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Deaton

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[54] **INFLATABLE PATIENT ENCLOSURES**

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[22] Filed: **Oct. 17, 1972**

[21] Appl. No.: **298,384**

Related U.S. Application Data

[62] Division of Ser. No. 17,688, March 9, 1070, Pat. No. 3,710,791.

[52] **U.S. Cl.** ..... **128/1 B**

[51] **Int. Cl.** **A61g 11/00**

[58] **Field of Search** ..... 128/1 B, 191, 191 A, 33; 135/1, 502; 52/2

[56] **References Cited**

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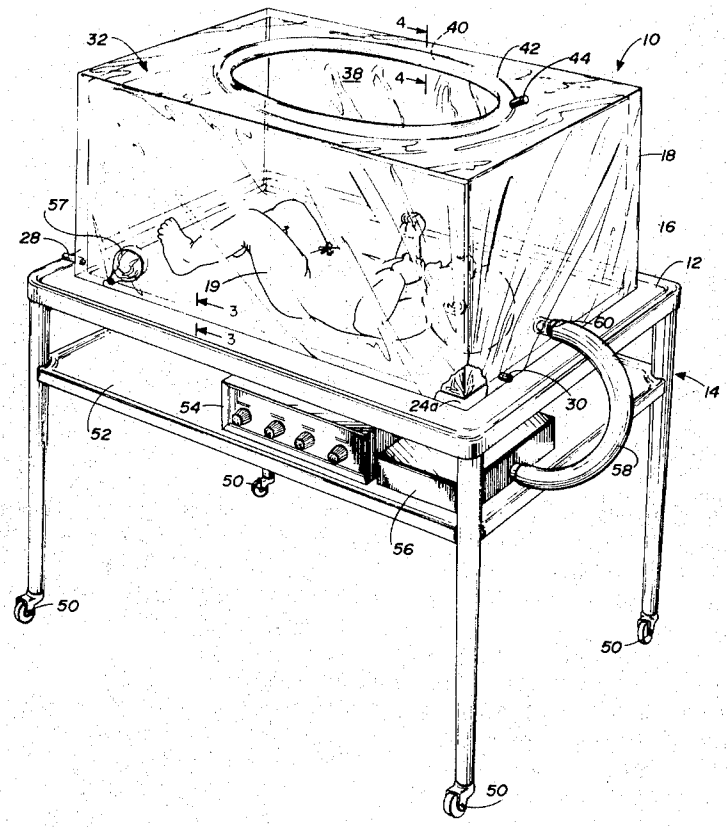
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Assistant Examiner—G. F. Dunne
Attorney, Agent, or Firm—Richards, Harris & Medlock

[57] **ABSTRACT**

An inflatable housing includes bottom and side portions adapted to enclose a volume of atmosphere for use as an incubator or an oxygen tent. The side portions of the housing are constructed from spaced apart flexible sheets to form air chambers which extend over a substantial area of the side portions. When the air chambers are inflated, the side portions become self-supporting and the air chambers form a confined air barrier about the volume of atmosphere surrounding the patient. For safety purposes in certain embodiments, at least two independent air chambers are provided around the housing, each of the independent air chambers having the capacity when inflated to maintain the side portions in an upright position. In other embodiments, a top portion has an opening defined therein, with an air chamber ring disposed about the periphery of the opening. The air chamber ring when inflated is capable of maintaining the shape of the opening regardless of the state of inflation of the air chambers in the side portions.

11 Claims, 8 Drawing Figures



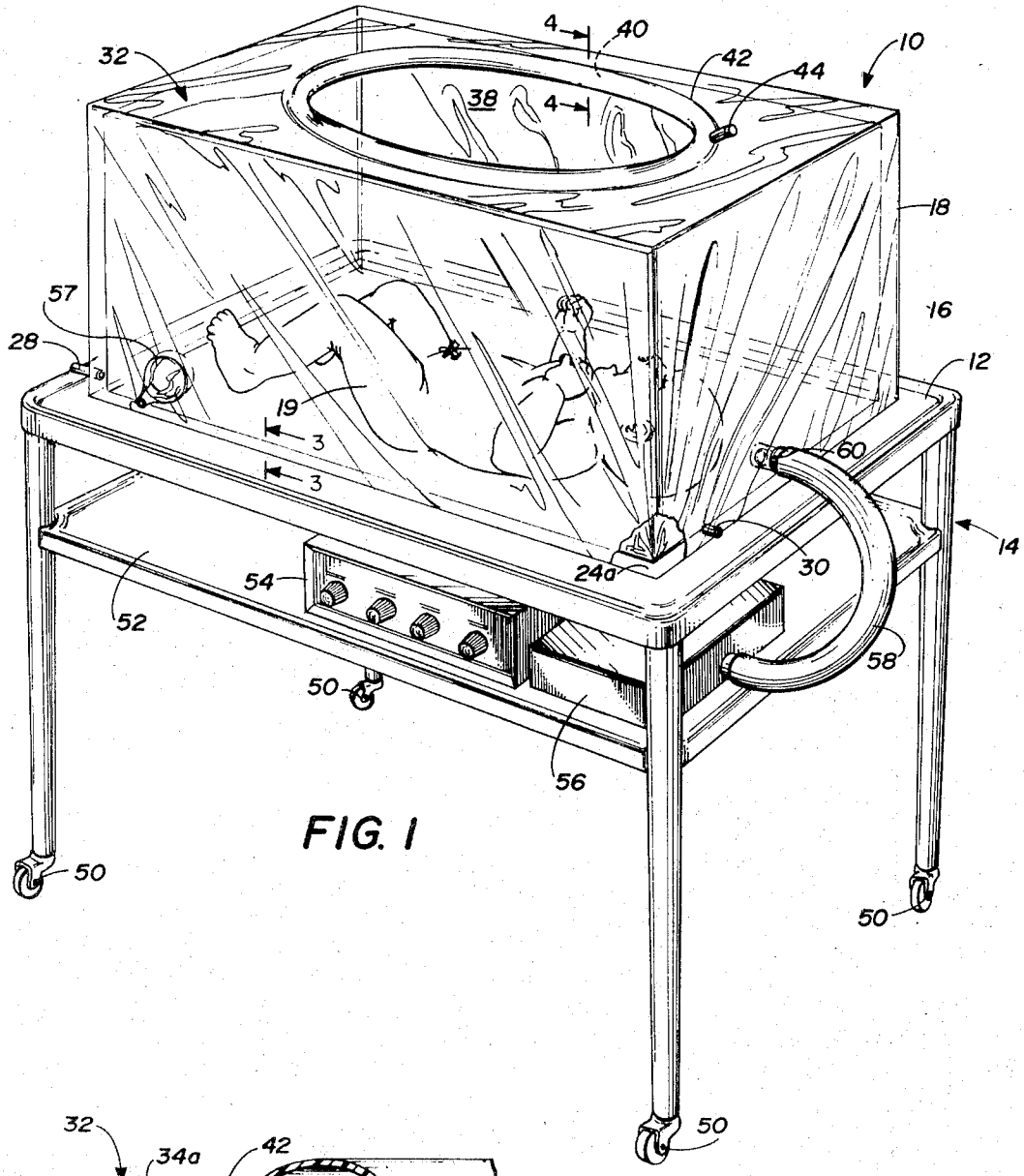


FIG. 1

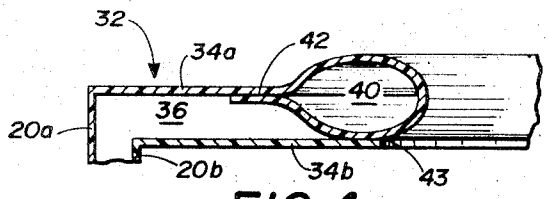


FIG. 4

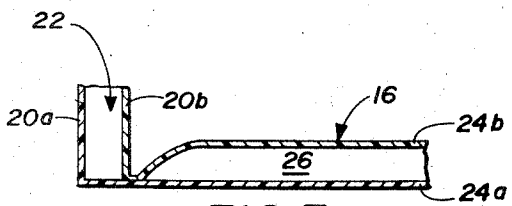


FIG. 3

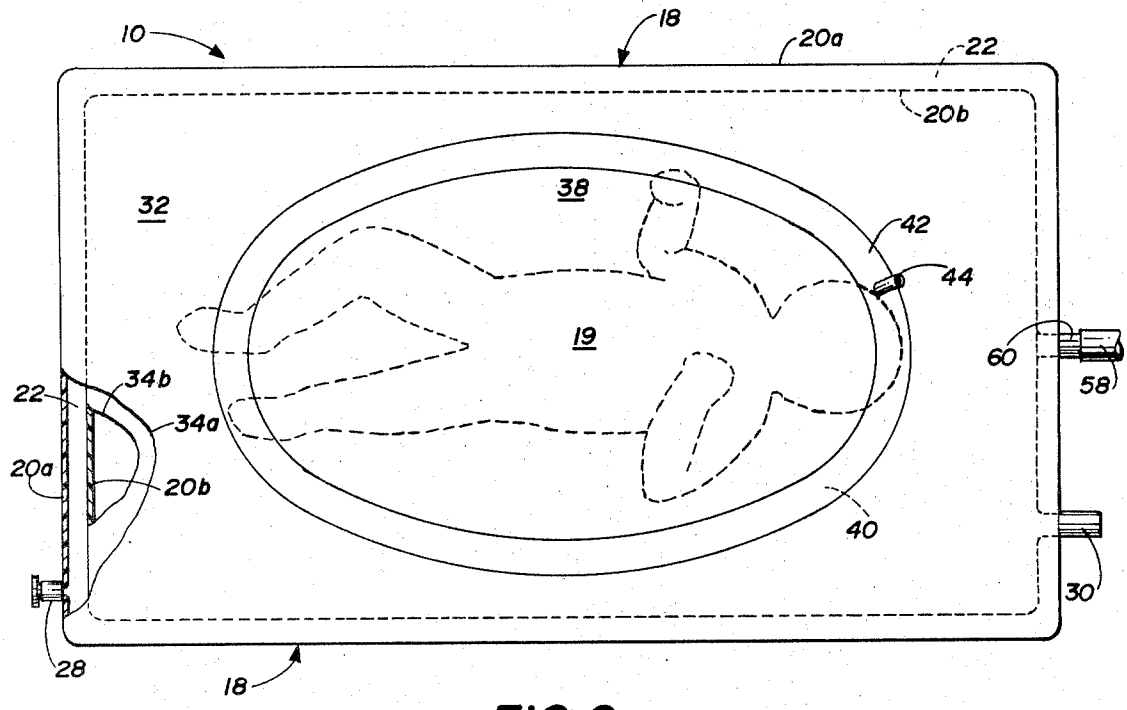

10
18
20a
22
20b
32
38
42
44
19
60
58
22
34b
34a
20a
20b
40
30
28
18

FIG. 2

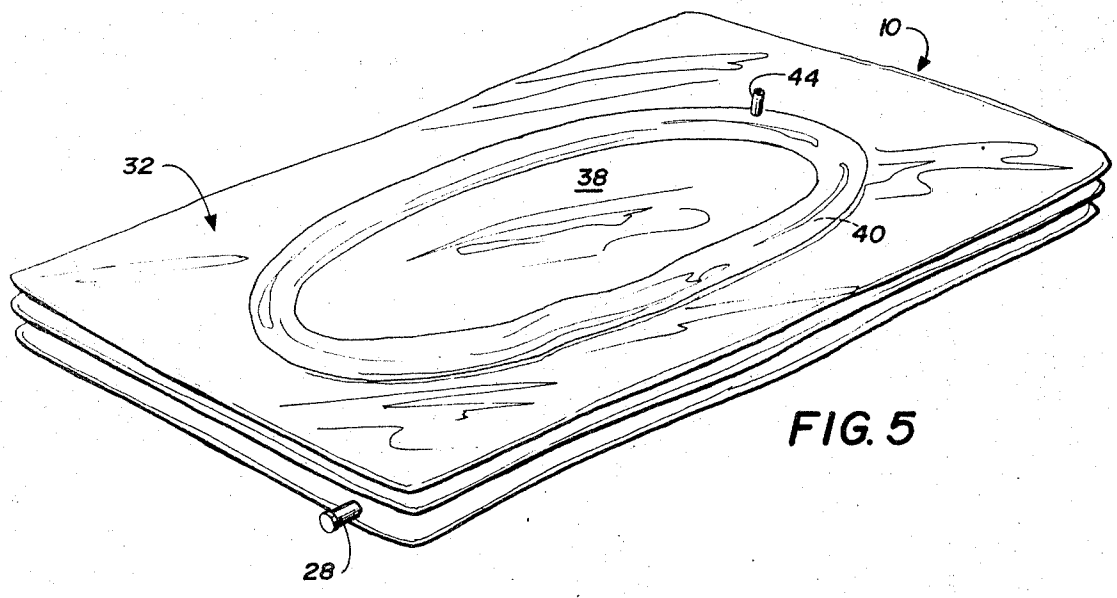

10
44
32
38
40
28

FIG. 5

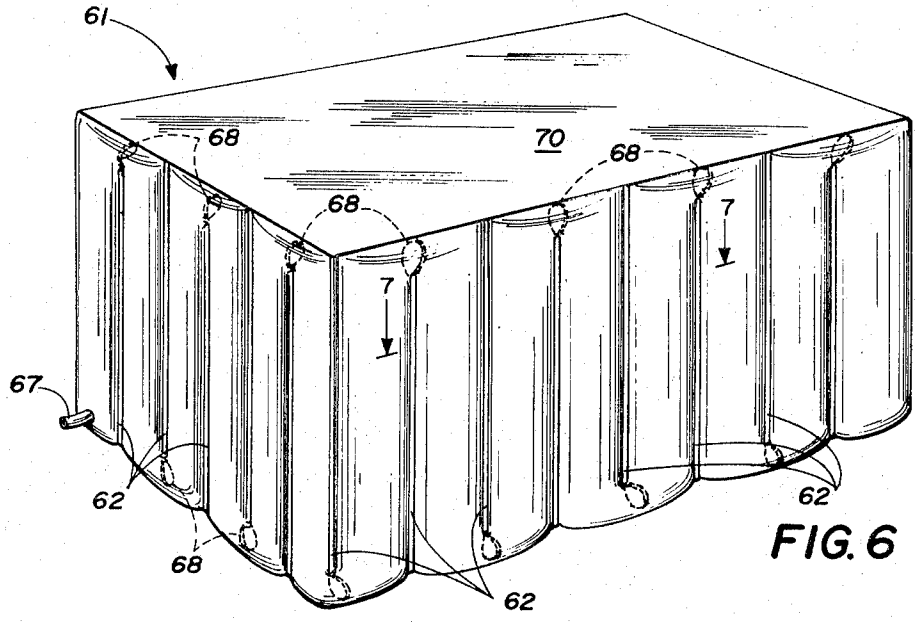


FIG. 6

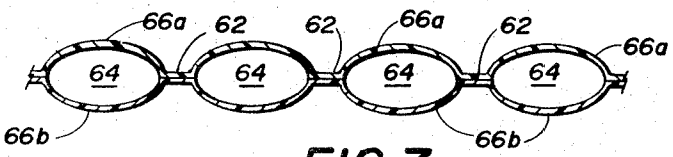


FIG. 7

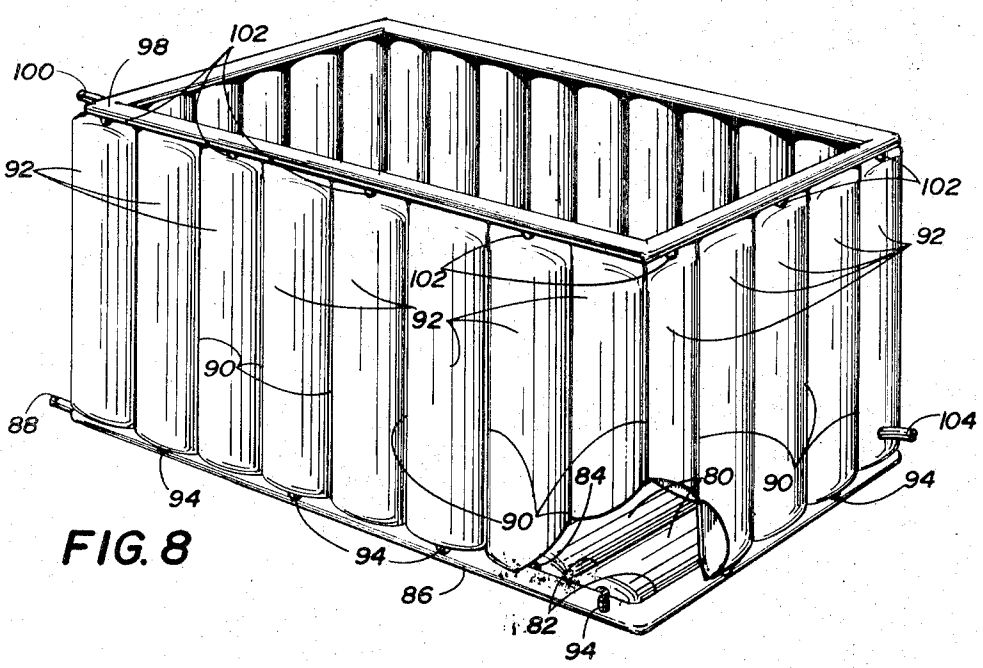


FIG. 8

INFLATABLE PATIENT ENCLOSURES

This is a division of application Ser. No. 17,688, filed Mar. 9, 1970 now U.S. Pat. No. 3,710,791, issued Jan. 16, 1973.

FIELD OF THE INVENTION

This invention relates to enclosures for treatment of a patient, and more particularly to inflatable patient enclosures for containing a volume of atmosphere useful for treatment of a patient.

THE PRIOR ART

It has long been known to provide enclosures for a volume of controlled atmosphere for treatment of patients. For instance, incubators formed from plastic housings are commonly used to accommodate infant patients within a temperature controlled oxygen atmosphere. Additionally, a wide variety of oxygen tents have been heretofore utilized to enclose the head portion of patients within a controlled oxygen or humidity atmosphere. Generally, both incubators and oxygen tents have heretofore included a rigid framework or housing. In the case of incubators, the housing has generally been constructed from plastic or glass, with ports being defined in the side thereof to allow access to the infant therein. In the case of oxygen tents, it has been usual to provide a rigid metal framework over which is disposed a flexible canopy or hood.

A number of problems have arisen from the use of such rigid frameworks and housings for both incubators and oxygen tents. Storage space at a hospital is always at a premium, and such rigid frameworks and housings have heretofore consumed valuable storage space when not in actual use. Moreover, the rigid frameworks have often been difficult to assemble when use is required, and maintenance problems have occurred due to the normal breakdown of conventional fasteners and the like utilized in both the rigid frameworks and housings. Another problem of extreme importance in hospitals is that previous rigid frameworks and housings have been extremely difficult to clean and sterilize, due to their size and also due to the rectangular nature of their construction which inherently results in a plurality of difficult-to-clean corners. In addition, the sharp corners and edges resulting from the rigid construction of previous incubators and oxygen tents have presented physical hazards to both patients and furniture.

Another problem particularly related to the use of conventional rigid incubators has been the extreme radiant heat loss allowed by the transparent plastic or glass side and top panels commonly utilized in such incubators. It is well known that infants are particularly susceptible to extreme heat loss from such heat radiation, thereby resulting in stress to the infant. Additionally such heat loss results in an increase in the load on the air conditioning system of an incubator in order to maintain a desirable environment for the infant. Moreover, many previously developed closed top incubators have suffered a severe loss in oxygen atmosphere when an attendant renders care to the patient through the side portholes in an incubator. Due to the fact that a loss in oxygen content within an incubator is not rebuilt for a substantial period of time, infant patients have sometimes been deprived of the required environmental atmosphere within previous incubators. In addition to these inherent problems, many prior incubators have

comprised a unitary system of atmosphere enclosure, conditioned air supply system, electrical controls and the like, and have thus not been adaptable to interchanging of components to allow flexibility of use of to enable maintenance or repair work to be done upon the components.

Oxygen tents having rigid frameworks have generally included metal members which create safety problems in the high oxygen atmosphere of a tent, due to the possibility of a spark or the like being struck from the metal members. In addition to the previously mentioned difficulties in sterilization and cleaning, metal frameworks in previous oxygen tents have also been subject to corrosion and rusting due to the moisture content of the atmosphere maintained within the tents. In an effort to circumvent certain of the problems inherent in the use of a rigid metal network for an oxygen tent, the Cameto U.S. Pat. No. 2,915,074, issued Dec. 1, 1959, disclosed the use of continuous, elongated air cells about the edges of an ice-cooled oxygen tent. However, the Cameto patent does not disclose an oxygen tent which meets the critical requirements for a practical and economical inflatable tent, such as, among other things, a tent which does not require ice-cooling and safety measures to prevent the undesirable deflation and collapse of such a tent. Moreover, the Cameto patent does not disclose an inflatable incubator, and further does not disclose structure for reducing radiant heat loss or for maintaining the desired environmental conditions within a patient enclosure.

SUMMARY OF THE INVENTION

In accordance with the present invention, an inflatable patient enclosure comprises a housing having bottom and side portions adapted to enclose a volume of atmosphere for treatment of a patient. The side portions of the housing are constructed from spaced apart flexible sheets to form air chambers therein which extend over a substantial area of the side portions. When the air chambers are inflated, the side portions become self-supporting and a confined air barrier is disposed about the volume of atmosphere surrounding the patient to thereby reduce radiant heat loss and to maintain the atmosphere in the enclosure within prescribed limits.

In accordance with another aspect of the invention, an inflatable patient enclosure includes bottom and side portions joined to form an enclosure for a volume of atmosphere for treatment of a patient. The bottom and side portions are constructed from spaced apart flexible sheets to form at least two independent air chambers, each of the independent air chambers having the capacity when inflated to maintain the side portions in an upright position.

In accordance with yet another aspect of the invention, an inflatable enclosure for a patient includes bottom, top and side portions joined to form an enclosure for a volume of atmosphere utilized to treat a patient. The side portions are constructed from opposed flexible sheets to form air chambers therein, which when inflated maintain the side portions in an upright position. The top portion of the enclosure has an opening defined therein to permit easy access to the patient. An independent air chamber is formed about the periphery of the opening in the top portion, the independent air chamber when inflated being capable of maintaining

the shape of the opening regardless of the state of inflation of the air chambers in the side portions.

In accordance with another aspect of the invention, an inflatable incubator is provided which includes a bottom portion joined with upright side portions to enclose a volume of conditioned atmosphere and an infant patient. The bottom and side portions are constructed from opposed flexible sheets which form air chambers extending over substantially the entire area of the bottom and side portions. When the air chambers are inflated, the bottom portion is adapted to support the weight of the infant patient, and the side portions are adapted to maintain a self-supporting upright position.

DESCRIPTION OF THE DRAWINGS

For a more complete understanding of the present invention and for further objects and advantages thereof, reference is now made to the following description taken in conjunction with the accompanying drawings, in which:

FIG. 1 illustrates a perspective view of the inflatable incubator according to the invention;

FIG. 2 illustrates a top view of the incubator as shown in FIG. 1;

FIG. 3 illustrates a sectional view taken generally along section lines 3—3 in FIG. 1;

FIG. 4 illustrates a sectional view taken generally along section lines 4—4 in FIG. 1;

FIG. 5 illustrates the inflatable incubator of FIG. 1 in a deflated position;

FIG. 6 is a somewhat diagrammatic perspective view of another embodiment of an incubator according to the invention;

FIG. 7 is a sectional view taken generally along the section lines 7—7 in FIG. 6;

FIG. 8 is a somewhat diagrammatic view, partially broken away of another embodiment of an incubator according to the invention.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to FIG. 1, an incubator identified by the numeral 10 is disposed upon the upper surface 12 of a table generally identified by the numeral 14. Incubator 10 includes a bottom portion 16 joined to four sidewall portions 18 to form a housing enclosing a volume of atmosphere for treatment of an infant 19.

As best shown in FIG. 2, the sidewalls 18 are constructed from spaced apart or opposed flexible sheets 20*a–b* which form a continuous air chamber 22 extending completely around the sides of the incubator 10. When the air chamber 22 is inflated, a confined air barrier is thus formed completely about the infant patient 19. This confined air barrier acts as a "dead" air space which substantially reduces the radiant heat loss from the infant 19 within the incubator 10.

FIG. 3 further illustrates the formation of the air chamber 22 by the opposed flexible sheets 20*a–b*, as well as the construction of the bottom portion 16. Bottom portion 16 is formed from spaced apart flexible sheets 24*a–b* to define an air chamber 26. When air chamber 26 is inflated, the bottom portion 16 acts as an air mattress to resiliently support the body of the infant patient 19. While in some embodiments the air chambers 22 and 26 may communicate with one another, in the preferred embodiment the two air chambers are separated in order to provide improved resiliency to the bottom portion 16. Air is forced into the chamber 22 via a conventional air filler valve stem 28. Likewise, air is forced into the bottom air chamber 26 via an air filler valve stem 30. In a hospital environment, sources of pressurized gas such as oxygen and the like are readily available, and thus the present tent may be inflated through the valve stems 28 and 30 by connection to such sources.

Referring to FIGS. 1 and 2, a top portion 32 is integrally formed from extensions from the sidewalls 18 and includes an upper flexible layer 34*a* which is an extension from the sidewall 20*b*. An air chamber 36 is thus defined in the top portion 32 to reduce the radiant heat loss from the incubator. Air chamber 36 is an extension of the air chamber 22, and is thus inflated by the admission of pressurized air via the valve stem 28.

An opening 38 is formed in the top portion 32 of the incubator 10 in order to allow easy access to the infant patient 19 for care and treatment thereof. Additionally, the opening 38 is of a size to enable the infant 19 to be placed within the incubator therethrough. For safety purposes, an independent inflatable air chamber ring 40 is defined about the periphery of the opening 38. Air chamber ring 40 is formed by folding the edges of the flexible layer 34*a* under about the periphery of the opening 38. The edge of the layer 34*a* is then welded by heat or the like at a joint 42 in the manner shown in FIG. 4 to form an oval confined air chamber ring 40. A weld joint 43 is also made between the layers 34*a* and 34*b* to seal the air chamber 36.

Air chamber 40 may be inflated by connecting a source of pressurized gas to an air filler valve stem 44. When the air chamber 40 is inflated, the shape of the opening 38 is maintained at all times regardless of the state of the inflation of the air chambers 22 or 36. Thus, in case of accidental deflation of the air chamber 22, the air chamber 40 will prevent the top portion 32 of the incubator from falling upon the face of the infant. In some instances, a rigid plastic ring may be used in place of the air chamber 40.

The incubator 10 is suitably fastened to the upper surface 12 of the table 14 by tabs extending from the incubator, not shown, which snap into corresponding snaps placed upon the surface 12, or by tie straps or other suitable structure. Table 14 is usually provided with rollers 50 to enable ease of transportation of the incubator. One or more shelfs 52 are provided on the table 14 to support environmental control circuitry for use with the incubator 10.

For instance, a unit 54 is provided with oxygen percentage control knobs, temperature control knobs, nebulizer or vaporizer control knobs and other suitable controls such as air flow control knobs. Conventional circuitry within the unit 54 controls the operation of an airconditioning unit 54 which supplies desired amounts of warm conditioned air through a conduit 58 into the volume surrounded by the incubator 10. Conduit 58 communicates with a nozzle 60 extending through the sidewall portions of the incubator 10.

Unit 56, for instance, may comprise a fan for sucking air into the unit, an air filtering device, warming heater structure for warming the filtered air and for delivering the conditioned air to the conduit 58. Additionally, conventional nebulizer or vaporizer structure may be disposed within the unit 56 in order to add predeter-

mined amounts of moisture into the conditioned air fed to the conduit **58.**

Suitable techniques of heating the air in the unit **56** comprise a resistance heated coil through which the air is drawn or an immersion heater element which heats a quantity of water through which the oxygen is passed to obtain heat and moisture therefrom. In some instances, it will be also desirable to dispose a thermostat within the incubator **10** and utilize the detected temperature to control the operation of the heater element within the unit **56** in order to maintain the atmosphere within the incubator **10** a predetermined temperature. Additionally, in some embodiments, a closed volume of air may be circulated within the incubator **10,** with ultraviolet light being directed upon the recirculated air in the unit **56** to sterilize the reused air.

In the embodiment illustrated, the conditioned air supplied via conduit **58** is fed into the incubator **10** with sufficient pressure that a small amount of air constantly escapes from the opening **38.** Due to this positive pressure exerted upon the atmosphere within the incubator **10,** contaminants and the like are prevented from opening the incubator via the opening **38,** and a sterile conditioned atmosphere is maintained within the incubator.

A flexible inlet sheath **57** extends outwardly from the incubator **10** and includes rubber bands or other tie strings on the end thereof for completely closing the end of the sheath. The sheath **56** covers an opening through the sidewalls of the incubator. Thus, when it is desired to admit additional hoses, monitoring leads or the like through the sidewall of the tent, the sheath **57** may be untied and then closed over the conduits or wires admitted into the incubator.

In order to evenly disseminate the air admitted into the incubator **10,** a baffle, not shown, such as a plastic sheet or the like may be disposed a short distance away from the nozzle **60.** The gas entering the incubator then hits the baffle and is distributed throughout the interior of the incubator.

An advantage of the embodiment shown in FIG. **1** is that a great deal of flexibility is provided with respect to the type of environment conditioning apparatus utilized in conjunction with the incubator **10.** The various units for conditioning the air may be interchanged for ease of maintenance and repair. Similarly, different units may be substituted for the units **54** and **56** when different environmental conditioning criteria are desired for particular patients. In fact, in some instances, the conduit **58** may be removed and the nozzle **60** closed, and the incubator **10** may be utilized as a simple bassinet for infants. However, the present enclosure is particularly adapted for use in an incubator due to the confined air space provided by the air chambers which surround the infant.

The percentage of oxygen maintained within the incubator **10** may be very accurately controlled up to in the range of 85 percent. Even with the opening **38** provided in the top of the incubator, the atmosphere within the incubator has been found to be very stable even during care or treatment of the patient **19.** The provision of the air chamber **26** on the bottom portion of the incubator provides the advantage of a mattress which does not have to be periodically sterilized and cleaned.

The present incubator is preferably constructed from rectangular sheets of transparent plastic or similar light flexible material. The transparent nature of the sheets enables the patient within the incubator to be easily inspected. The plastic sheets are heat welded together in the preferred embodiment, although certain types of adhesives may be utilized in some instances. Additionally, in an alternative embodiment, the incubator may be constructed by joining a plurality of self-contained inflatable rectangles, as by the use of conventional zippers, adhesive, or material sold under the tradename Velcro. Referring to FIG. **5,** the incubator **10** may be collapsed into a very compact form when not in use. This enables the incubator to be very easily stored and enables the incubator to be economically packaged and transported. The present incubator will be inexpensive to manufacture, and thus may be disposed of after use. However, in the instances where additional use is required, the incubator may be deflated and easily cleaned and sterilized as by subjecting the deflated incubator to ethylene oxide.

FIGS. **6** and **7** illustrate another embodiment of an incubator **61** according to the invention. The construction of this embodiment of the incubator differs in that a series of elongated, parallel rib portions **62** define a series of vertical air pockets **64** which form the sides of the incubator. The rib portions **62** preferably comprise elongated heat welds between opposed flexible plastic sheets **66***a–b.* At the ends of each air chamber **64,** an opening is defined which communicates with the adjacent air chamber **64.** These openings are formed due to the fact that the rib portions **62** do not extend the full length of the air chambers **64.** Each air chamber **64** has an opening at each end. Thus, pressurized air may be fed into each of the air chambers **64** by admission to a single air filler valve stem **67.** The air enters the valve stem **67** and sequentially fills the air chamber **64** by flowing through a tortuous up and down path through adjacent ones of the air chambers **64.**

Disposed in the region of each of the openings between adjacent air chambers **64** are flexible plastic members **68** which tend to act as air check valves. The flexible members **68** comprise, for instance, extensions of the ribs **62,** and are of a length slightly greater than the openings between adjacent air chambers. The outer ends of the flexible members are free to move. Thus, pressurized air entering the valve stem **67** is allowed to pass freely through each of the openings between adjacent air chambers **64,** the passage of the air in this direction not being impeded by the flexible members **68.** However, once the incubator **60** in inflated and each of the air chambers **64** are filled, the flexible members **68** tend to prevent backward flow of air and tend to maintain each of the air chambers **64** as an independent inflated chamber. The check valve action provided by flexible members **68** thus tends to prevent undesirable deflation of the entire incubator **60** due to the accidental rupturing of one of the air chambers **64.**

Incubator **60** is illustrated as having a completely closed top **70,** although the preferred embodiment includes an opening as shown in FIG. **1.** The top **70** may be zippered to enable selective opening thereof, or portholes may be defined through the sides of the incubator, not shown, in a conventional manner if desired. The top **70** may comprise a double layered plastic sheet which defines an air chamber, or may comprise a single plastic sheet. Similarly, the bottom of the incubator **60,** not shown, may comprise either a single plastic layer or may comprise the double layer illustrated in FIG. **1**

which provides an air mattress effect for the infant contained within the incubator.

FIG. 8 illustrates another embodiment of an incubator according to the invention which contains two independent sets of air chambers to prevent any hazardous collapse of the incubator due to the loss of air pressure within one of the sets of air chambers. The incubator shown in FIG. 8 comprises a bottom portion formed from a plurality of elongated, generally rectangular air pockets 80 formed by a series of parallel welds 82 at spaced apart locations across the width of two opposed plastic sheets. One end of each of the air pockets 80 is closed, with the other end including an inlet portion 84. Each inlet portion 84 is connected to openings along the length of a hollow plastic tube 86 which is disposed around the periphery of the bottom. An air filler valve stem 88 is connected to the tube 86 for admission of pressurized air. An advantage of this bottom construction is the formation of an air mattress for cushioning the patient. Also, moisture tends to collect in the crevices between the air pockets, where the moisture may be easily drained away from the patient.

The sidewalls of the incubator are also formed from a plurality of parallel, spaced apart welds 90 between opposed flexible plastic sheets. The welds 90 extend along the full width of the sheets, and thus independent, generally rectangular air pockets 92 are formed to comprise the sidewalls of the incubator. Alternate ones of the air pockets 92 are connected at the bottom thereof via inlets 94 to the tube 88. Thus, when pressurized air is supplied via the valve stem 88, the air passes through the tube 86 and into alternate ones of the air pockets 92. This set of alternate air pockets provides sufficient strength when inflated to completely support the incubator in the upright position.

A second tube 98 is disposed about the periphery of the top of the incubator and includes an air valve stem 100 for the admission of air thereto. The remaining alternate air pockets 92 are connected to openings along the tube 98 via air inlets 102. Thus, when pressurized air is admitted to the valve stem 100, the second set of independent air pockets 92 are inflated. Again, the second set of independent air pockets 92 has sufficient strength to maintain the wall portions in an upright position. Thus, if one set of the air pockets becomes deflated, the remaining independent set of air pockets maintains the incubator in an upright position to prevent collapse. In the embodiment shown in FIG. 8, the tube 98 forms the upper opening for the incubator to enable ease of access to the patient therein. Conditioned atmosphere is provided to the incubator via a conduit 104 in the conventional manner. If desired, air check valves made up of flexible plastic may be disposed at each of the inlets 94 and 102 to reduce the possibility of deflation of the device upon leakage from one of the air pockets. Although, the air pockets 92 have been illustrated and described as being vertically oriented, the air pockets could be also horizontally disposed in certain embodiments.

Whereas the present invention has been described with respect to specific embodiments thereof, it will be understood that various changes and modifications will be suggested to one skilled in the art, and it is intended to encompass such changes and modifications as fall within the scope of the appended claims.

I claim:

1. An inflatable incubator comprising:

a bottom portion joined with upright side portions to enclose a volume of conditioned atmosphere and an infant patient,

said bottom and side portions being constructed from opposed flexible sheets which form air chambers extending over substantially the entire area of said bottom and side portions, said air chambers when inflated adapted to support the weight of the infant patient at said bottom portion and adapted to maintain said side portions in a self-supporting upright position,

a top portion connected at the periphery thereof to said side portions and including a hole defined therein, and

a supply of warm conditioned air connected to said incubator, a positive air pressure being provided to the atmosphere within said incubator such that a portion of said air escapes from said hole in said top portion.

2. The inflatable incubator of claim 1 and further comprising:

an independent air chamber ring disposed about said opening, said air chamber ring when inflated maintaining the shape of said opening regardless of the state of inflation of said side portions.

3. The inflatable incubator of claim 1 and further comprising:

means to sense the temperature within said incubator, and

means for controlling the temperature of said warm conditioned air in response to the sensed temperature.

4. The inflatable incubator of claim 1 and further comprising:

safety means for maintaining the upright support of said side portions when a portion of said air chambers are deflated.

5. The inflatable incubator of claim 4 wherein said safety means comprises:

at least a pair of independent chambers each having the capability of maintaining the walls in an upright condition when inflated.

6. The inflatable incubator of claim 1 and further comprising:

means for supplying moisture to the conditioned air supplied to said incubator.

7. An inflatable incubator comprising:

an incubator housing having bottom, top and side portions dimensioned to enclose the entire body of a patient,

said side portions being constructed from spaced apart sheets of thin flexible material joined to form air chambers which when inflated maintain said side portions in an upright position, said air chambers when deflated allowing said incubator housing to be collapsed for storing, said air chambers when inflated forming a confined air barrier about the patient to insulate the patient from the ambient atmosphere,

an aperture formed in the top portion of said housing,

means formed through said side portions for receiving a treated gas in order to maintain a treated atmosphere of said gas within said housing, and

an independent air chamber disposed about the periphery of said aperture formed in the top of said housing, said independent air aperture when in-

flated being capable of maintaining the shape of said aperture regardless of the state of inflation of said air chamber.

8. An inflatable incubator comprising:

an incubator housing having bottom, top and side portions dimensioned to enclose the entire body of a patient,

said side portions being constructed from spaced apart sheets of thin flexible material joined to form air chambers which when inflated maintain said side portions in an upright position, said air chambers when deflated allowing said incubator housing to be collapsed for storing, said air chambers when inflated forming a confined air barrier about the patient to insulate the patient from the ambient atmosphere,

an aperture formed in the top portion of said housing,

means formed through said side portions for receiving a treated gas in order to maintain a treated atmosphere of said gas within said housing, and

means for supplying warm conditioned air through said receiving means into the interior of said incubator housing for treating the patient therein.

9. An inflatable incubator comprising:

an incubator housing having bottom, top and side portions dimensioned to enclose the entire body of a patient,

said side portions being constructed from spaced apart sheets of thin flexible material joined to form air chambers which when inflated maintain said side portions in an upright position, said air chambers when deflated allowing said incubator housing to be collapsed for storing, said air chambers when inflated forming a confined air barrier about the patient to insulate the patient from the ambient atmosphere,

an aperture formed in the top portion of said housing,

means formed through said side portions for receiving a treated gas in order to maintain a treated atmosphere of said gas within said housing, and

means for controlling the temperature of the atmosphere within said incubator housing.

10. An inflatable incubator comprising:

an incubator housing having bottom, top and side portions dimensioned to enclose the entire body of a patient,

said side portions being constructed from spaced apart sheets of thin flexible material joined to form air chambers which when inflated maintain said side portions in an upright position, said air chambers when deflated allowing said incubator housing to be collapsed for storing, said air chambers when inflated forming a confined air barrier about the patient to insulate the patient from the ambient atmosphere,

an aperture formed in the top portion of said housing,

means formed through said side portions for receiving a treated gas in order to maintain a treated atmosphere of said gas within said housing, and

a source of warm conditioned air connected to said means for receiving a treated gas to supply a positive pressure within said incubator housing such that a portion of the conditioned air escapes through said aperture formed in the top portion of said incubator housing.

11. An inflatable incubator comprising:

an incubator housing having bottom, top and side portions dimensioned to enclose the entire body of a patient,

said side portions being constructed from spaced apart sheets of thin flexible material joined to form air chambers which when inflated maintain said side portions in an upright position, said air chambers when deflated allowing said incubator housing to be collapsed for storing, said air chambers when inflated forming a confined air barrier about the patient to insulate the patient from the ambient atmosphere,

an aperture formed in the top portion of said housing,

means formed through said side portions for receiving a treated gas in order to maintain a treated atmosphere of said gas within said housing, and

a nebulizer for supplying moist conditioned air into said nebulizer housing through said means for receiving a treated gas.

* * * * *