

FOLDABLE CARRY COT WITH CUSHION

BACKGROUND OF THE INVENTION

1. Field of the Invention

5 [0001] The present disclosure relates to an infant carrier, and in particular to a foldable carry cot with cushions and collapsible frame.

2. Description of the Related Art

[0002] Portable carry cots provide a convenient way to transport infants and babies.

10 The conventional portable carry cot is constructed using a one-piece plastic shell.

[0003] Unfortunately, when the bassinet is not in use, the plastic shell is inconvenient to store and takes up space in the home or vehicle.

[0004] An additional shortcoming of the conventional carry cot is that the cushioning inside the plastic shell is insufficient to adequately protect the occupant
15 of the carry cot from accidental physical impacts. The occupant is particularly vulnerable to shocks around the head position area in the carry cot.

[0005] Therefore, to overcome the disadvantages of the prior art, there is need for a foldable carry cot with collapsible frame that allows the size of the carry cot to be

minimized when not in use thereby enhancing storage convenience and saving space and at the same time cushions are provided in the foldable carry cot to increase protection against inadvertent impacts which improves safety for the occupant.

5 BRIEF SUMMARY OF THE INVENTION

[0006] An objective of the present disclosure is to provide a foldable infant carry cot with cushions.

[0007] The present invention provides a carry cot comprising at least one cushion and has a foldable frame. The cushion is disposed on an interior side of the carry cot, for example, near the head of an occupant of the carry cot. Or, for example, the carry cot comprises two cushions disposed respectively on two interior sides of the carry cot on either side of the carry cot occupant. The cushions can be a shock-absorbing component that absorbs impact coming from any of the sides of the carry cot. As a result, the head of the carry cot occupant can be protected by the cushions.

15 [0008] The cushion comprises, for example, an elastic body or an elastic body covered with material or fabric. The elastic body can be any material that absorbs shock and/or with soft textures. In an embodiment, the elastic body comprises Styrofoam, expandable polypropylene (EPP), expandable polystyrene (EPS),

expandable polyolefin (EPO), polyethylene (PE) board with foam, or PE board with rubber.

[0009] In an embodiment of the present invention, the cushion or cushions are removably attached to the interior side of the carry cot by magnets, buttons, snaps, clips, or hook and loop fabric fastener. In this embodiment the cushion and the interior side of the carry cot comprise mating fastening elements so that the cushion is removably attached to the side wall.

[0010] In an embodiment of the present invention, the cushion or cushions are independent pieces and the carry cot further comprises a pouch or side pocket for housing the cushion and the cushion is disposed in the pouch while the pouch holds the cushion in position.

[0011] In an embodiment of the present invention, the cushion is an extension of a top side rail or upper frame of the carry cot or is attached to the top side rail or upper frame of the carry cot. A user can flip the cushion downward before the occupant is housed in the carry cot. The cushion is attached to the top side rail or the upper frame by a joint, a clip, fabric, a hinge, a fabric hinge, a hook, or a clasp. The caregiver can removably attach the cushion to the top side rail or upper frame at a location appropriate to the current need.

[0012] In an embodiment of the present invention, the cushion is an extension of a bottom side rail or lower frame of the carry cot or is attached to the bottom side rail or lower frame of the carry cot. A user can flip the cushion upward before the occupant is housed in the carry cot. The cushion is attached to the bottom side rail or the lower frame by a joint, a clip, fabric, a hinge, a fabric hinge, a hook, or a clasp. The caregiver can removably attach the cushion to the bottom side rail or lower frame at a location appropriate to the current need.

[0013] In an embodiment of the present invention, the cushion forms a pouch or pocket between the cushion and the side wall of the carry cot. This allows the caregiver to use the pouch or pocket as a moveable storage area or place an additional cushion inside the pouch when needed.

[0014] In an embodiment of the present invention, the cushion comprises various shapes, sizes, thicknesses, materials, fabrics, or colors.

[0015] In an embodiment of the present invention, the cushion comprises a combination of various shapes, sizes, thicknesses, materials, fabrics, or colors.

[0016] In an embodiment of the present invention, the cushion comprises a combination of various removably attachable fasteners.

[0017] The present invention further provides a carry cot comprising a foldable frame. The foldable frame allows the carry cot to collapse or fold into itself. As a result, the size of the carry cot can be minimized when not in use or when the carry cot is placed in storage.

5 [0018] An advantage of the present invention is that when an infant is not occupying the carry cot, the carry cot can be folded or collapsed, thereby greatly reducing the size of the carry cot, and the carry cot can easily be stowed in the trunk or rear of a vehicle, inside a closet, or on a shelf while saving storage space.

[0019] The foldable frame comprises an upper frame, a lower frame, a flexible
10 sidewall, a carrying handle, and a plurality of hinges.

[0020] The flexible sidewall is attached or connected to and disposed between the upper frame and the lower frame.

[0021] The plurality of hinges is attached or connected to and disposed between the upper frame and the lower frame.

15 [0022] Each of the plurality of hinges comprises an upper bracket, a lower bracket, and a pivot pin. The pivot pin holds the bottom of the upper bracket and top of the lower bracket together while allowing the upper bracket and the lower bracket to rotatably move away from or closer to each other by pivoting around the pivot pin

[0023] The top of the upper bracket is rotatably connected to the upper frame. The bottom of the lower bracket is rotatably connected to the lower frame. As the hinge folds and the carry cot collapses (upper bracket and lower bracket move closer to each other) the top of the upper bracket rotates around the upper frame in a first
5 direction. At the same time, the bottom of the lower bracket rotates around the lower frame in a second direction. When the hinge opens and the carry cot unfolds (upper bracket and lower bracket move away from each other) the top of the upper bracket rotates around the upper frame in the second direction. At the same time, the bottom of the lower bracket rotates around the lower frame in the first direction.

10 [0024] In an embodiment of the present invention, the plurality of hinges is disposed on the exterior side of the flexible sidewall.

[0025] In an embodiment of the present invention, the plurality of hinges is disposed on the interior side of the flexible sidewall.

[0026] In an embodiment of the present invention, the flexible sidewall is multi-
15 ply and the plurality of hinges is disposed between the exterior wall and the interior wall of the flexible sidewall.

[0027] In an embodiment of the present invention, the plurality of hinges equals 2 hinges.

[0028] In an embodiment of the present invention, the plurality of hinges equals 3 hinges.

[0029] In an embodiment of the present invention, the plurality of hinges equals 4 hinges.

5 [0030] In an embodiment of the present invention, the plurality of hinges equals more than 4 hinges.

[0031] In an embodiment of the present invention, one of the plurality of hinges is disposed at the end of the carry cot nearest the occupant's head position.

[0032] In an embodiment of the present invention, one of the plurality of hinges is
10 disposed at the end of the carry cot nearest the occupant's feet position.

[0033] In an embodiment of the present invention, two of the plurality of hinges are disposed on either side of the carry cot nearest the occupant's head position.

[0034] In an embodiment of the present invention, the plurality of hinges further comprise locking elements. The locking elements allow the hinges to be locked in
15 place when the carry cot's frame is extended or unfolded and prevents the upper frame and the flexible sidewall from collapsing.

[0035] The locking elements comprise, for example, a latch, a latch handle, a spring, and a lock shaft. When the carry cot is completely expanded or unfolded, the spring

pushes the lock shaft into an indentation, slot, or hole and the hinge becomes locked in the open (unfolded) position. When the hinge is locked, the upper frame is prevented from collapsing toward the lower frame.

[0036] When the user wants to fold or collapse the carry cot, the latch handle is
5 pulled or pushed and the latch removes the lock shaft from the indentation, slot, or hole and the hinge becomes unlocked. When the hinge is unlocked, the upper frame is allowed to collapse toward the lower frame and the carry cot is folded.

[0037] When the user wants to unfold the carry cot, the user grasps the carrying handle and lifts the carry cot. The weight of the lower frame or the weight of the
10 occupant pulls the lower frame of the carry cot away from the upper frame until the spring pushes the lock shaft into the indentation, slot, or hole and the hinge becomes locked in the open (unfolded) position. The user does not need to interact with the locking elements in order to unfold the carry cot and lock it in the expanded position. When the hinge is locked, the upper frame is prevented from collapsing toward the
15 lower frame and the user can conveniently carry the carry cot and occupant.

[0038] In an embodiment of the present invention, the lower frame further comprises a baseboard that acts as a floor to the carry cot.

[0039] In an embodiment of the present invention, the upper frame and/or the lower frame comprise a single piece hoop/ring structure.

[0040] In an embodiment of the present invention, the upper frame and/or the lower frame comprise a plurality of pieces that fit together to form a hoop/ring structure.

5 [0041] In an embodiment of the present invention, the upper frame and/or the lower frame comprise metal or plastic material that is hollow or solid.

[0042] In an embodiment of the present invention, the flexible sidewall is removable from the upper and lower frame. For example, the flexible sidewall comprises mating fastening elements that connect to hold the top of the flexible
10 sidewall to the upper frame and the bottom of the flexible sidewall to the lower frame or baseboard.

[0043] In an embodiment of the present invention, the carry cot further comprises a retractable canopy. The retractable canopy can be pushed back/down to expose the interior of the carry cot for loading the occupant and pulled forward/up to cover the
15 area above the occupant's head position to protect the occupant from excessive sunlight, wind, or rain.

[0044] In an embodiment of the present invention, the carry cot further comprises mounting elements on the baseboard or lower frame that allows the carry cot to be removably attached to a stroller.

5 BRIEF DESCRIPTION OF THE DRAWINGS

[0045] Figure 1 is a drawing illustrating a foldable carry cot with removably attached cushion according to an embodiment of the present invention.

[0046] Figure 2A is a drawing illustrating a foldable carry cot with removably attached cushion according to an embodiment of the present invention.

10 [0047] Figure 2B is a drawing illustrating a carry cot with cushions according to an embodiment of the present invention.

[0048] Figure 2C is a drawing illustrating a carry cot with downward rotating cushions according to an embodiment of the present invention.

[0049] Figure 2D is a drawing illustrating a carry cot with upward rotating cushions
15 according to an embodiment of the present invention.

[0050] Figure 2E is a drawing illustrating a carry cot with storable cushions according to an embodiment of the present invention.

[0051] Figure 2F is a drawing illustrating a carry cot with removable and storable cushions according to an embodiment of the present invention.

[0052] Figure 3 is a drawing illustrating a foldable carry cot with a plurality of hinges according to an embodiment of the present invention.

5 [0053] Figure 4 is a drawing illustrating a foldable carry cot with a plurality of hinges and removably attached cushion according to an embodiment of the present invention.

[0054] Figure 5 is a drawing illustrating a foldable carry cot with a plurality of hinges and removably attached cushion according to an embodiment of the present
10 invention.

[0055] Figure 6 is a drawing illustrating a foldable carry cot with a plurality of hinges according to an embodiment of the present invention.

[0056] Figure 7 is a drawing illustrating a foldable carry cot with a plurality of hinges according to an embodiment of the present invention.

15 [0057] Figure 8 is a drawing illustrating a foldable carry cot with a plurality of hinges according to an embodiment of the present invention.

[0058] Figure 9 is a drawing illustrating a foldable carry cot with a plurality of hinges according to an embodiment of the present invention.

[0059] Figure 10 is a drawing illustrating a foldable carry cot with a plurality of hinges in a folded position according to an embodiment of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

5 [0060] To facilitate understanding of the object, characteristics and effects of this present disclosure, embodiments together with the attached drawings for the detailed description of the present disclosure are provided.

[0061] Refer to Figure 1 and Figures 2A-2F, which are drawings illustrating a foldable carry cot with removably attached, foldable, and/or storable cushions
10 according to embodiments of the present invention.

[0062] The present invention provides a carry cot 100 comprising at least one cushion 600. The cushion 600 is disposed on an interior side of the carry cot 100, for example, near the head of an occupant of the carry cot 100. Or, for example, the carry cot 100 comprises two cushions 600 disposed respectively on two interior sides
15 of the carry cot 100 on either side of the carry cot occupant. The cushions 600 can be a shock-absorbing component that absorbs impact coming from any of the sides of the carry cot 100. As a result, the head of the carry cot occupant can be protected by the cushions 600.

[0063] The cushion 600 comprises, for example, an elastic body or an elastic body covered with material or fabric. The elastic body can be any material that absorbs shock and/or with soft textures. In an embodiment, the elastic body comprises Styrofoam, expandable polypropylene (EPP), expandable polystyrene (EPS),
5 expandable polyolefin (EPO), polyethylene (PE) board with foam, or PE board with rubber.

[0064] In an embodiment of the present invention, the cushion 600 or cushions are removably attached to the interior side of the carry cot 100 by removably attachable fasteners 610 such as, for example, magnets, buttons, snaps, clips, or hook and loop
10 fabric fastener. In this embodiment the cushion 600 and the interior side of the carry cot 100 comprise mating fastening elements so that the cushion 600 is removably attached to the side wall.

[0065] In an embodiment of the present invention, the cushion 600 or cushions are independent pieces and the carry cot 100 further comprises a pouch or side pocket
15 for housing the cushion 600 and the cushion 600 is disposed in the pouch while the pouch holds the cushion 600 in position.

[0066] In an embodiment of the present invention, the cushion 600 is an extension of a top side rail or upper frame 200 of the carry cot 100 or is attached to the top side

rail or upper frame 200 of the carry cot 100. A user can flip the cushion 600 downward before the occupant is housed in the carry cot 100. The cushion 600 is attached to the top side rail or the upper frame 200 by a joint, a clip, fabric, a hinge, a fabric hinge, a hook, or a clasp, zipper, hook and loop fastener such as Velcro®,
5 etc. The caregiver can removably attach the cushion 600 to the top side rail or upper frame 200 at a location appropriate to the current need.

[0067] In an embodiment of the present invention, the cushion 600 is an extension of a bottom side rail or lower frame 300 of the carry cot 100 or is attached to the bottom side rail or lower frame 300 of the carry cot 100. A user can flip the cushion
10 600 upward before the occupant is housed in the carry cot 100. The cushion 600 is attached to the bottom side rail or the lower frame 300 by a joint, a clip, fabric, a hinge, a fabric hinge, a hook, or a clasp, zipper, hook and loop fastener such as Velcro®, etc. The caregiver can removably attach the cushion 600 to the bottom side rail or lower frame 300 at a location appropriate to the current need.

15 [0068] In an embodiment of the present invention, the cushion 600 forms a pouch or pocket between the cushion 600 and the side wall of the carry cot 100. This allows the caregiver to use the pouch or pocket as a moveable storage area or place an additional cushion inside the pouch when needed.

[0069] In an embodiment of the present invention, the cushion 600 comprises various shapes, sizes, thicknesses, materials, fabrics, or colors.

[0070] In an embodiment of the present invention, the cushion 600 comprises a combination of various shapes, sizes, thicknesses, materials, fabrics, or colors.

5 [0071] In an embodiment of the present invention, the cushion 600 comprises a combination of various removably attachable fasteners 610.

[0072] Refer to Figures 3-10, which are drawings illustrating a foldable carry cot with a plurality of hinges according to an embodiment of the present invention.

[0073] The present invention further provides a carry cot 100 comprising a foldable
10 frame. The foldable frame allows the carry cot 100 to collapse or fold into itself. As a result, the size of the carry cot 100 can be minimized when not in use or when the carry cot 100 is placed in storage.

[0074] An advantage of the present invention is that when an infant is not occupying the carry cot 100, the carry cot 100 can be folded or collapsed, thereby
15 greatly reducing the size of the carry cot 100, and the carry cot 100 can easily be stowed in the trunk or rear of a vehicle, inside a closet, or on a shelf while saving storage space.

[0075] The foldable frame comprises an upper frame 200, a lower frame 300, a flexible sidewall 400, a carrying handle 500, and a plurality of hinges 700.

[0076] The carrying handle 500 is rotatably attached to the upper frame 200 by rotating handle hinges 550 (Figure 1).

5 [0077] The flexible sidewall 400 is attached or connected to and disposed between the upper frame 200 and the lower frame 300.

[0078] The plurality of hinges 700 is attached or connected to and disposed between the upper frame 200 and the lower frame 300.

[0079] Each of the plurality of hinges 700 comprises an upper bracket 710, a lower
10 bracket 720, and a pivot pin 730. The pivot pin holds the bottom of the upper bracket 710 and top of the lower bracket 720 together while allowing the upper bracket 710 and the lower bracket 720 to rotatably move away from or closer to each other by pivoting around the pivot pin 730.

[0080] The top of the upper bracket 710 is rotatably connected to the upper frame
15 200. The bottom of the lower bracket 720 is rotatably connected to the lower frame 300. As the hinge 700 folds and the carry cot 100 collapses (upper bracket 710 and lower bracket 720 move closer to each other) the top of the upper bracket 710 rotates around the upper frame 200 in a first direction. At the same time, the bottom of the

lower bracket 720 rotates around the lower frame 300 in a second direction. When the hinge 700 opens and the carry cot 100 unfolds (upper bracket 710 and lower bracket 720 move away from each other) the top of the upper bracket 710 rotates around the upper frame 200 in the second direction. At the same time, the bottom of the lower bracket 720 rotates around the lower frame 300 in the first direction.

[0081] In an embodiment of the present invention, the plurality of hinges 700 is disposed on the exterior side of the flexible sidewall 400. In an embodiment of the present invention, the plurality of hinges 700 is disposed on the interior side of the flexible sidewall 400. In an embodiment of the present invention, the flexible sidewall 400 is multi-ply and the plurality of hinges 700 is disposed between the exterior wall and the interior wall of the flexible sidewall 400.

[0082] In an embodiment of the present invention, the plurality of hinges 700 equals 2 hinges. In an embodiment of the present invention, the plurality of hinges 700 equals 3 hinges. In an embodiment of the present invention, the plurality of hinges 700 equals 4 hinges. In an embodiment of the present invention, the plurality of hinges 700 equals more than 4 hinges.

[0083] In an embodiment of the present invention, one of the plurality of hinges 700 is disposed at the end of the carry cot 100 nearest the occupant's head position.

In an embodiment of the present invention, one of the plurality of hinges 700 is disposed at the end of the carry cot 100 nearest the occupant's feet position. In an embodiment of the present invention, two of the plurality of hinges 700 are disposed on either side of the carry cot 100 nearest the occupant's head position.

5 [0084] In an embodiment of the present invention, as shown in Figures 9 and 10, a plurality of cushions 600 is disposed on the hinges 700. For example, one cushion 600 is disposed on each of the upper brackets 710 and one cushion 600 is disposed on each of the lower brackets 720. In an embodiment, as the carry cot 100 is folded (collapsed) or unfolded (expanded), the plurality of cushions 600 push against the
10 flexible sidewall 400 and prevent the flexible sidewall 400 from being caught in the hinges 700. Additionally, the plurality of cushions 600 provide protection from the hard hinges 700 for the occupant in the carry cot 100.

[0085] In an embodiment, the plurality of cushions 600 comprise, for example, Styrofoam, expandable polypropylene (EPP), expandable polystyrene (EPS),
15 expandable polyolefin (EPO), polyethylene (PE) board with foam, or PE board with rubber. In an embodiment, the cushions 600 are non-removably attached to the hinges 700.

[0086] In an embodiment of the present invention, the plurality of cushions 600 are removably attached to the hinges by removably attachable fasteners such as, for example, magnets, buttons, snaps, clips, or hook and loop fabric fastener. In this embodiment the plurality of cushions 600 and the hinges 700 comprise mating
5 fastening elements so that the plurality of cushions 600 are removably attached to the hinges 700.

[0087] In an embodiment of the present invention, the plurality of cushions 600 comprises various shapes, sizes, thicknesses, materials, fabrics, or colors.

[0088] In an embodiment of the present invention, the plurality of hinges 700
10 further comprise locking elements. The locking elements allow the hinges 700 to be locked in place when the carry cot's frame is extended or unfolded and prevents the upper frame 200 and the flexible sidewall 400 from collapsing.

[0089] The locking elements comprise, for example, a latch, a latch handle, a spring, and a lock shaft. When the carry cot 100 is completely expanded or unfolded, the
15 spring pushes the lock shaft into an indentation, slot, or hole and the hinge 700 becomes locked in the open (unfolded) position. When the hinge 700 is locked, the upper frame 200 is prevented from collapsing toward the lower frame 300.

[0090] When the user wants to fold or collapse the carry cot 100, the latch handle is pulled or pushed and the latch removes the lock shaft from the indentation, slot, or hole and the hinge 700 becomes unlocked. When the hinge 700 is unlocked, the upper frame 200 is allowed to collapse toward the lower frame 300 and the carry cot
5 100 is folded.

[0091] When the user wants to unfold the carry cot 100, the user grasps the carrying handle 500 and lifts the carry cot 100. The weight of the lower frame 300 or the weight of the occupant pulls the lower frame 300 of the carry cot 100 away from the upper frame 200 until the spring pushes the lock shaft into the indentation, slot, or
10 hole and the hinge 700 becomes locked in the open (unfolded) position. The user does not need to interact with the locking elements in order to unfold the carry cot 100 and lock it in the expanded position. When the hinge 700 is locked, the upper frame 200 is prevented from collapsing toward the lower frame 300 and the user can conveniently carry the carry cot 100 and occupant.

15 [0092] In an embodiment of the present invention, the lower frame 300 further comprises a baseboard 350 that acts as a floor to the carry cot 100.

[0093] In an embodiment of the present invention, the upper frame 200 and/or the lower frame 300 comprise a single piece hoop/ring structure.

[0094] In an embodiment of the present invention, the upper frame 200 and/or the lower frame 300 comprise a plurality of pieces that fit together to form a hoop/ring structure.

[0095] In an embodiment of the present invention, the upper frame 200 and/or the lower frame 300 comprise metal or plastic material that is hollow or solid.

[0096] In an embodiment of the present invention, the flexible sidewall 400 is removable from the upper and lower frame. For example, the flexible sidewall 400 comprises mating fastening elements that connect to hold the top of the flexible sidewall 400 to the upper frame 200 and the bottom of the flexible sidewall 400 to the lower frame 300 or baseboard 350.

[0097] In an embodiment of the present invention, the carry cot 100 further comprises a retractable canopy 800. The retractable canopy 800 can be pushed back/down to expose the interior of the carry cot 100 for loading the occupant and pulled forward/up to cover the area above the occupant's head position to protect the occupant from excessive sunlight, wind, or rain.

[0098] In an embodiment of the present invention, the carry cot 100 further comprises mounting elements 900 on the baseboard 350 or lower frame 300 that allows the carry cot 100 to be removably attached to a stroller.

[0099] While the present disclosure has been described by means of specific embodiments, numerous modifications and variations could be made thereto by those skilled in the art without departing from the scope and spirit of the present disclosure set forth in the claims.

WHAT IS CLAIMED IS:

1. A foldable infant carry cot (100) comprising:

at least one cushion (600) disposed on an interior side of the carry cot (100), the

at least one cushion (600) comprising a plurality of removably attachable fasteners

5 (610) for attaching the at least one cushion (600) to a side wall of the carry cot (100).

2. The foldable infant carry cot (100) according to claim 1, the at least one cushion

(600) comprising a shock-absorbing component that absorbs impact coming from any

of the sides of the carry cot (100).

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3. The foldable infant carry cot (100) according to claim 1, the at least one cushion

(600) comprising an elastic body or an elastic body covered with material or fabric.

4. The foldable infant carry cot (100) according to claim 1, the at least one cushion

15 (600) comprising Styrofoam, expandable polypropylene (EPP), expandable

polystyrene (EPS), expandable polyolefin (EPO), polyethylene (PE) board with foam,

or PE board with rubber.

5. The foldable infant carry cot (100) according to claim 1, the removably attachable fasteners (610) comprising magnets, buttons, snaps, clips, or hook and loop fabric fasteners.
- 5 6. The foldable infant carry cot (100) according to claim 1, the carry cot (100) further comprising a pouch for housing the at least one cushion (600) and the cushion (600) is disposed in the pouch while the pouch holds the cushion (600) in position.
7. The foldable infant carry cot (100) according to claim 1, wherein the cushion (600) is an extension of an upper frame (200) of the carry cot (100) or is attached to the upper frame (200) of the carry cot (100).
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8. The foldable infant carry cot (100) according to claim 1, wherein the at least one cushion (600) is attached to an upper frame (200) by a joint, a clip, fabric, a hinge, a fabric hinge, a hook, or a clasp.
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9. The foldable infant carry cot (100) according to claim 1, wherein the at least one cushion (600) is an extension of a lower frame (300) of the carry cot (100) or is

attached to the lower frame (300) of the carry cot (100).

10. The foldable infant carry cot (100) according to claim 1, wherein the at least one cushion (600) is attached to a lower frame (300) by a joint, a clip, fabric, a hinge, a
5 fabric hinge, a hook, or a clasp.

11. The foldable infant carry cot (100) according to claim 1, wherein the at least one cushion (600) forms a pocket between the at least one cushion and the side wall of the carry cot (100).

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12. The foldable infant carry cot (100) according to claim 1, wherein the at least one cushion (600) comprises various shapes, sizes, thicknesses, materials, fabrics, or colors.

15 13. A foldable infant carry cot (100) comprising:

a foldable frame allowing the carry cot (100) to fold and collapse.

14. The foldable infant carry cot (100) according to claim 13, the foldable frame

comprising:

an upper frame (200);

a lower frame (300);

5 a flexible sidewall (400) disposed between the upper frame (200) and the lower frame (300);

a carrying handle (500); and

a plurality of hinges (700) disposed between the upper frame (200) and the lower frame (300).

10 15. The foldable infant carry cot (100) according to claim 14, each of the plurality of hinges (700) comprising:

an upper bracket (710) rotatably connected to the upper frame (200);

a lower bracket (720) rotatably connected to the lower frame (300); and

15 a pivot pin (730), the pivot pin (730) holding a bottom of the upper bracket (710) and a top of the lower bracket (720) together while allowing the upper bracket (710) and the lower bracket (720) to rotatably move away from or closer to each other by pivoting around the pivot pin (730).

16. The foldable infant carry cot (100) according to claim 15, wherein as the hinge (700) folds and the carry cot (100) collapses, the upper bracket (710) and lower bracket (720) move closer to each other, the top of the upper bracket (710) rotates around the upper frame (200) in a first direction, and the bottom of the lower bracket (720) rotates around the lower frame (300) in a second direction.

17. The foldable infant carry cot (100) according to claim 16, wherein as the hinge (700) opens and the carry cot (100) unfolds, the upper bracket (710) and lower bracket (720) move away from each other, the top of the upper bracket (710) rotates around the upper frame (200) in the second direction, and the bottom of the lower bracket (720) rotates around the lower frame (300) in the first direction.

18. The foldable infant carry cot (100) according to claim 14, wherein two of the plurality of hinges (700) are disposed on either side of the carry cot (100) nearest an occupant's head position.

19. The foldable infant carry cot (100) according to claim 14, wherein one of the plurality of hinges (700) is disposed at an end of the carry cot (100) nearest an

occupant's head position.

20. The foldable infant carry cot (100) according to claim 14, wherein one of the plurality of hinges (700) is disposed at an end of the carry cot (100) nearest an
5 occupant's feet position.

21. The foldable infant carry cot (100) according to claim 14, the plurality of hinges (700) further comprising:

locking elements allowing the hinges (700) to be locked in place when the
10 folding frame of the carry cot (100) is unfolded and prevents the upper frame (200) and the flexible sidewall (400) from collapsing.

22. The foldable infant carry cot (100) according to claim 21, the locking elements comprising a latch, a latch handle, a spring, and a lock shaft.

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23. The foldable infant carry cot (100) according to claim 22, wherein when the carry cot (100) is completely unfolded, the spring pushes the lock shaft into an indentation, slot, or hole and the hinge (700) becomes locked in an open position.

24. The foldable infant carry cot (100) according to claim 14, the lower frame (300) further comprising a baseboard (350) that provides a floor to the carry cot (100).
- 5 25. The foldable infant carry cot (100) according to claim 14, wherein the upper frame (200) and/or the lower frame (300) comprise a single piece hoop/ring structure.
26. The foldable infant carry cot (100) according to claim 14, wherein the upper frame (200) and/or the lower frame (300) comprise a plurality of pieces that fit
10 together to form a hoop/ring structure.
27. The foldable infant carry cot (100) according to claim 14, wherein the upper frame (200) and/or the lower frame (300) comprise metal or plastic material that is hollow or solid.
- 15 28. The foldable infant carry cot (100) according to claim 14, wherein the flexible sidewall (400) is removable from the upper frame (200) and the lower frame (300).

29. The foldable infant carry cot (100) according to claim 14, the flexible sidewall (400) comprising mating fastening elements that connect to hold the top of the flexible sidewall (400) to the upper frame (200) and the bottom of the flexible sidewall (400) to the lower frame (300).

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30. The foldable infant carry cot (100) according to claim 14, the carry cot (100) further comprising:

a retractable canopy (800);

wherein, the retractable canopy (800) can be pushed back/down to expose

10 an interior of the carry cot (100) for loading an occupant and pulled forward/up to cover an area above the occupant's head position.

31. The foldable infant carry cot (100) according to claim 24, the carry cot (100) further comprising:

15 mounting elements (900) on the baseboard (350) or the lower frame (300) that allow the carry cot (100) to be removably attached to a stroller.

32. A foldable infant carry cot (100) comprising:

at least one cushion (600) disposed on an interior side of the carry cot (100), the
at least one cushion (600) comprising a plurality of removably attachable fasteners
(610) for attaching the at least one cushion (600) to a side wall of the carry cot (100);
and

5 a foldable frame allowing the carry cot (100) to fold and collapse.

33. The foldable infant carry cot (100) according to claim 32, the at least one cushion
(600) comprising a shock-absorbing component that absorbs impact coming from any
of the sides of the carry cot (100).

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34. The foldable infant carry cot (100) according to claim 32, the at least one cushion
(600) comprising an elastic body or an elastic body covered with material or fabric.

35. The foldable infant carry cot (100) according to claim 32, the at least one cushion
15 (600) comprising Styrofoam, expandable polypropylene (EPP), expandable
polystyrene (EPS), expandable polyolefin (EPO), polyethylene (PE) board with foam,
or PE board with rubber.

36. The foldable infant carry cot (100) according to claim 32, the removably attachable fasteners (610) comprising magnets, buttons, snaps, clips, or hook and loop fabric fasteners.
- 5 37. The foldable infant carry cot (100) according to claim 32, the carry cot (100) further comprising a pouch for housing the at least one cushion (600) and the cushion (600) is disposed in the pouch while the pouch holds the cushion (600) in position.
38. The foldable infant carry cot (100) according to claim 32, wherein the cushion
10 (600) is an extension of an upper frame (200) of the carry cot (100) or is attached to the upper frame (200) of the carry cot (100).
39. The foldable infant carry cot (100) according to claim 32, wherein the at least one cushion (600) is attached to an upper frame (200) by a joint, a clip, fabric, a
15 hinge, a fabric hinge, a hook, or a clasp.
40. The foldable infant carry cot (100) according to claim 32, wherein the at least one cushion (600) is an extension of a lower frame (300) of the carry cot (100) or is

attached to the lower frame (300) of the carry cot (100).

41. The foldable infant carry cot (100) according to claim 32, wherein the at least one cushion (600) is attached to a lower frame (300) by a joint, a clip, fabric, a hinge,
5 a fabric hinge, a hook, or a clasp.

42. The foldable infant carry cot (100) according to claim 32, wherein the at least one cushion (600) forms a pocket between the at least one cushion (600) and the side wall of the carry cot (100).

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43. The foldable infant carry cot (100) according to claim 32, wherein the at least one cushion (600) comprises various shapes, sizes, thicknesses, materials, fabrics, or colors.

15 44. The foldable infant carry cot (100) according to claim 32, the foldable frame comprising:

an upper frame (200);

a lower frame (300);

a flexible sidewall (400) disposed between the upper frame (200) and the lower frame (300);

a carrying handle (500); and

a plurality of hinges (700) disposed between the upper frame (200) and the lower
5 frame (300).

45. The foldable infant carry cot (100) according to claim 44, each of the plurality of hinges (700) comprising:

an upper bracket (710) rotatably connected to the upper frame (200);

10 a lower bracket (720) rotatably connected to the lower frame (300); and

a pivot pin (730), the pivot pin (730) holding a bottom of the upper bracket (710) and a top of the lower bracket (720) together while allowing the upper bracket (710) and the lower bracket (720) to rotatably move away from or closer to each other by pivoting around the pivot pin (730).

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46. The foldable infant carry cot (100) according to claim 45, wherein as the hinge (700) folds and the carry cot (100) collapses, the upper bracket (710) and lower bracket (720) move closer to each other, the top of the upper bracket (710) rotates

around the upper frame (200) in a first direction, and the bottom of the lower bracket (720) rotates around the lower frame (300) in a second direction.

47. The foldable infant carry cot (100) according to claim 46, wherein as the hinge
5 (700) opens and the carry cot (100) unfolds, the upper bracket (710) and lower bracket (720) move away from each other, the top of the upper bracket (710) rotates around the upper frame (200) in the second direction, and the bottom of the lower bracket (720) rotates around the lower frame (300) in the first direction.

10 48. The foldable infant carry cot (100) according to claim 44, wherein two of the plurality of hinges (700) are disposed on either side of the carry cot (100) nearest an occupant's head position.

49. The foldable infant carry cot (100) according to claim 44, wherein one of the
15 plurality of hinges (700) is disposed at an end of the carry cot (100) nearest an occupant's head position.

50. The foldable infant carry cot (100) according to claim 44, wherein one of the

plurality of hinges (700) is disposed at an end of the carry cot (100) nearest an occupant's feet position.

51. The foldable infant carry cot (100) according to claim 44, the plurality of hinges
5 (700) further comprising:

locking elements allowing the hinges (700) to be locked in place when the folding frame of the carry cot (100) is unfolded and prevents the upper frame (200) and the flexible sidewall (400) from collapsing.

10 52. The foldable infant carry cot (100) according to claim 51, the locking elements comprising a latch, a latch handle, a spring, and a lock shaft.

53. The foldable infant carry cot (100) according to claim 52, wherein when the carry cot (100) is completely unfolded, the spring pushes the lock shaft into an indentation,
15 slot, or hole and the hinge (700) becomes locked in an open position.

54. The foldable infant carry cot (100) according to claim 44, the lower frame (300) further comprising a baseboard (350) that provides a floor to the carry cot (100).

55. The foldable infant carry cot (100) according to claim 44, wherein the upper frame (200) and/or the lower frame (300) comprise a single piece hoop/ring structure.

5 56. The foldable infant carry cot (100) according to claim 44, wherein the upper frame (200) and/or the lower frame (300) comprise a plurality of pieces that fit together to form a hoop/ring structure.

57. The foldable infant carry cot (100) according to claim 44, wherein the upper
10 frame (200) and/or the lower frame (300) comprise metal or plastic material that is hollow or solid.

58. The foldable infant carry cot (100) according to claim 44, wherein the flexible sidewall (400) is removable from the upper frame (200) and the lower frame (300).

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59. The foldable infant carry cot (100) according to claim 44, the flexible sidewall (400) comprising mating fastening elements that connect to hold the top of the flexible sidewall (400) to the upper frame (200) and the bottom of the flexible

sidewall (400) to the lower frame (300).

60. The foldable infant carry cot (100) according to claim 32, the carry cot (100) further comprising:

5 a retractable canopy (800);

wherein, the retractable canopy (800) can be pushed back/down to expose an interior of the carry cot (100) for loading an occupant and pulled forward/up to cover an area above the occupant's head position.

10 61. The foldable infant carry cot (100) according to claim 44, the carry cot (100) further comprising:

mounting elements (900) on a baseboard (350) or the lower frame (300) that allow the carry cot (100) to be removably attached to a stroller.

15 62. A foldable infant carry cot (100) comprising:

a foldable frame allowing the carry cot (100) to fold and collapse; and

at least one cushion (600) disposed on an interior side of the carry cot (100), the

at least one cushion (600) connected to the foldable frame.

63. The foldable infant carry cot (100) according to claim 62, the at least one cushion (600) comprising a shock-absorbing component that absorbs impact coming from any of the sides of the carry cot (100).

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64. The foldable infant carry cot (100) according to claim 62, the at least one cushion (600) comprising an elastic body or an elastic body covered with material or fabric.

65. The foldable infant carry cot (100) according to claim 62, the at least one cushion (600) comprising Styrofoam, expandable polypropylene (EPP), expandable polystyrene (EPS), expandable polyolefin (EPO), polyethylene (PE) board with foam, or PE board with rubber.

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66. The foldable infant carry cot (100) according to claim 62, wherein the cushion (600) is an extension of an upper frame (200) of the carry cot (100) or is attached to the upper frame (200) of the carry cot (100).

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67. The foldable infant carry cot (100) according to claim 62, wherein the at least

one cushion (600) is attached to an upper frame (200) by a joint, a clip, fabric, a hinge, a fabric hinge, a hook, or a clasp.

68. The foldable infant carry cot (100) according to claim 62, wherein the at least
5 one cushion (600) is an extension of a lower frame (300) of the carry cot (100) or is attached to the lower frame (300) of the carry cot (100).

69. The foldable infant carry cot (100) according to claim 62, wherein the at least
one cushion (600) is attached to a lower frame (300) by a joint, a clip, fabric, a hinge,
10 a fabric hinge, a hook, or a clasp.

70. The foldable infant carry cot (100) according to claim 62, wherein the at least
one cushion (600) forms a pocket between the at least one cushion (600) and a side
wall of the carry cot (100).

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71. The foldable infant carry cot (100) according to claim 62, wherein the at least
one cushion (600) comprises various shapes, sizes, thicknesses, materials, fabrics, or
colors.

72. The foldable infant carry cot (100) according to claim 62, the foldable frame comprising:

an upper frame (200);

5 a lower frame (300);

a flexible sidewall (400) disposed between the upper frame (200) and the lower frame (300);

a carrying handle (500); and

a plurality of hinges (700) disposed between the upper frame (200) and the lower frame (300).

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73. The foldable infant carry cot (100) according to claim 72, each of the plurality of hinges (700) comprising:

an upper bracket (710) rotatably connected to the upper frame (200);

15 a lower bracket (720) rotatably connected to the lower frame (300); and

a pivot pin (730), the pivot pin (730) holding a bottom of the upper bracket (710) and a top of the lower bracket (720) together while allowing the upper bracket (710) and the lower bracket (720) to rotatably move away from or closer to each other by

pivoting around the pivot pin (730).

74. The foldable infant carry cot (100) according to claim 73, wherein as the hinge
(700) folds and the carry cot (100) collapses, the upper bracket (710) and the lower
5 bracket (720) move closer to each other, the top of the upper bracket (710) rotates
around the upper frame (200) in a first direction, and the bottom of the lower bracket
(720) rotates around the lower frame (300) in a second direction.

75. The foldable infant carry cot (100) according to claim 74, wherein as the hinge
10 (700) opens and the carry cot (100) unfolds, the upper bracket (710) and the lower
bracket (720) move away from each other, the top of the upper bracket (710) rotates
around the upper frame (200) in the second direction, and the bottom of the lower
bracket (720) rotates around the lower frame (300) in the first direction.

15 76. The foldable infant carry cot (100) according to claim 72, wherein two of the
plurality of hinges (700) are disposed on either side of the carry cot (100) nearest an
occupant's head position.

77. The foldable infant carry cot (100) according to claim 72, wherein one of the plurality of hinges (700) is disposed at an end of the carry cot (100) nearest an occupant's head position.
- 5 78. The foldable infant carry cot (100) according to claim 72, wherein one of the plurality of hinges (700) is disposed at an end of the carry cot (100) nearest an occupant's feet position.
79. The foldable infant carry cot (100) according to claim 72, the plurality of hinges
- 10 (700) further comprising:
- locking elements allowing the hinges (700) to be locked in place when the folding frame of the carry cot (100) is unfolded and prevents the upper frame (200) and the flexible sidewall (400) from collapsing.
- 15 80. The foldable infant carry cot (100) according to claim 79, the locking elements comprising a latch, a latch handle, a spring, and a lock shaft.
81. The foldable infant carry cot (100) according to claim 80, wherein when the carry

cot (100) is completely unfolded, the spring pushes the lock shaft into an indentation, slot, or hole and the hinge (700) becomes locked in an open position.

82. The foldable infant carry cot (100) according to claim 72, the lower frame (300)
5 further comprising a baseboard (350) that provides a floor to the carry cot (100).

83. The foldable infant carry cot (100) according to claim 72, wherein the upper frame (200) and/or the lower frame (300) comprise a single piece hoop/ring structure.

10 84. The foldable infant carry cot (100) according to claim 72, wherein the upper frame (200) and/or the lower frame (300) comprise a plurality of pieces that fit together to form a hoop/ring structure.

85. The foldable infant carry cot (100) according to claim 72, wherein the upper
15 frame (200) and/or the lower frame (300) comprise metal or plastic material that is hollow or solid.

86. The foldable infant carry cot (100) according to claim 72, wherein the flexible

sidewall (400) is removable from the upper frame (200) and the lower frame (300).

87. The foldable infant carry cot (100) according to claim 72, the flexible sidewall (400) comprising mating fastening elements that connect to hold a top of the flexible
5 sidewall (400) to the upper frame (200) and the bottom of a flexible sidewall (400) to the lower frame (300).

88. The foldable infant carry cot (100) according to claim 72, the carry cot (100) further comprising:
10 a retractable canopy (800);
wherein, the retractable canopy (800) can be pushed back/down to expose an interior of the carry cot (100) for loading an occupant and pulled forward/up to cover an area above the occupant's head position.

15 89. The foldable infant carry cot (100) according to claim 72, the carry cot (100) further comprising:
mounting elements (900) on a baseboard (350) or the lower frame (300) that allows the carry cot (100) to be removably attached to a stroller.