substantially egg-shaped container and/or decorative egg 132 is characterized as having an upper end 138, a lower end 140, and a sidewall 142. The second portion 136 of the substantially egg-shaped container and/or decorative egg 132 is characterized as having an upper end 144, a lower end 146, and a sidewall 148.

The first portion 134 of the substantially egg-shaped container and/or decorative egg 132 is connectable to the second portion 136 thereof via a connector assembly 150, shown in FIG. 14. The connector assembly 150 includes a male member 152 on the upper end 138 of the first portion 134 and a female member 154 on the adjacentively disposed lower end 146 of the second portion 136. Thus, upon matingly engaging the male member 152 and the female member 154, the first portion 134 and the second portion 136 of the substantially egg-shaped container and/or decorative egg 132 are connectable, thereby forming the substantially egg-shaped container and/or decorative egg 132 which is selectively moveable between the substantially erected condition (FIGS. 13 and 14) and the substantially collapsed condition (FIG. 15).

The sidewall 142 of the first portion 134 defines a receiving space or first cavity 156 capable of holding at least one object therein; and the sidewall 148 of the second portion 136 further defines a receiving space or second
The first cavity 156 is capable of holding at least one object therein while the second cavity 158 functions as a shield for the at least one object held within the first cavity 156 supported in the first cavity 156 of the first portion 134 of the substantially egg-shaped container and/or decorative egg 132. Alternatively, the object may be held in the second cavity 158 while the first cavity 156 acts as the shield.

The sidewall 142 further includes a plurality of condition modifying elements such as score lines 160 which permit the first portion 134 to be selectively moveable between the substantially erected condition (FIGS. 13 and 14) and the substantially collapsed condition (FIG. 15). The sidewall 148 also includes a plurality of condition modifying elements such as score lines 162 which permit the second portion 136 to be selectively moveable between the substantially erected condition (FIGS. 13 and 14) and the substantially collapsed condition (shown in FIG. 15).

The substantially egg-shaped container and/or decorative egg 132 is similar to the substantially egg-shaped container and/or decorative egg 10 of FIGS. 1-3 and as described herein before, except that the plurality of score lines 160 and 162 of the substantially egg-shaped container and/or decorative egg 132 are offset in a manner such that the substantially egg-shaped container and/or decorative egg 132 is selectively moveable between the substantially erected condition (FIGS. 13 and 14) and the substantially collapsed condition (FIG. 15). The offsetting of the condition modifying elements such as score lines 160 and 162 provides resistance to collapsing, and therefore functions as a shape-sustaining member. However, it is to be understood that the use of offset condition modifying elements is not limited to score lines, and any other element capable of functioning in this manner may be utilized as shown in FIGS. 13-15. In addition, while the plurality of score lines 160 and 162 are depicted as extending generally vertically across the substantially egg-shaped container and/or decorative egg 132, it is to be understood that the plurality of score lines 160 and 162 may extend at any angle along each of the sidewalls 142 and 148 of the substantially egg-shaped container and/or decorative egg 132, such as but not limited to, horizontally or diagonally, so long as the plurality of score lines 160 and 162 are offset from one another and function in accordance with the present invention.

Optionally, the plurality of score lines 162 may not extend to the lower end 146 of the second portion 136 and/or the plurality of score lines 160 may not extend to the upper end 138 of the first portion 134; therefore, a horizontal portion of the sidewall 148 and/or a horizontal portion of the sidewall 142 of the substantially egg-shaped container and/or decorative egg 132 may be free of the score lines 160 and 162.

Referring now to FIGS. 16 and 17, shown therein is another embodiment of a substantially egg-shaped container and/or decorative egg 150 constructed in accordance with the present invention. The substantially egg-shaped container and/or decorative egg 150 includes a first portion 152 and a second portion 154 such that the first portion 152 and second portion 154 are selectively moveable between a substantially erected condition (FIG. 16) and a substantially collapsed condition (FIG. 17). The first portion 152 is provided with a plurality of condition modifying elements such as score lines 156 on a portion thereof, while the second portion 154 is provided with a plurality of condition modifying elements such as score lines 158 on a portion thereof.

The substantially egg-shaped container and/or decorative egg 150 is similar to the substantially egg-shaped container and/or decorative egg 10 described herein above, except that the plurality of score lines 156 and 158 extend in a generally horizontal direction.

Referring now to FIGS. 18 and 19, shown therein is another embodiment of a substantially egg-shaped container and/or decorative egg 160 constructed in accordance with the present invention. The substantially egg-shaped container and/or decorative egg 160 includes a first portion 162 and a second portion 164 such that the first portion 162 is selectively moveable between a substantially erected condition (FIG. 18) and a substantially collapsed condition (FIG. 19). The substantially egg-shaped container and/or decorative egg 160 is similar to the substantially egg-shaped container and/or decorative egg 150 described herein above, except that the first portion 162 is provided with a plurality of condition modifying elements such as score lines 166 on a portion thereof, while the second portion 164 is substantially free of condition modifying elements, and thus only the first portion 162 of the substantially egg-shaped container and/or decorative egg moves to a substantially collapsed condition, as shown in FIG. 19.

Referring now to FIGS. 20 and 21, shown therein is another embodiment of a substantially egg-shaped container and/or decorative egg 170 constructed in accordance with the present invention. The substantially egg-shaped container and/or decorative egg 170 includes a first portion 172 and a second portion 174 such that the first portion 172 and second portion 174 are selectively moveable between a substantially erected condition (FIG. 20) and a substantially collapsed condition (FIG. 21).

The substantially egg-shaped container and/or decorative egg 170 is similar to the substantially egg-shaped container and/or decorative egg 10 described herein above, except that the first and second portions 172 and 174 of the substantially egg-shaped container and/or decorative egg 170 are provided with condition modifying elements that extend in both the horizontal and vertical directions; in particular, the first portion 172 is provided with a plurality of horizontally-extending condition modifying elements such as score lines 176 and a plurality of vertically-extending condition modifying elements such as score lines 178, while the second portion 174 is provided with a plurality of horizontally-extending condition modifying elements such as score lines 180 and a plurality of vertically-extending condition modifying elements such as score lines 182.

Any of the substantially egg-shaped containers and/or decorative eggs described herein may be erected and/or collapsed manually, that is, the substantially egg-shaped containers and/or decorative eggs require energy from an exogenous source to fully erect and/or collapse the substantially egg-shaped container and/or decorative egg. Optionally, any of the substantially egg-shaped containers and/or decorative egg described herein may be self-erecting and/or self-collapsing. When provided with one or more condition modifying elements and/or shape-sustaining members formed therein, the condition modifying element(s) and/or shape-sustaining member(s) may be provided with any configuration described herein or any configuration known in the art.
While all of the substantially egg-shaped containers and/or decorative eggs are described herein as being formed of two portions, it is to be understood that the substantially egg-shaped containers and/or decorative eggs of the present invention may not be divided into portions but may simply be of uniform construction. In this instance, the substantially egg-shaped containers and/or decorative eggs may or may not have a receiving space formed therein and still fall within the scope of the present invention, as long as the substantially egg-shaped containers and/or decorative eggs are capable of collapsing and/or erecting in accordance with the present invention.

Other methods of collapsing and/or erecting substantially egg-shaped containers and/or decorative eggs that fall within the scope of the present invention are disclosed in U.S. Patent Application Publication No. US 2005/0178061 A1, entitled “COLLAPSIBLE AND/OR ERECTABLE FLORAL CONTAINERS,” published Aug. 18, 2005, the entire contents of such application being hereby specifically incorporated herein by reference.

From the above description it is clear that the present invention is well adapted to carry out the objects and to attain the advantages mentioned herein as well as those inherent in the invention. While presently preferred embodiments of the invention have been described for purposes of this disclosure, it will be understood that numerous changes may be made which will readily suggest themselves to those skilled in the art and which are accomplished within the spirit of the invention disclosed.

What is claimed is:

1. A collapsible shape-sustaining substantially egg-shaped container, comprising:
   a first portion having an upper end, a lower end, a sidewall, and a receiving space;
   a second portion having an upper end, a lower end, a sidewall, and a receiving space; and
   wherein at least one of the first portion and the second portion is selectively moveable between a substantially erect condition and a substantially collapsed condition.

2. The collapsible shape-sustaining substantially egg-shaped container of claim 1, wherein at least a portion of the sidewall of at least one of the first and second portions has at least one condition modifying element to facilitate collapsing the container from the substantially erect condition to the substantially collapsed condition.

3. The collapsible shape-sustaining substantially egg-shaped container of claim 2, wherein the at least one condition modifying element is selected from the group consisting of score lines, hinges, concentric sections, interlocking concentric sections, pivotally interlocking sections, sections of material which are thinner than the remainder of the container, sections of material which are more flexible than the remainder of the container, pleats, folds, perforations, creases, voids, partially or wholly cut through areas, removed portions of material, a V-shaped or U-shaped member, excess material, flexible material, stretchable material, and combinations thereof.

4. The collapsible, shape-sustaining substantially egg-shaped container of claim 1, further comprising a connecting assembly for matingly connecting the first and second portions.

5. The collapsible, shape-sustaining substantially egg-shaped container of claim 1, further comprising at least one shape-sustaining member for maintaining the substantially egg-shaped container in the substantially erect condition.

6. The collapsible, shape-sustaining substantially egg-shaped container of claim 1, further comprising at least one retaining member for maintaining the substantially egg-shaped container in the substantially collapsed condition.

7. The collapsible, shape-sustaining substantially egg-shaped container of claim 1, further comprising a joining assembly that connects the first and second portions together.

8. The collapsible, shape-sustaining substantially egg-shaped container of claim 1, further comprising at least one of a decorative pattern, decorative design, and color disposed on at least a portion thereof.

9. The collapsible, shape-sustaining substantially egg-shaped container of claim 1, wherein the collapsible, shape-sustaining substantially egg-shaped container is constructed of a material selected from the group consisting of natural polymers, synthetic polymers, plastic, foamed polymeric material, cavitated polymeric material, expanded polymeric material, polymeric materials with differential densities, polymeric materials with differential thicknesses, polymeric materials with voids formed therein, paper, cardboard, cloth, metalized film, foil, metal, clay, feathers, pent moss, wood, and combinations, aggregates or laminations thereof.

10. The collapsible, shape-sustaining substantially egg-shaped container of claim 1, wherein the collapsible, shape-sustaining substantially egg-shaped container is self erecting.

11. The collapsible, shape-sustaining substantially egg-shaped container of claim 1, wherein the collapsible, shape-sustaining substantially egg-shaped container is manually erecting.

12. The collapsible, shape-sustaining substantially egg-shaped container of claim 1, wherein the collapsible, shape-sustaining substantially egg-shaped container is self collapsing.

13. The collapsible, shape-sustaining substantially egg-shaped container of claim 1, wherein the collapsible, shape-sustaining substantially egg-shaped container is manually collapsing.

14. An erectable shape-sustaining substantially egg-shaped container, comprising:
   a first portion having an upper end, a lower end, a sidewall, and a receiving space;
   a second portion having an upper end, a lower end, a sidewall, and a receiving space; and
   wherein at least one of the first portion and the second portion is selectively moveable between a substantially erect condition and a substantially collapsed condition.

15. The erectable shape-sustaining substantially egg-shaped container of claim 14, wherein at least a portion of the sidewall of at least one of the first and second portions has at least one condition modifying element to facilitate erecting the container from the substantially collapsed condition to the substantially erect condition.

16. The erectable shape-sustaining substantially egg-shaped container of claim 15, wherein the at least one condition modifying element is selected from the group consisting of score lines, hinges, concentric sections, interlocking concentric sections, pivotally interlocking sections,
sections of material which are thinner than the remainder of the container, sections of material which are more flexible than the remainder of the container, pleats, folds, perforations, creases, voids, partially or wholly cut through areas, removed portions of material, a V-shaped or U-shaped member, excess material, flexible material, stretchable material, and combinations thereof.

17. The erectable, shape-sustaining substantially egg-shaped container of claim 14, further comprising a connecting assembly for matingly connecting the first and second portions.

18. The erectable, shape-sustaining substantially egg-shaped container of claim 14, further comprising at least one shape-sustaining member for maintaining the substantially egg-shaped container in the substantially collapsed condition.

19. The erectable, shape-sustaining substantially egg-shaped container of claim 14, further comprising at least one retaining member for maintaining the substantially egg-shaped container in the substantially collapsed condition.

20. The erectable, shape-sustaining substantially egg-shaped container of claim 14, further comprising a joining assembly that connects the first and second portions together.

21. The erectable, shape-sustaining substantially egg-shaped container of claim 14, further comprising at least one of a decorative pattern, decorative design, and color disposed on at least a portion thereof.

22. The erectable, shape-sustaining substantially egg-shaped container of claim 14, wherein the erectable, shape-sustaining substantially egg-shaped container is constructed of a material selected from the group consisting of natural polymers, synthetic polymers, plastic, foamed polymeric material, cavitated polymeric material, expanded polymeric material, polymeric materials with differential densities, polymeric materials with differential thicknesses, polymeric materials with voids formed therein, paper, cardboard, cloth, metallized film, foil, metal, clay, feathers, peat moss, wood, and combinations, aggregates or laminations thereof.

23. The erectable, shape-sustaining substantially egg-shaped container of claim 14, wherein the erectable, shape-sustaining substantially egg-shaped container is self erecting.

24. The erectable, shape-sustaining substantially egg-shaped container of claim 14, wherein the erectable, shape-sustaining substantially egg-shaped container is manually erecting.

25. The erectable, shape-sustaining substantially egg-shaped container of claim 14, wherein the erectable, shape-sustaining substantially egg-shaped container is self collapsing.

26. The erectable, shape-sustaining substantially egg-shaped container of claim 14, wherein the erectable, shape-sustaining substantially egg-shaped container is manually collapsing.

27. A collapsible shape-sustaining substantially egg-shaped container, wherein the collapsible shape-sustaining substantially egg-shaped container is selectively moveable between a substantially erect condition and a substantially collapsed condition.

28. An erectable shape-sustaining substantially egg-shaped container, wherein the erectable shape-sustaining substantially egg-shaped container is selectively moveable between a substantially collapsed condition and a substantially erect condition.

29. A method of using an erectable, shape-sustaining substantially egg-shaped container, comprising the steps of:

providing an erectable shape-sustaining substantially egg-shaped container in a substantially collapsed condition, the erectable shape-sustaining substantially egg-shaped container comprising a first portion having an upper end, a lower end, a sidewall, and a receiving space, and a second portion having an upper end, a lower end, a sidewall, and a receiving space, wherein at least one of the first portion and the second portion is selectively moveable between a substantially collapsed condition and a substantially erect condition;

moving at least one of the first portion and the second portion of the erectable shape-sustaining egg-shaped container from the substantially collapsed condition to the substantially erect condition;

disposing at least one object in the first portion of the erectable shape-sustaining egg-shaped container, wherein the second portion of the erectable shape-sustaining egg-shaped container acts as a shield for a portion of the at least one object disposed in the first portion of the erectable shape-sustaining egg-shaped container.

30. A method of using a collapsible, shape-sustaining substantially egg-shaped container, comprising the steps of:

providing a collapsible shape-sustaining substantially egg-shaped container in a substantially erect condition, the collapsible shape-sustaining substantially egg-shaped container comprising a first portion having an upper end, a lower end, a sidewall, and a receiving space, and a second portion having an upper end, a lower end, a sidewall, and a receiving space, wherein at least one of the first portion and the second portion is selectively moveable between a substantially collapsed condition and a substantially erect condition;

disposing at least one object in the first portion of the collapsible shape-sustaining egg-shaped container, wherein the second portion of the collapsible shape-sustaining egg-shaped container acts as a shield for a portion of the at least one object disposed in the first portion of the collapsible shape-sustaining egg-shaped container;

removing the at least one object from the collapsible shape-sustaining egg-shaped container, and

moving at least one of the first portion and the second portion of the collapsed shape-sustaining egg-shaped container from the substantially erect condition to the substantially collapsed condition.