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(54) **COMPACT COLLAPSIBLE GAZEBO**

(57)

ABSTRACT

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A compact collapsible gazebo includes a gazebo frame, which includes a plurality of telescoping legs, configured to rest on a ground surface and to extend and collapse. The gazebo frame also includes a plurality of side scissor structures, each comprising a plurality of scissor members and coupled to a pair of the telescoping legs, where the side scissor structures scissor together to collapse the gazebo frame and scissor apart to expand the gazebo frame. The gazebo frame also includes a plurality of central scissor structures, each having a plurality of scissor members and coupled to a central cover support and a midsection of a side scissor structure, where the central scissor structures scissor together to collapse the gazebo frame and scissor apart to expand the gazebo frame. Advantages of the invention include compactness and ease of transport of the gazebo for the gazebo user.

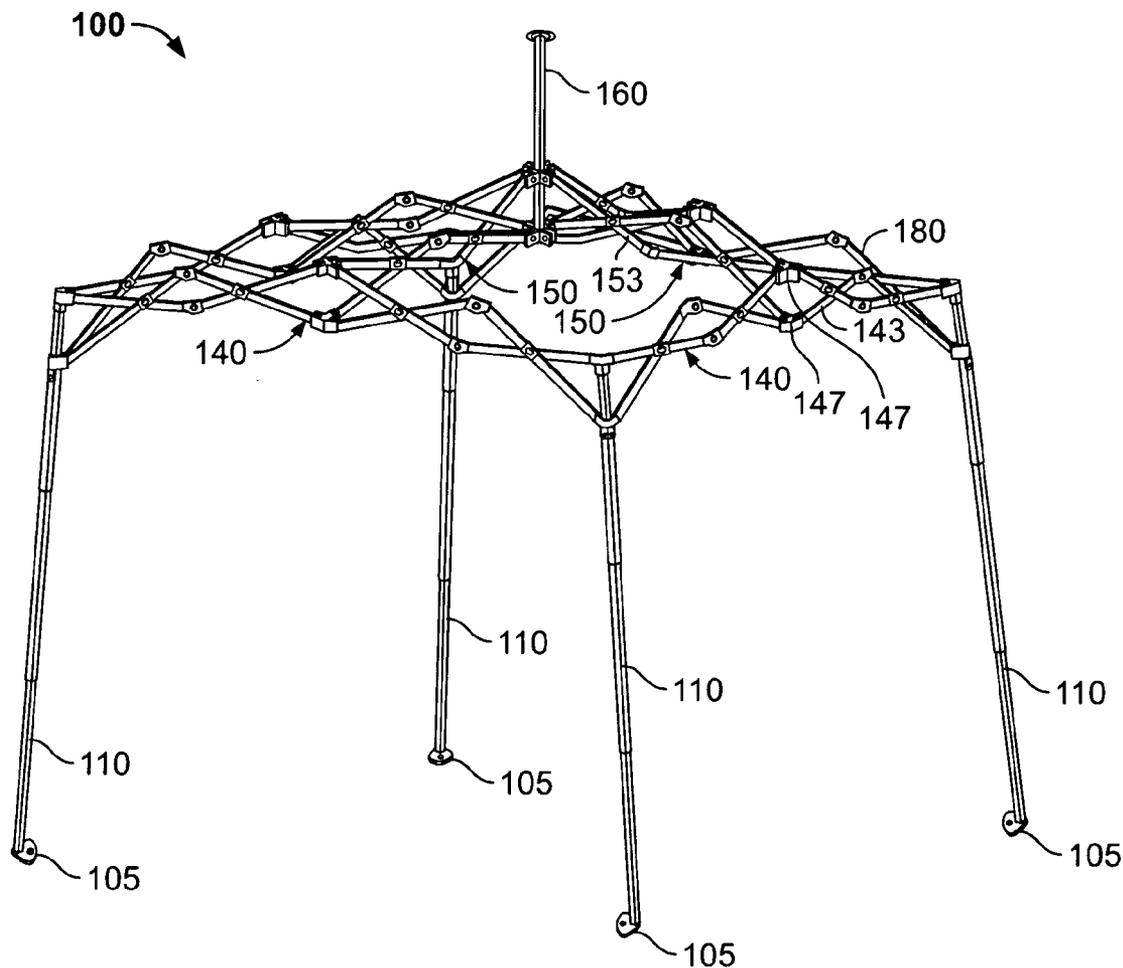
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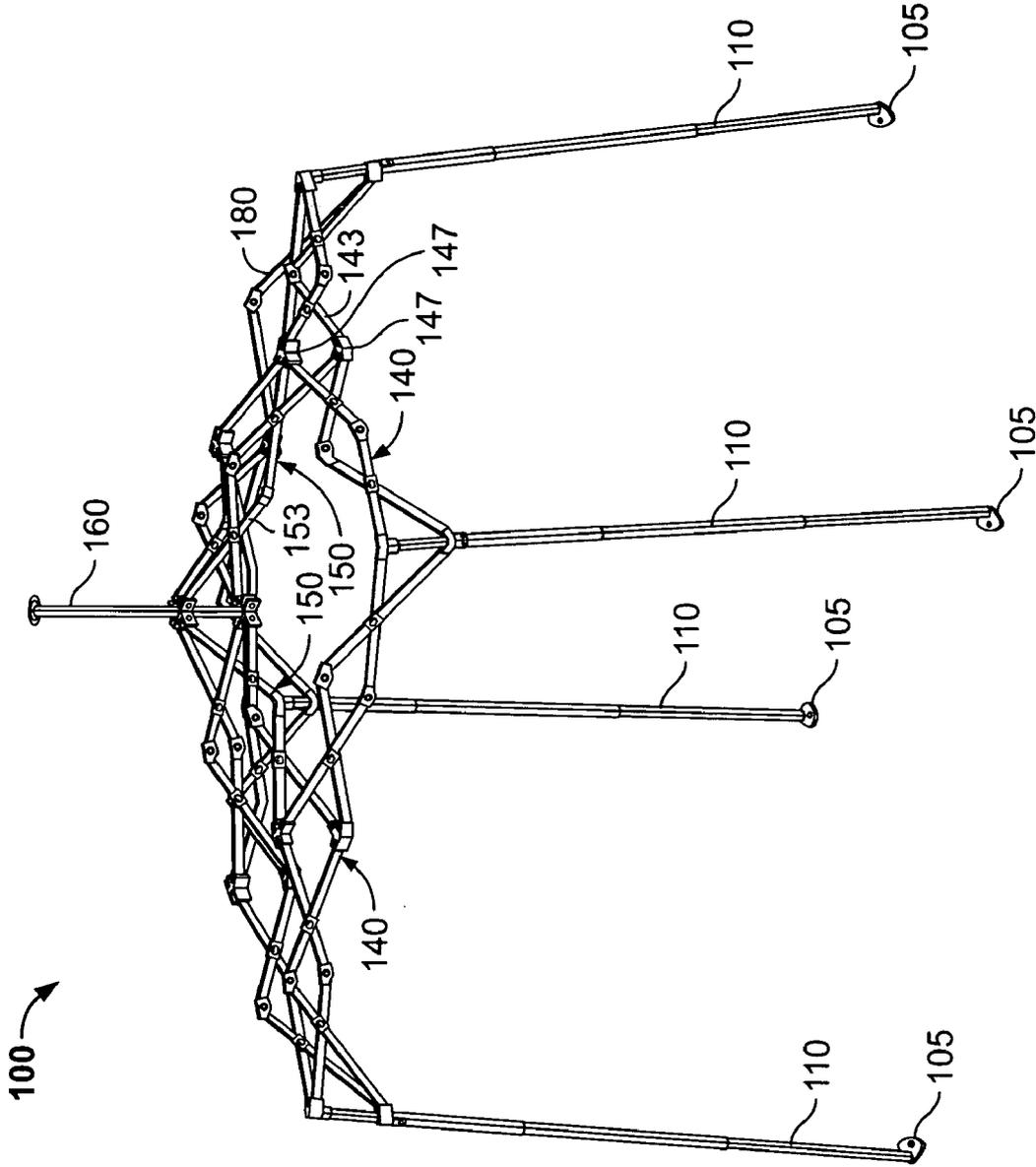


FIG. 1

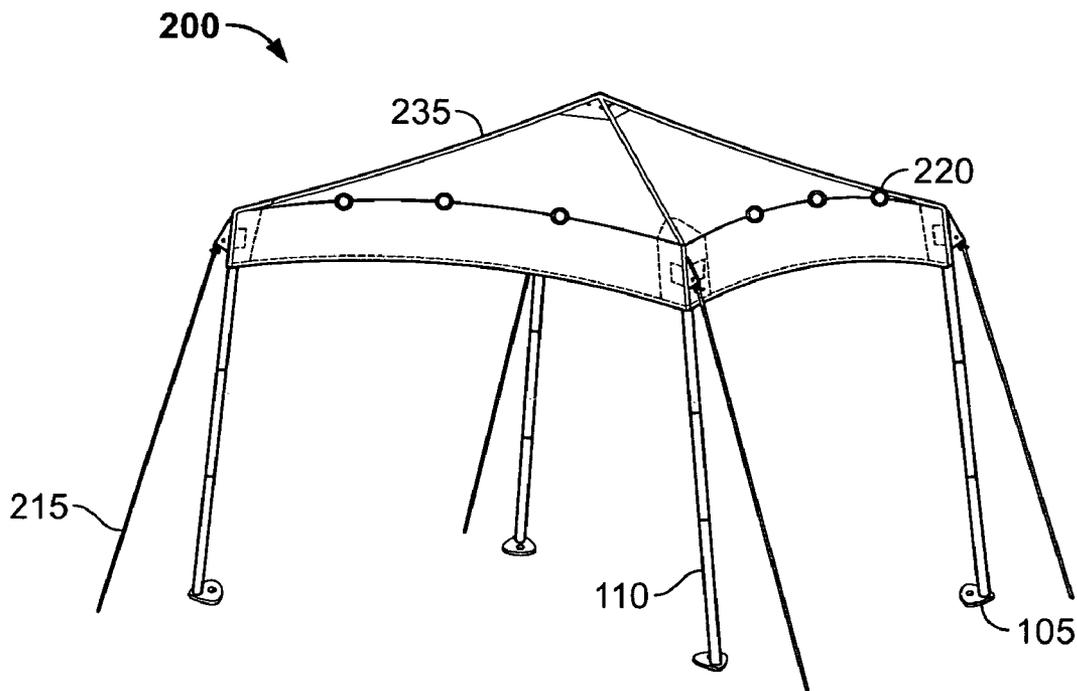


FIG. 2A

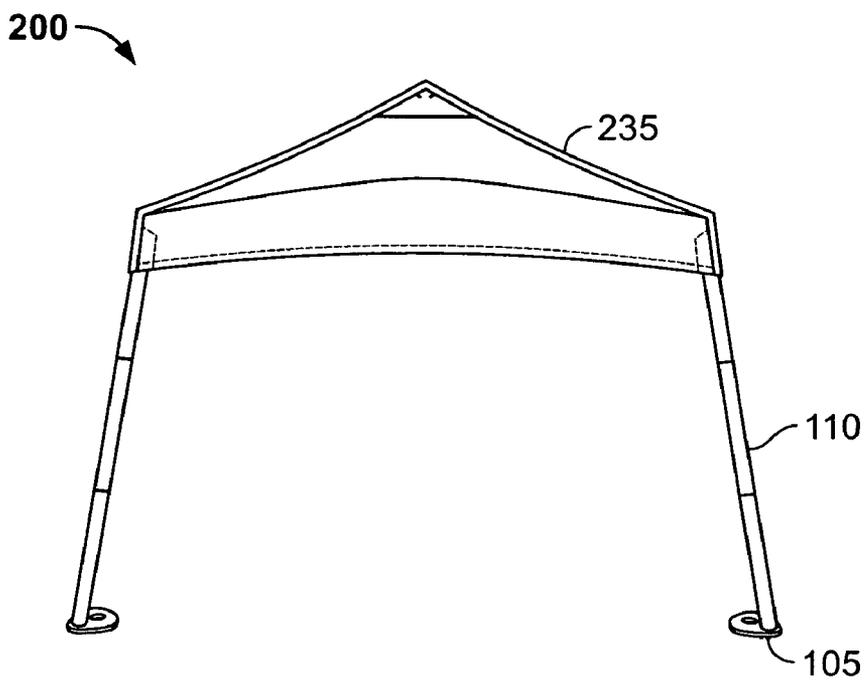


FIG. 2B

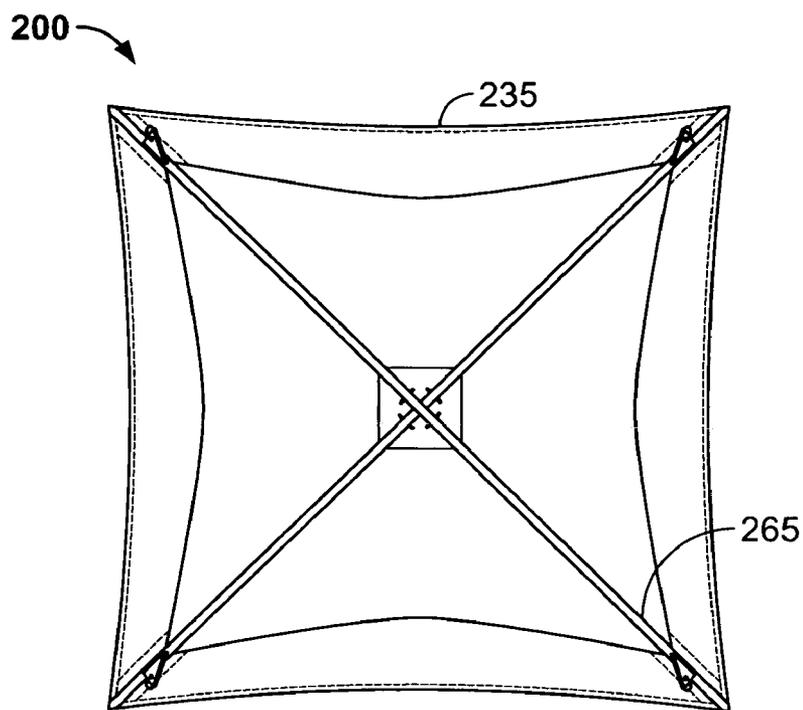


FIG. 2C

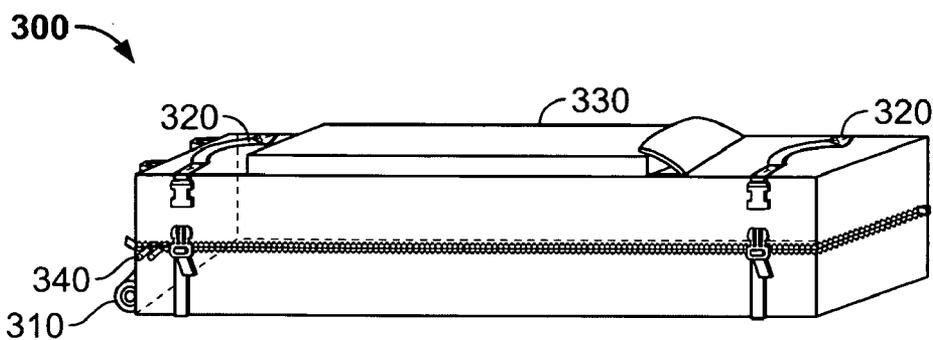


FIG. 3A

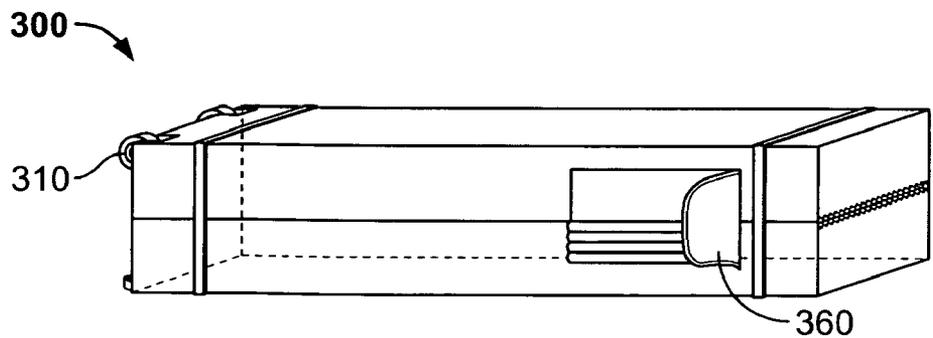


FIG. 3B

COMPACT COLLAPSIBLE GAZEBO

FIELD

[0001] The present invention relates generally to gazebos, and more particularly to collapsible gazebos.

BACKGROUND

[0002] Gazebos are known to provide shade from the sun and protection from rain. To make gazebos portable, collapsible gazebos have been designed. Collapsible gazebos can typically be deployed at a desired location, such as a park or back yard, and collapsed when no longer needed.

[0003] Conventional collapsible gazebos present a problem, however, in that they can be very large when collapsed, making them cumbersome to transport.

[0004] Therefore, what is needed is a compact collapsible gazebo.

SUMMARY

[0005] The invention overcomes the identified limitations and provides a compact collapsible gazebo.

[0006] An exemplary embodiment of a compact collapsible gazebo includes a gazebo frame, which includes a plurality of telescoping legs, configured to rest on a ground surface and to extend and collapse. The gazebo frame also includes a plurality of side scissor structures, each comprising a plurality of scissor members and coupled to a pair of the telescoping legs, where the side scissor structures scissor together to collapse the gazebo frame and scissor apart to expand the gazebo frame. The gazebo frame also includes a plurality of central scissor structures, each having a plurality of scissor members and coupled to a central cover support and a midsection of a side scissor structure, where the central scissor structures scissor together to collapse the gazebo frame and scissor apart to expand the gazebo frame.

[0007] In one aspect of the invention, the central cover support is configured to extend in a telescoping fashion in response to expanding of the gazebo frame and collapse in a telescoping fashion in response to collapsing of the gazebo frame. In another aspect, the number of telescoping legs is four, the number of side scissor structures is four, and the number of central scissor structures is four.

[0008] In another aspect of the invention, the gazebo frame includes a plurality of feet, each coupled to a bottom of a telescoping leg, configured to rest on the ground surface. In another aspect, a gazebo cover is configured to lie on top of the central cover support and at least one other part of the gazebo frame.

[0009] In another embodiment, a collapsible gazebo system includes a collapsible gazebo frame and a gazebo case configured to contain the gazebo frame when collapsed. The gazebo frame includes a plurality of telescoping legs, configured to rest on a ground surface and to extend and collapse. The gazebo frame also includes a plurality of side scissor structures, each comprising a plurality of scissor members and coupled to a pair of the telescoping legs, where the side scissor structures scissor together to collapse the gazebo frame and scissor apart to expand the gazebo frame. The gazebo frame also includes a plurality of central scissor structures, each having a plurality of scissor members and

coupled to a central cover support and a midsection of a side scissor structure, where the central scissor structures scissor together to collapse the gazebo frame and scissor apart to expand the gazebo frame.

[0010] In one aspect, the gazebo case includes wheels, configured to allow the gazebo case to roll. In another aspect, the gazebo case includes storage pockets.

[0011] Advantages of the invention include compactness and ease of transport of the gazebo for the gazebo user.

DRAWINGS

[0012] The invention will be described with reference to the drawings, in which:

[0013] **FIG. 1** is a perspective view showing a compact gazebo without a cover, according to one embodiment of the invention;

[0014] **FIG. 2A** is a perspective view showing a compact gazebo with a cover, according to one embodiment of the invention;

[0015] **FIG. 2B** is a side view showing a compact gazebo with a cover, according to one embodiment of the invention;

[0016] **FIG. 2C** is a top view showing a compact gazebo with a cover, according to one embodiment of the invention;

[0017] **FIG. 3A** is a topside perspective view showing a gazebo case, according to one embodiment of the invention; and

[0018] **FIG. 3B** is a bottomside perspective view showing a gazebo case, according to one embodiment of the invention.

DETAILED DESCRIPTION

[0019] Exemplary embodiments are described herein to provide a detailed description of the invention. Variations of these embodiments will be apparent to those of skill in the art. For example, the invention is described with reference to a compact gazebo, but the invention may also apply to other types of collapsible structures, such as tents or cabanas.

[0020] **FIG. 1** is a perspective view showing a compact collapsible gazebo **100** (compact gazebo, collapsible gazebo, or gazebo) without a cover, according to one embodiment of the invention. In the embodiment, the collapsible gazebo **100** includes a gazebo frame **180**. The gazebo frame **180** includes a plurality of telescoping legs **110**, configured to rest on a ground surface and to extend and collapse. The gazebo frame **180** also includes a plurality of side scissor structures **140**, each having a plurality of scissor members **143** and coupled to a pair of the telescoping legs **110**, where the side scissor structures **140** scissor together to collapse the gazebo frame **180** and scissor apart to expand the gazebo frame **180**. The gazebo frame **180** also includes a plurality of central scissor structures **150**, each having a plurality of scissor members **153** and coupled to a central cover support **160** and a midsection of a side scissor structure **147**, where the central scissor structures **150** scissor together to collapse the gazebo frame **180** and scissor apart to expand the gazebo frame **180**.

[0021] In one aspect of the invention, the central cover support **160** is configured to extend in a telescoping fashion

in response to expanding of the gazebo frame **180** and collapse in a telescoping fashion in response to collapsing of the gazebo frame **180**. In another aspect, the number of telescoping legs **110** is four, the number of side scissor structures **140** is four, and the number of central scissor structures **150** is four.

[0022] In another aspect of the invention, the gazebo frame includes a plurality of feet **105**, each coupled to a bottom of a telescoping leg **110**, configured to rest on the ground surface.

[0023] FIG. 2A is a perspective view showing a compact gazebo **200** with a cover **235**, according to one embodiment of the invention. The gazebo cover **235** is configured to lie on top of the central cover support **160** and at least one other part of the gazebo frame **180**. In one aspect, the gazebo cover **235** includes fasteners **220**, configured to fasten the gazebo cover **235** to the gazebo frame **180**. In another aspect, the gazebo cover **235** includes tie-downs **215**, configured to secure the gazebo frame **180** and cover to the ground surface.

[0024] FIG. 2B is a side view showing the compact gazebo **200** with the cover **235**, according to one embodiment of the invention.

[0025] FIG. 2C is a top view showing the compact gazebo **200** with the cover **235**, according to one embodiment of the invention. In one aspect, the gazebo cover **235** includes ribs **265** to strengthen the gazebo cover **235** at stress points.

[0026] FIG. 3A is a topside perspective view showing a gazebo case **300**, according to one embodiment of the invention. In one aspect, the gazebo case **300** includes wheels **310**, configured to allow the gazebo case **300** to roll. In another aspect, the gazebo case **300** includes storage pockets **330** and **360**. In another aspect, the gazebo case **300** is opened and closed using a zipper **340**. In another aspect, the gazebo case **320** also includes locking straps **320** to prevent the gazebo case **300** from opening when the straps **320** are in a locked position.

[0027] In connection with the gazebo case **300**, one embodiment of a collapsible gazebo system includes the gazebo frame **180** and the gazebo case **300**, configured to contain the gazebo frame **180** when collapsed. In one aspect, the gazebo case **300** is also configured to contain the gazebo cover **235**, when not deployed.

[0028] FIG. 3B is a bottomside perspective view showing a gazebo case, according to one embodiment of the invention.

[0029] In one embodiment, a method of striking a collapsible gazebo includes collapsing a plurality of telescoping legs, collapsing a plurality of side scissor structures, each coupled to a pair of the telescoping legs, and, collapsing a plurality of central scissor structures, each coupled to a central cover support and a midsection of a side scissor structure. In one aspect, the method also includes the step of collapsing the central cover support. In another aspect, the method also includes the step of containing the collapsible gazebo in a gazebo case.

[0030] Advantages of the invention include compactness and ease of transport of the gazebo for the gazebo user.

[0031] Having disclosed exemplary embodiments and the best mode, modifications and variations may be made to the

disclosed embodiments while remaining within the subject and spirit of the invention as defined by the following claims.

1. A collapsible gazebo including a gazebo frame, the gazebo frame comprising:

- a plurality of telescoping legs configured to rest on a ground surface and to extend and collapse;
- a plurality of side scissor structures, each having a plurality of scissor members and coupled to a pair of the telescoping legs, where the side scissor structures scissor together to collapse the gazebo frame and scissor apart to expand the gazebo frame; and
- a plurality of central scissor structures, each having a plurality of scissor members and coupled to a central cover support and a midsection of a side scissor structure, where the central scissor structures scissor together to collapse the gazebo frame and scissor apart to expand the gazebo frame.

2. The collapsible gazebo of claim 1, wherein:

the central cover support is configured to extend in a telescoping fashion in response to expanding of the gazebo frame and collapse in a telescoping fashion in response to collapsing of the gazebo frame.

3. The collapsible gazebo of claim 1, further comprising:

a gazebo cover, configured to lie on top of the central cover support and at least one other part of the gazebo frame.

4. The collapsible gazebo of claim 1, wherein the number of telescoping legs is four, the number of side scissor structures is four, and the number of central scissor structures is four.

5. The collapsible gazebo of claim 1, further comprising:

a plurality of feet, each coupled to a bottom of a telescoping leg, configured to rest on the ground surface.

6. A collapsible gazebo system, comprising:

a gazebo frame, the gazebo frame having:

a plurality of telescoping legs, configured to rest on a ground surface and to extend and collapse;

a plurality of side scissor structures, each having a plurality of scissor members and coupled to a pair of the telescoping legs, where the side scissor structures scissor together to collapse the gazebo frame and scissor apart to expand the gazebo frame; and

a plurality of central scissor structures, each having a plurality of scissor members and coupled to a central cover support and a midsection of a side scissor structure, where the central scissor structures scissor together to collapse the gazebo frame and scissor apart to expand the gazebo frame; and

a gazebo case configured to contain the gazebo frame when collapsed.

7. The collapsible gazebo system of claim 6, wherein:

the central cover support is configured to extend in a telescoping fashion in response to expanding of the gazebo frame and collapse in a telescoping fashion in response to collapsing of the gazebo frame.

8. The collapsible gazebo system of claim 6, further comprising:

a gazebo cover, configured to lie on top of the central cover support and at least one other part of the gazebo frame.

9. The collapsible gazebo system of claim 8, wherein the gazebo case is configured to contain the gazebo cover, when the gazebo cover is not deployed.

10. The collapsible gazebo system of claim 6, wherein the gazebo case further comprises wheels, the wheels configured to allow the gazebo case to roll.

11. The collapsible gazebo system of claim 6, wherein the gazebo case further comprises storage pockets.

12. The collapsible gazebo system of claim 6, wherein the number of telescoping legs is four, the number of side scissor structures is four, and the number of central scissor structures is four.

13. The collapsible gazebo system of claim 6, further comprising:

a plurality of feet, each coupled to a bottom of a telescoping leg, configured to rest on the ground surface.

14. A method in striking a collapsible gazebo, comprising the steps of:

collapsing a plurality of telescoping legs;

collapsing a plurality of side scissor structures, each coupled to a pair of the telescoping legs; and

collapsing a plurality of central scissor structures, each coupled to a central cover support and a midsection of a side scissor structure.

15. The method of claim 14, further comprising the step of:

collapsing the central cover support.

16. The method of claim 14, further comprising the step of:

containing the collapsible gazebo in a gazebo case.

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