



(22) Date de dépôt/Filing Date: 2011/12/23

(41) Mise à la disp. pub./Open to Public Insp.: 2013/06/23

(51) Cl.Int./Int.Cl. *B63C 9/105* (2006.01),  
*A62B 1/02* (2006.01), *B63C 9/06* (2006.01),  
*B63C 9/30* (2006.01), *B64D 17/00* (2006.01)

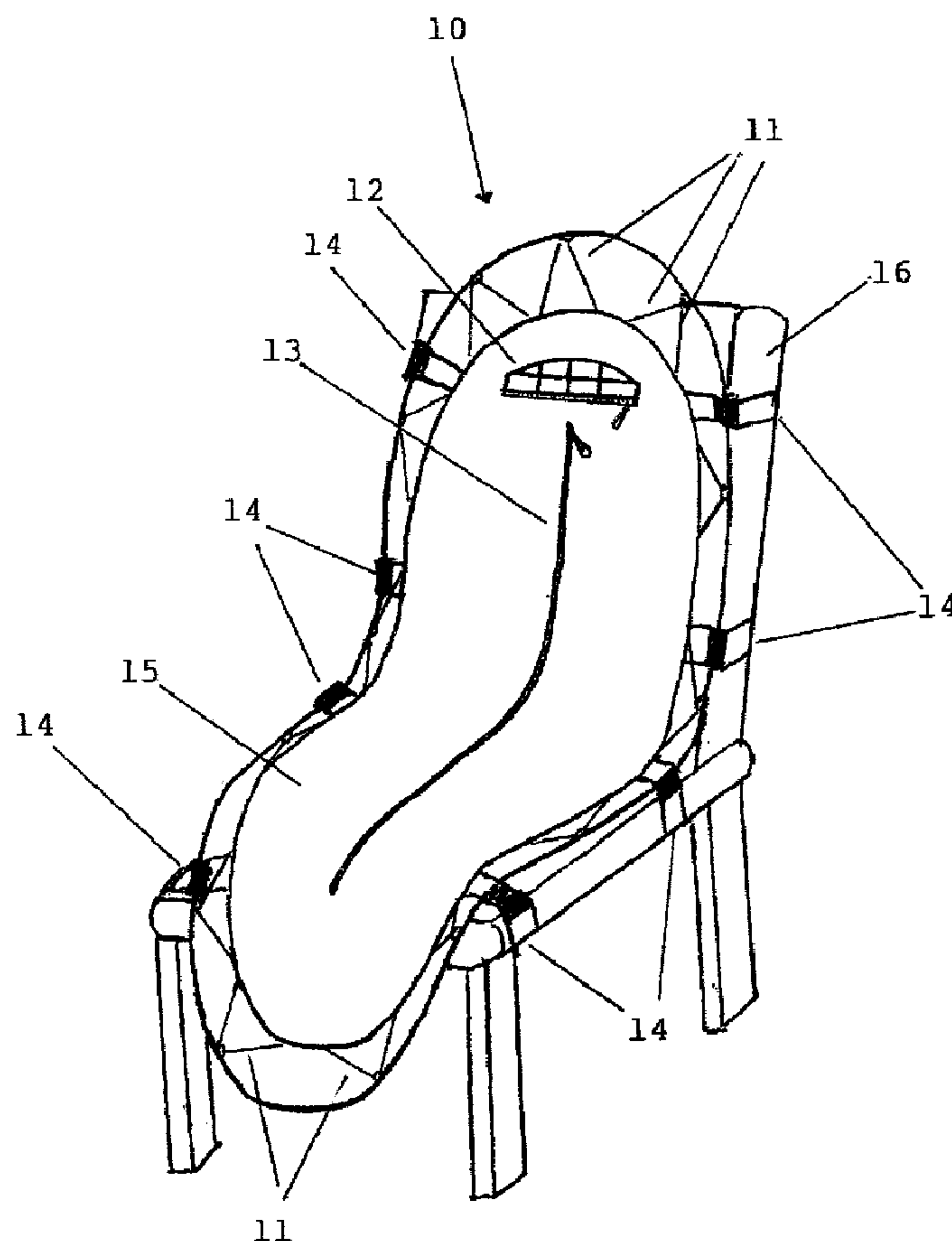
(71) Demandeur/Applicant:  
KWOK, GEORGE MING YAT, CA

(72) Inventeur/Inventor:  
KWOK, GEORGE MING YAT, CA

(74) Agent: NA

(54) Titre : COCON POUR BATEAU GONFLABLE BLINDE

(54) Title: ARMORED INFLATABLE BOAT COCOON



(57) Abrégé/Abstract:

An armored inflatable boat cocoon (10), having an element flap (15) which has a small window (12) for seeing and a long zipper (13) which a person can unzip and step in to get protection, the element flap (15) is controlled by numerous cords (11), the



(57) **Abrégé(suite)/Abstract(continued):**

armored inflatable boat cocoon (10) which is buckled to a seat (16) with numerous back straps (14), the invention can be placed into a suitcase or being carried with a duffle bag to wherever place where protection is needed, be it on land, on water or in the air.

## ARMORED INFLATABLE BOAT COCOON

**Abstract:** An armored inflatable boat cocoon (10), having an element flap (15) which has a small window (12) for seeing and a long zipper (13) which a person can unzip and step in to get protection, the element flap (15) is controlled by numerous cords (11), the armored inflatable boat cocoon (10) which is buckled to a seat (16) with numerous back straps (14), the invention can be placed into a suitcase or being carried with a duffle bag to wherever place where protection is needed, be it on land, on water or in the air.

Patent Application of

Ming Yat Kwok

For

TITLE: ARMORED INFLATABLE BOAT COCOON

#### BACKGROUND—FIELD OF INVENTION

The present invention relates to an armored inflatable boat cocoon for persons needing protection against impact force from an accident and protection against the extreme elements and also prevention of drowning.

#### BACKGROUND—DESCRIPTION OF PRIOR ART

There are floating devices to protect a person from drowning, they are either inflatable ones or non-inflatable ones, an inflatable floating device needs time to get ready, usually being inflated with an air pump, air cartridge, activation of a chemical or blow with the mouth, they can be folded and needing very little space for storage, the non-inflatable floating devices are usually rigid and non-collapsible needing more space for storage but they are reliable, ready to be used at any instance.

When a person needs protection from the impact of an accident on land, in the air or on a vessel on the water, the best one can hope for is the seatbelt system or air bag system and or both if the transportation system is so equipped, there are only seatbelts on a plane, to get more protection a person has to hold the knees with both hands with the head in them, there are currently no known seatbelt or air bag system on the trains or on the vessels traveling on the water.

The previous mentioned prior arts are of some help for their sole intended use. They can be useful for water sport against drowning, keep warm in the frigid water as well as protection against impact during a vehicle collision. All those prior arts are not reliable articles that a person can get protection by bringing them on to a plane, a train, a bus or a vessel because they are either lack of portability or they are not armored so they are not impact resistance.

The present invention overcomes the drawbacks of the prior arts, it is portable. A person can carry the boat cocoon and put it on wherever protection is needed, be it on land, in the air or on the water. The armored inflatable boat cocoon protects a person against impact, cushions a person falling from up high and shields a person from the extreme weather and the boat cocoon also prevent a person from drowning.

### SUMMARY OF THE INVENTION

The present invention is an armored inflatable boat cocoon, the boat cocoon is the size of a long overcoat when deflated for portability, a person can carry the boat cocoon in a suitcase or in a duffle bag. To set the boat cocoon in the ready mode, a person straps loosely the back straps of the boat cocoon to the seat, and with the large element flap on, the boat cocoon is functioning as a seat cover except that it has a long zipper at the middle of the flap where a person, during an emergency situation can unzip and step into the boat cocoon, arms can reach out through the short elastic sleeve outlets and buckle all the straps and adjust them after inflating the boat cocoon. The boat cocoon is built with many air chambers, a person can inflate the boat cocoon by one or all of the followings, through the use of an electric pump, by blowing through the valves, by the use of the hand pumps and or by triggering the release of gas from the cartridges, there are also numerous air release valves so the boat cocoon can be deflated and reset in a short time. There are pockets where armored plates are placed to strengthen the impact absorbing ability and stronger resistant of puncture to the air chambers. When necessary to do so, a person can stretch out the feet through the elastic short trunks in order to relax or walk about. The element flap, is controlled through numerous cords inside the boat cocoon, the element flap, through the controlling cords, may be let loose and locked at one end, the element flap is now functioning as a parachute to cushion the fall when coming down from up high. The element flap functions as a canopy when the boat cocoon lays flat on the surface, the canopy can be made into a dome by the maneuvering of the cords and a few pieces of flexible narrow strips. There is a see-through window with zipper at the top end of the element flap, a person staying under the element flap and inside the boat cocoon, is shielded against bad weather and can see through and one can also breathe through the window by opening a bit of the zipper. The armored inflatable boat cocoon protects a person against impact and the extreme elements and from drowning.

## BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is showing the armored inflatable boat cocoon which is placed on a seat and the seat straps are buckled.

Fig. 2 is showing the armored inflatable boat cocoon inflated with the back straps buckled to the seat and the front straps are buckled also, the element flap is removed together with all the cords.

Fig. 3 is the armored inflatable boat cocoon inflated which is laying down without the element flap, the seat and all the straps.

Fig. 4 is showing the dome shaped element flap with the support of a few pieces of flexible plates and is covering the armored inflatable boat cocoon.

Fig. 5 is showing the armored inflatable boat cocoon with the element flap functioning as a parachute to cushion the force of the fall..

Fig. 6 is showing the armored inflatable boat cocoon which is opening up to show the lay out and all the air chambers.

## DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring to Fig. 1 is showing the armored inflatable boat cocoon (10) buckled up to a seat (16) with back straps (14), the smaller version of the element flap (15) so to show numerous control cords (11) has a small window with zipper (12) where a person can see and breathe, there is also a long zipper (13) at the middle where a person can step into the boat cocoon (10) to protect oneself from impact, drowning and extreme elements.

Referring to Fig. 2 with the element flap (15) removed to show the boat cocoon (10) inflated and the front straps (27) buckled and the back straps (14) buckled to a seat (16), showing pocket zipper (21) where the armored plates (20) and other items are placed inside, pocket zipper (24) where armored plates (26) and other unlisted items are placed, short elastic sleeves (22) are for the arms to reach out for maneuvering. The legs of a person can stretch out through the elastic trunks (23). The face guard (25) can be flipped away when it is not in use.

Referring to Fig. 3 is showing the armored inflatable boat cocoon (10) inflated and laying flat on the ground without the element flap (15)

Referring to Fig. 4 revealing the armored inflatable boat cocoon (10) inflated and is opening out and laying flat and is showing the element flap (15) functioning as a domed canopy with the support of the front straps (27) where small thin plates (41) are stored inside their respective pockets. There are numerous cords (11) are binding the element flap (15) in place, a person can look through and breathe through from the small window (12), a person unzips the long zipper (13) to maneuver out or in of the covering.

Referring to Fig. 5 is revealing the armored inflatable boat cocoon (10) inflated with the front straps (27) buckled and the element flap ((15) with the long zipper (13) and the small window (12), is functioning as a parachute due to the manipulation of the cords (11). Joint knot (52) binds the cords (11) which having stoppers (50) and stop at the guide rings (51).

Referring to Fig. 6 is showing the armored inflatable boat cocoon (10) inflated and opening out without the element flap (15) and all the cords (11) removed, the straps (14) and (27) are also removed, revealing are the air chambers (60) wrapped around at the upper section to protect the vital organs of a person are armored plates (26), there are also armored plates (20) wrapped around the head area to protect the head of a person, elastic short sleeves (22) are for arms to reach out while all wrapped up to maneuver whatever necessary for the survival, those elastic sleeves are water resistant and are folded inside while not in use, short elastic trunks (23) are for legs that need to stretch out or walk, they are water resistant and are folded inside while not in use. A person can blow through the fittings (62) or fitted with hand pumps and or electric pump (not shown) to inflate the armored inflatable boat cocoon (10), the boat cocoon can also be inflated by pulling the gas release lever of the gas cartridges (63), there are several quick air release valves (61) to deflate the device for packing. Pockets (64) are for the storing of other items and or extra armored plates.

## CONCLUSION

It can now be seen that the armored inflatable boat cocoon provides protection for persons traveling on land, on water or in the air, in a matter of fact, since the beginning of air travel, a person on a plane has only a seat belt to rely upon for protection, with the present invention a person can now bring the armored inflatable boat cocoon on board, in case of emergency, a person can completely wrap oneself up with the armored inflatable boat cocoon for protection against impact, the element flap functioning as a parachute, will slow down the fall, and the inflated cocoon with armored plates will lessen the impact when falling down from up high, in case it is on the water, the dome shaped inflated boat cocoon will protect a person from drowning and hypothermia, There are hardly any protection for the passengers when riding on the public transit, a few may provide seatbelts, that is about all, with the present invention, persons riding the public transit or the private vehicle can now bring the armored inflatable boat cocoon and protect themselves. When persons taking the ferry, a cruise ship or even a private yacht, life vests or floating rings are stored somewhere you may not find it in a hurry and that is for your protection from drowning only, but with the present invention, persons traveling on water can bring their own armored inflatable boat cocoon and have complete control and place it where it is readily available and protect themselves from drowning, impact and the extreme elements, including hypothermia.

Although the description above contains many specifications, these should not be construed as limiting the scope of the invention but merely providing support to the illustration of the preferred embodiment of this invention. For example the armored inflatable boat cocoon can be inflated by any other means besides the methods mentioned above, it can also be inflated automatically, air chambers can be divided into different independent sections, fitted with one way valves, the air chambers will be inflated all at once, but if one leaks, the others will stay inflated, armored plates may be placed to the other part of the boat cocoon other than the upper body area and the head area.

Thus the scope of this invention should not be determined by the appended claims and their legal equivalents, rather than by the examples given herein.

I claim:

1. An armored inflatable boat cocoon embraces a person and protects said person from drowning, from the elements and from the impact of an accident, comprising:

A substantially inflatable body said body including several air chambers with armored plates embraces a person in a situation that is requiring protection from drowning, protection from the elements and protection from the impact of an accident, said body having short sleeves for the hands to reach out for maneuvering and said body having short trunks for the legs to stretch out and walk about and said body also having a bracket;

an element flap functions as a seat cover, functions as a parachute and functions as a canopy; said body and said element flap component being configured, sized and positioned relative to each other as to embrace and to protect said person.

2. An armored inflatable boat cocoon as cited in claim 1 wherein said air chambers where air inflates all of them but when one leaks which will not affect the others.

3. An armored inflatable boat cocoon as cited in claim 1 wherein said body having numerous deflating valves allowing fast deflating and packing up for traveling.

4. An armored inflatable boat cocoon as cited in claim 1 wherein said body having fittings for blowing air into said air chambers.

5. An armored inflatable boat cocoon as cited in claim 1 wherein said body having storage space for the placing of air cartridges said cartridges having and their individual activating devices.

6. An armored inflatable boat cocoon as cited in claim 1 wherein said body having armored plates to resist puncture and lessen the force of impact from an accident.

7. An armored inflatable boat cocoon as cited in claim 1 wherein said air chambers having pockets with zippers for the placing of said armored plates.

8. An armored inflatable boat cocoon as cited in claim 1 wherein said body also having a face bracket which is to protect the head and face of said person.

9. An armored inflatable boat cocoon as cited in claim 1 wherein said body having short sleeves for hands to reach out while all wrapped up inside said body and said short elastic sleeves are said sleeves are tugged in while not in use.

10. An armored inflatable boat cocoon as cited in claim 1 wherein said body having short trunks where legs are stretched out said short elastic trunks are elastic said trunks are tugged in while not in use.

11. An armored inflatable boat cocoon as cited in claim 1 wherein said body including pockets for storage of survival necessity items.

12. An armored inflatable boat cocoon as cited in claim 1 wherein said element flap is functioning as a seat cover while covering also the deflated boat cocoon.

13. An armored inflatable boat cocoon as cited in claim 12 wherein said element flap is set up as a domed canopy to protect said person from the elements.

14. An armored inflatable boat cocoon as cited in claim 13 wherein said domed canopy is supported by several thin pieces of flexible straps.

15. An armored inflatable boat cocoon as cited in claim 1 wherein said body including straps with pockets.

16. An armored inflatable boat cocoon as cited in claim 12 wherein said element flap is controlled by numerous cords.

17. An armored inflatable boat cocoon as cited in claim 16 wherein said numerous cords when said cords are tightly retained said element flap covers said boat cocoon and so protects said person from said elements.

18. An armored inflatable boat cocoon as cited in claim 16 wherein said numerous cords when said cords are set loose and anchored at the end stoppers then said element flap functions as a parachute.

19. An armored inflatable boat cocoon as cited in claim 12 wherein said element flap has a long zipper at the middle when in case of emergency said zipper is being unzipped and said person steps into said boat cocoon for protection.

20. An armored inflatable boat cocoon as cited in claim 12 wherein said element flap further including a small window with zipper said window enables said person to see through and breathe through.

FIG 1

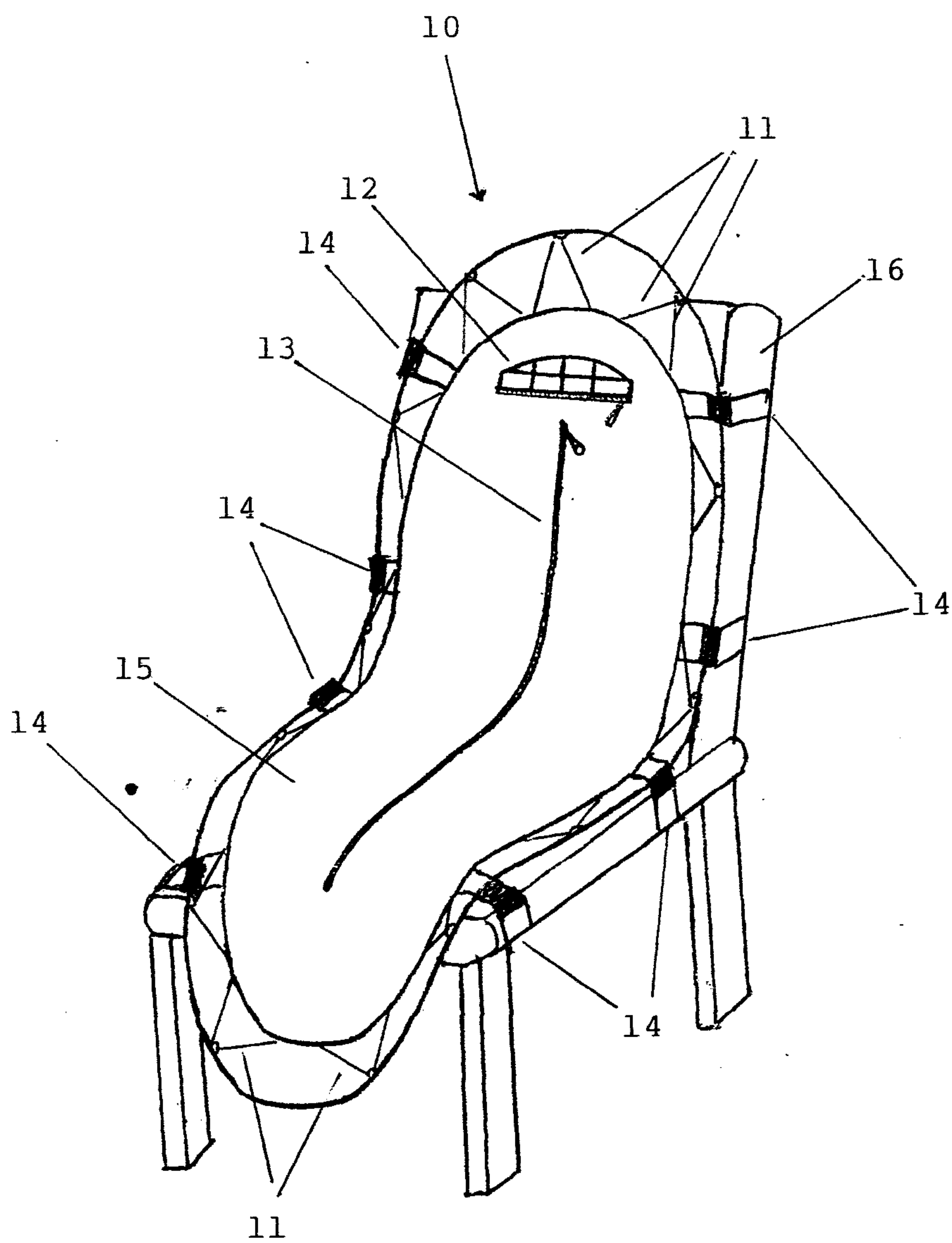


FIG 2

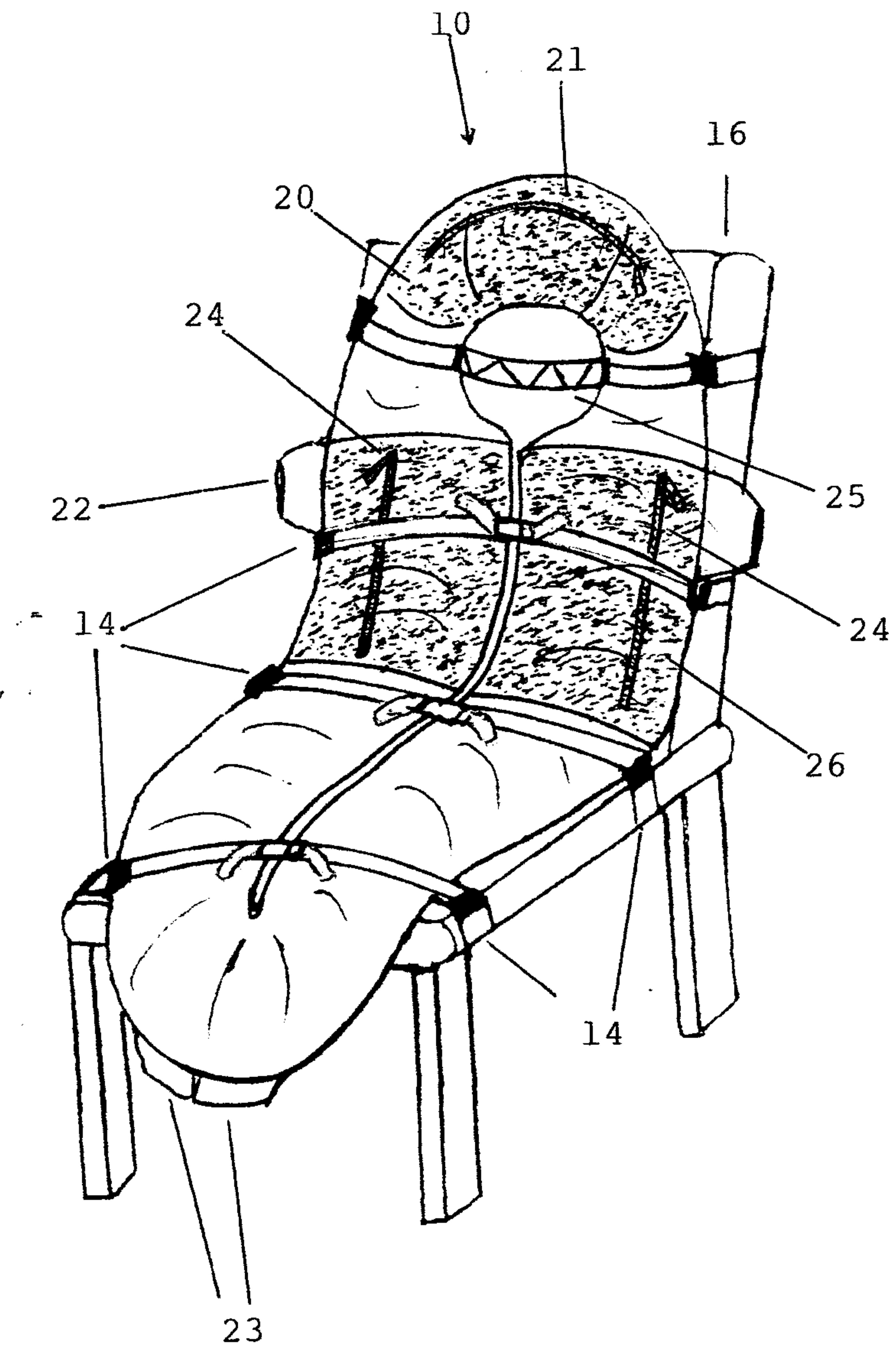


FIG 3

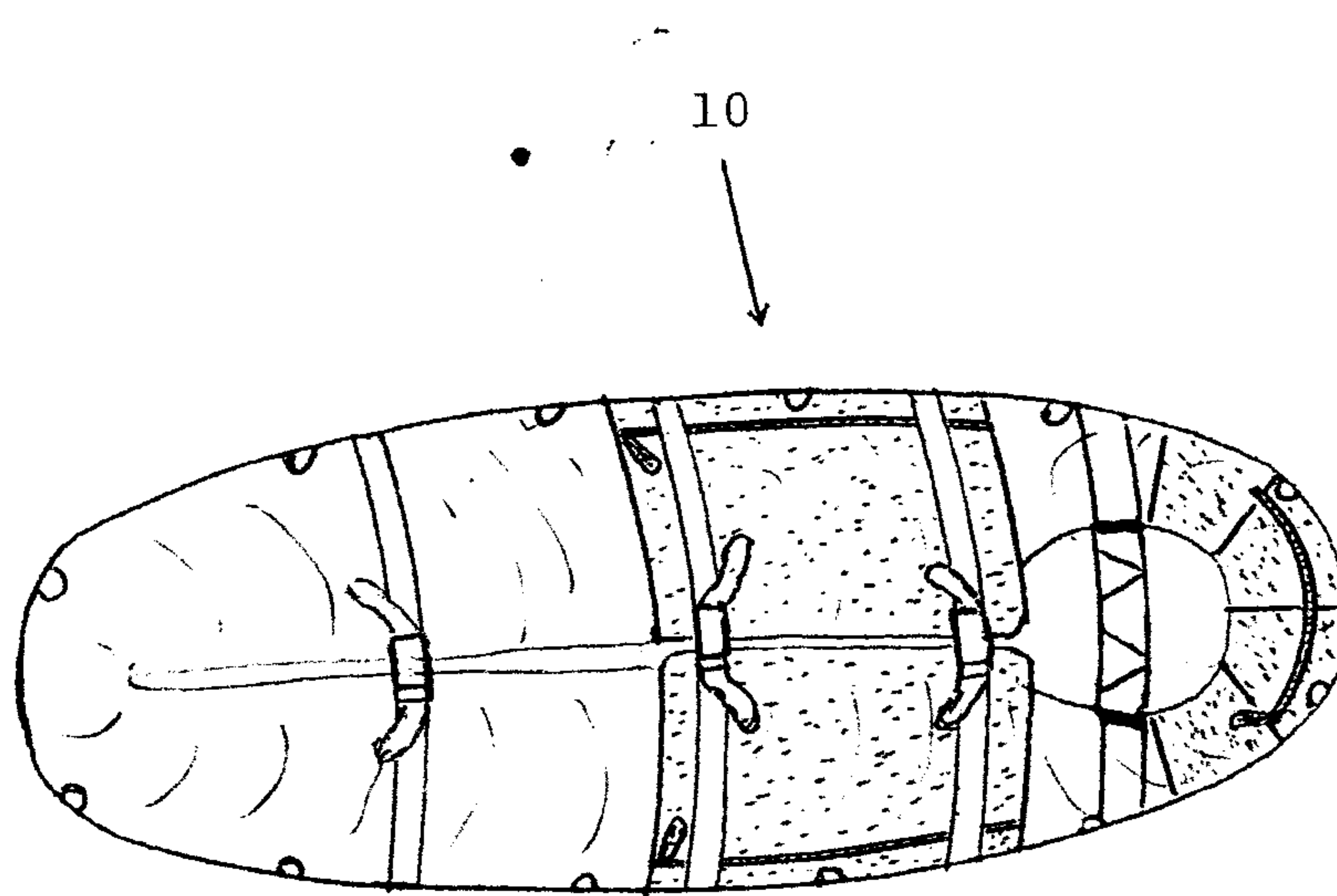


FIG 4

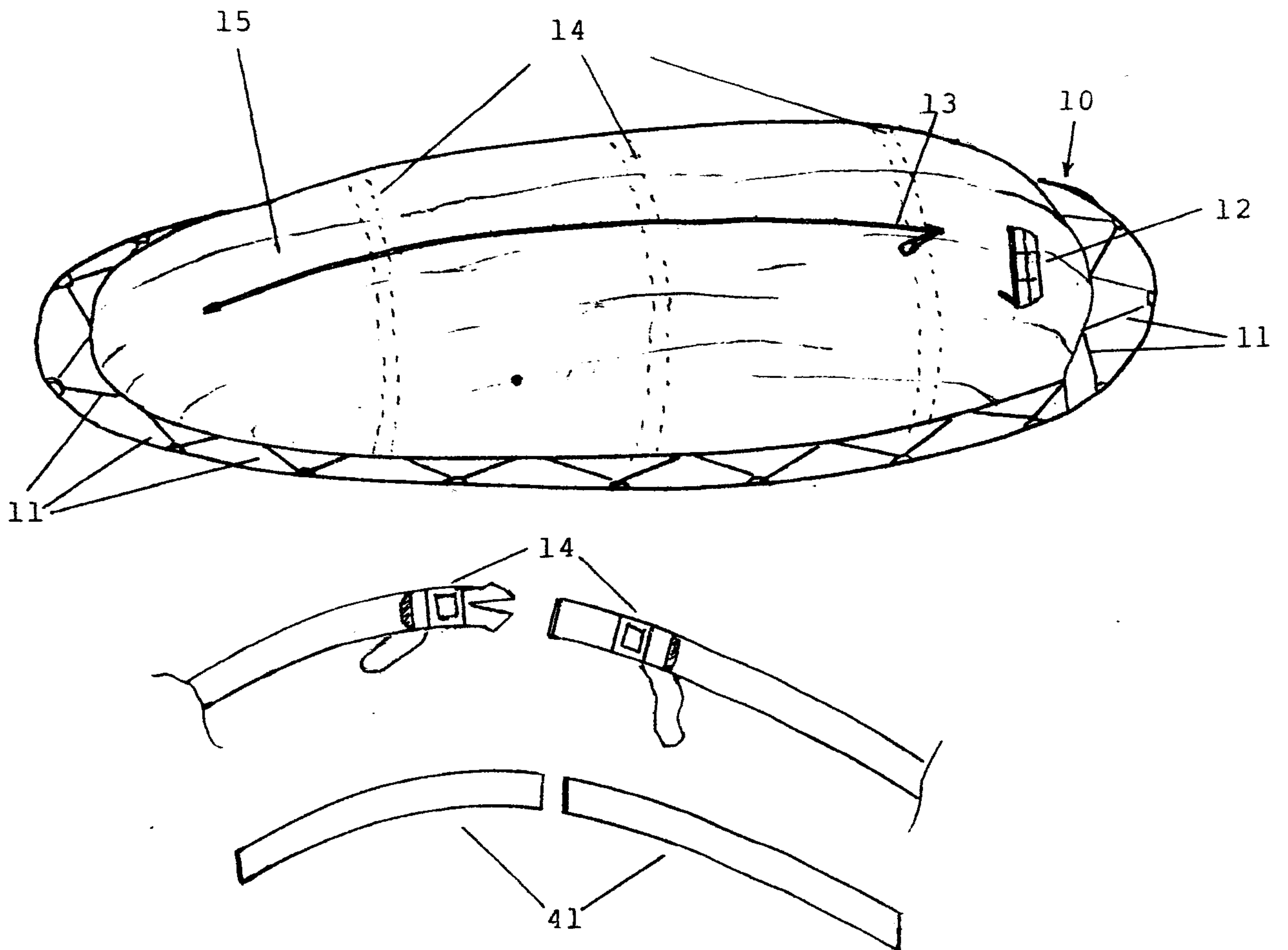


FIG 5

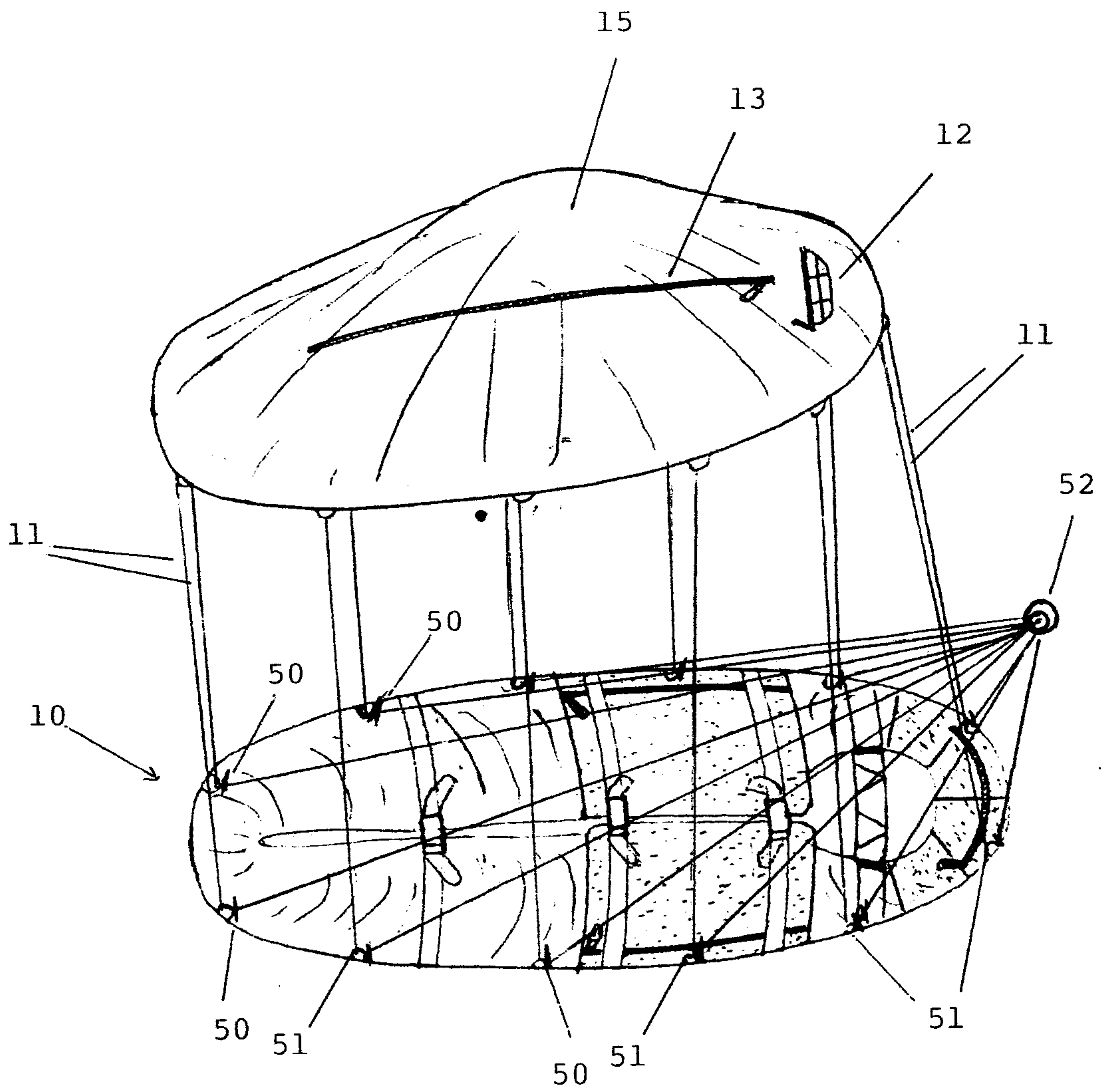


FIG 6

