



US 20090289480A1

(19) **United States**

(12) **Patent Application Publication**
McFarland et al.

(10) **Pub. No.: US 2009/0289480 A1**

(43) **Pub. Date: Nov. 26, 2009**

(54) **COMBINATION CHILD SEAT AND TRAVEL SAFETY VEST FOR WHEELED LUGGAGE**

Publication Classification

(76) Inventors: **David S. McFarland**, Sonoma, CA (US); **Dale C. Sommers**, Northglenn, CO (US); **Mary Evelyn Arnold**, Sonoma, CA (US)

(51) **Int. Cl.**
A47C 1/08 (2006.01)
A45C 5/14 (2006.01)
(52) **U.S. Cl.** **297/255; 190/18 A**

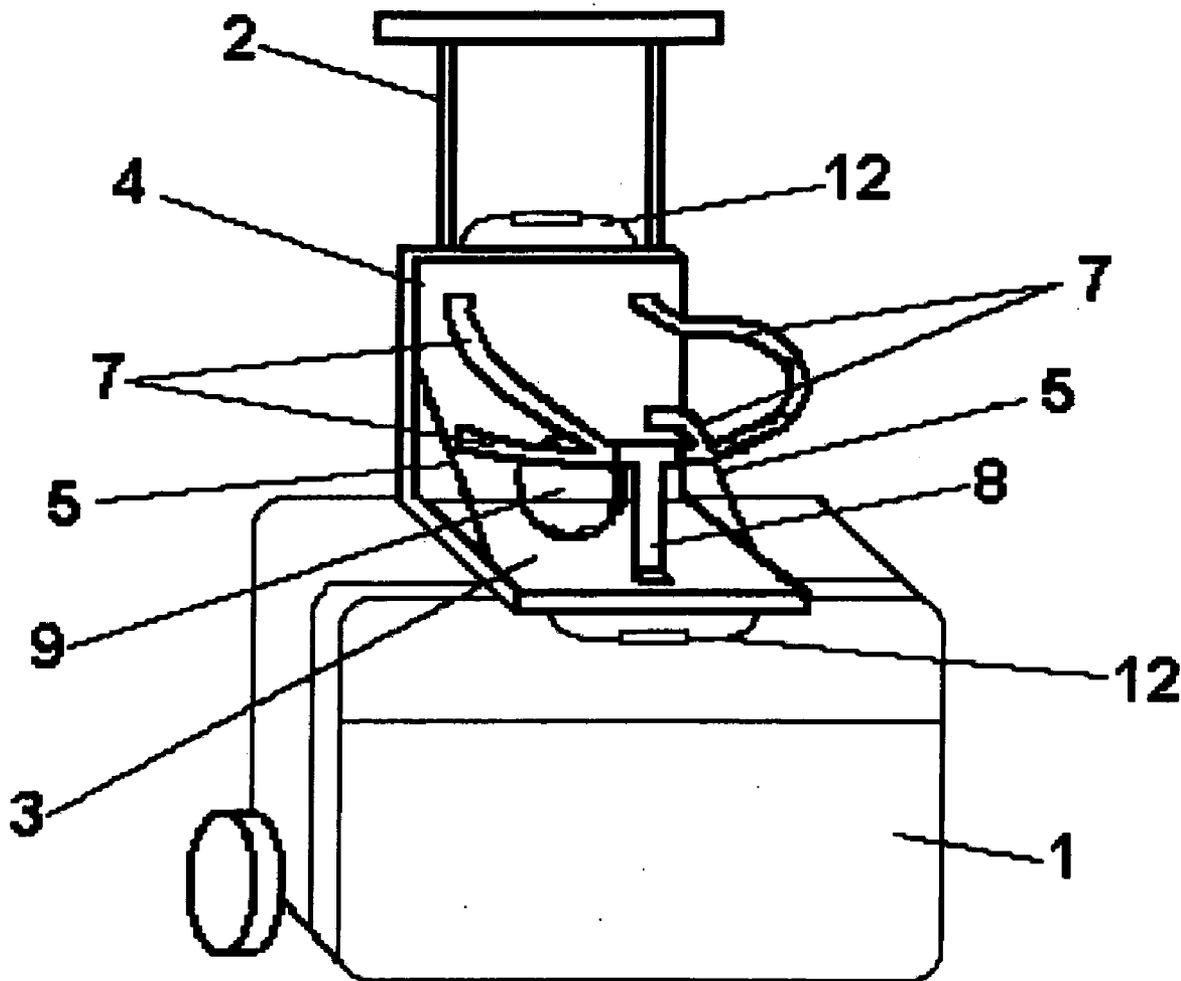
(57) **ABSTRACT**

An improved lightweight, portable and compact combination seat and serape[®] for travel ease and safety while traveling with a small child. The device is releasably attached to the telescoping handle upon wheeled luggage, is disposable in an unfolded position for use wherein it functions as a seat and when used as a serape[®] for travel safety is draped over the head and shoulders of the juvenile to be secured with the parent into the airline seatbelt, and when in its storage condition is separated from and compactly contained within the luggage for carry-on in an airliner or other public transportation.

Correspondence Address:
David S. McFarland
1063 GrantCourt
Sonoma, CA 95476-7420 (US)

(21) Appl. No.: **12/154,387**

(22) Filed: **May 23, 2008**



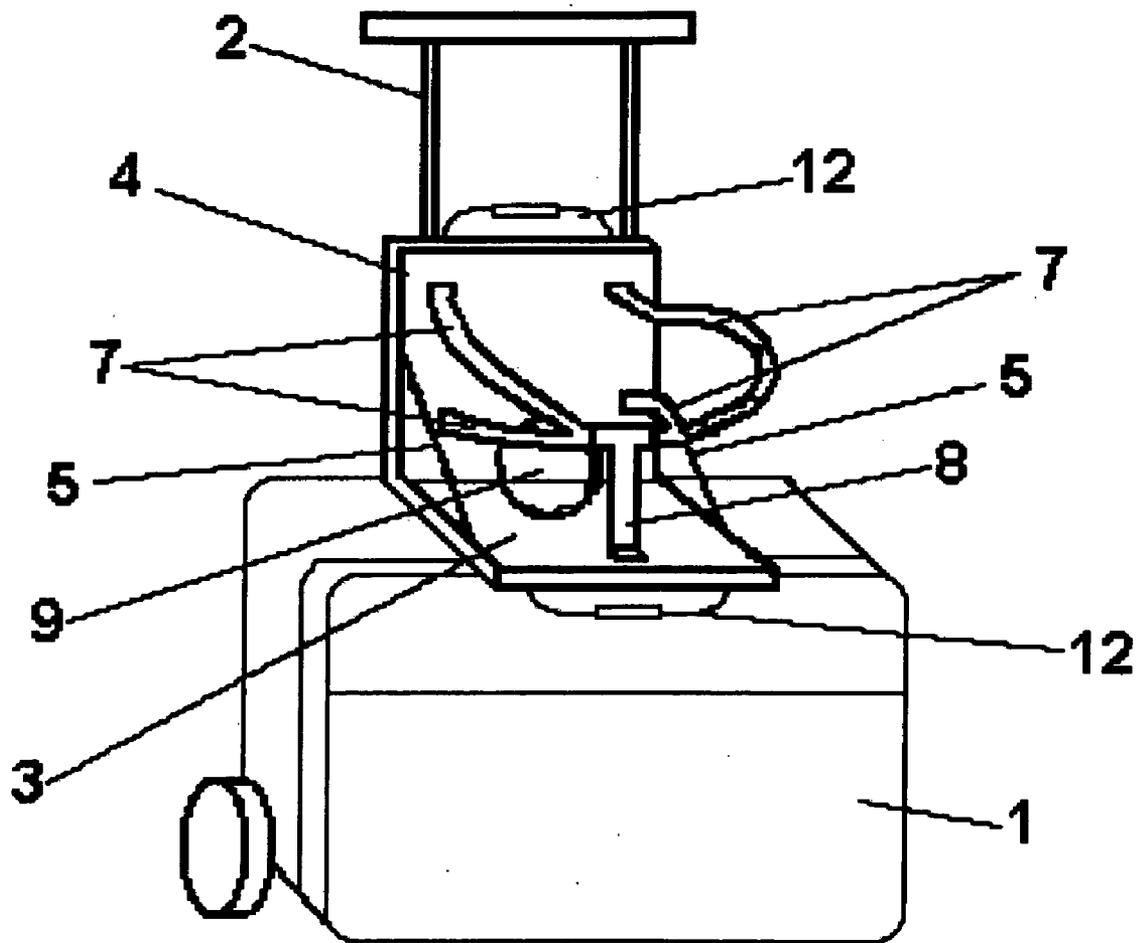


Fig. 1

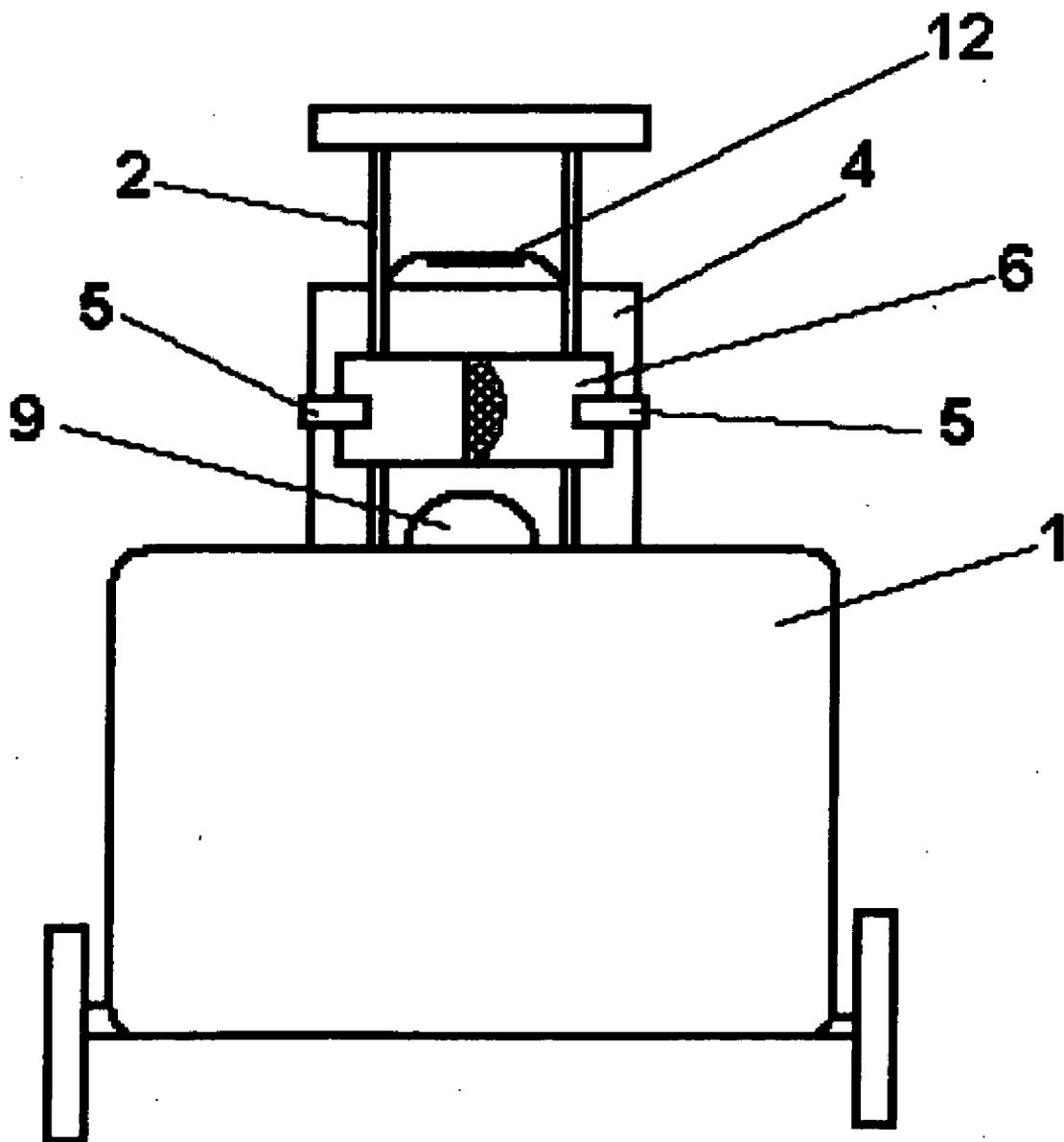


Fig. 2

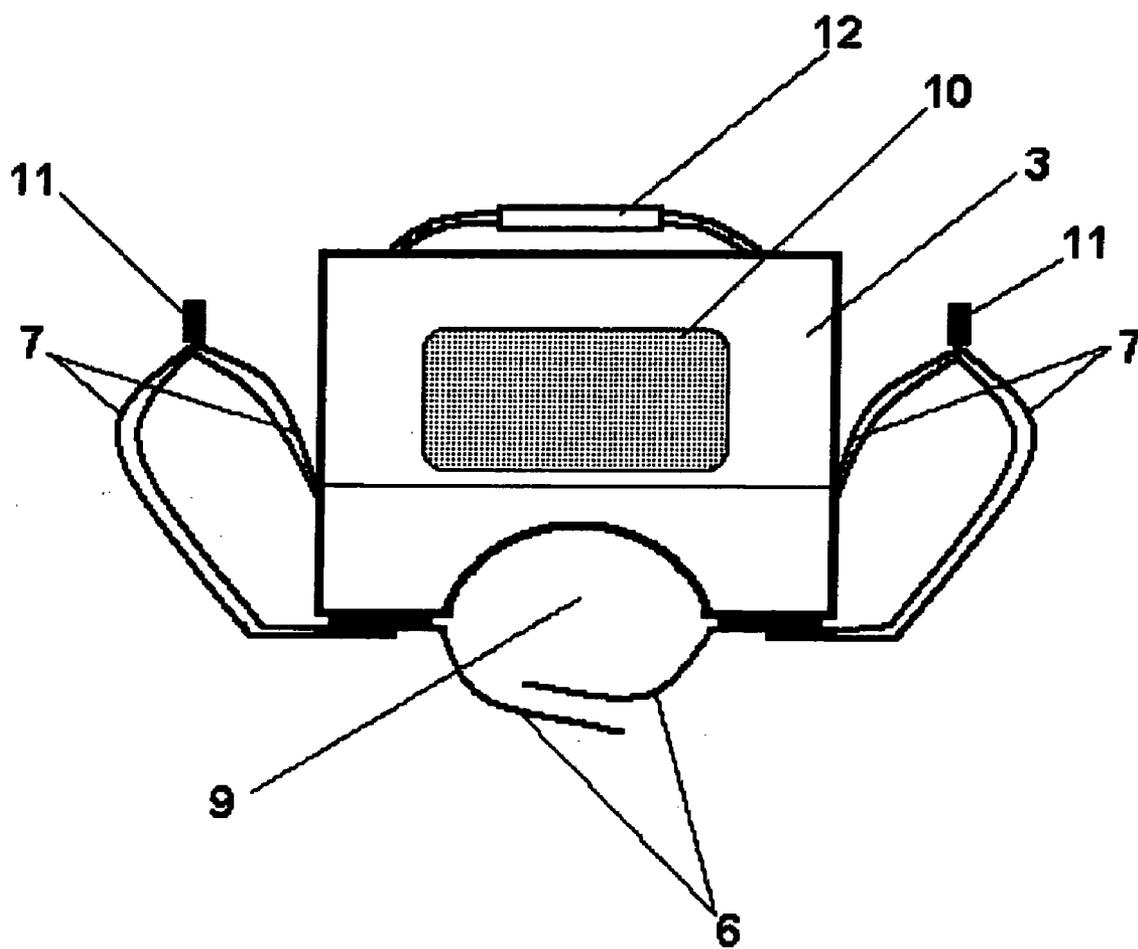


Fig. 3

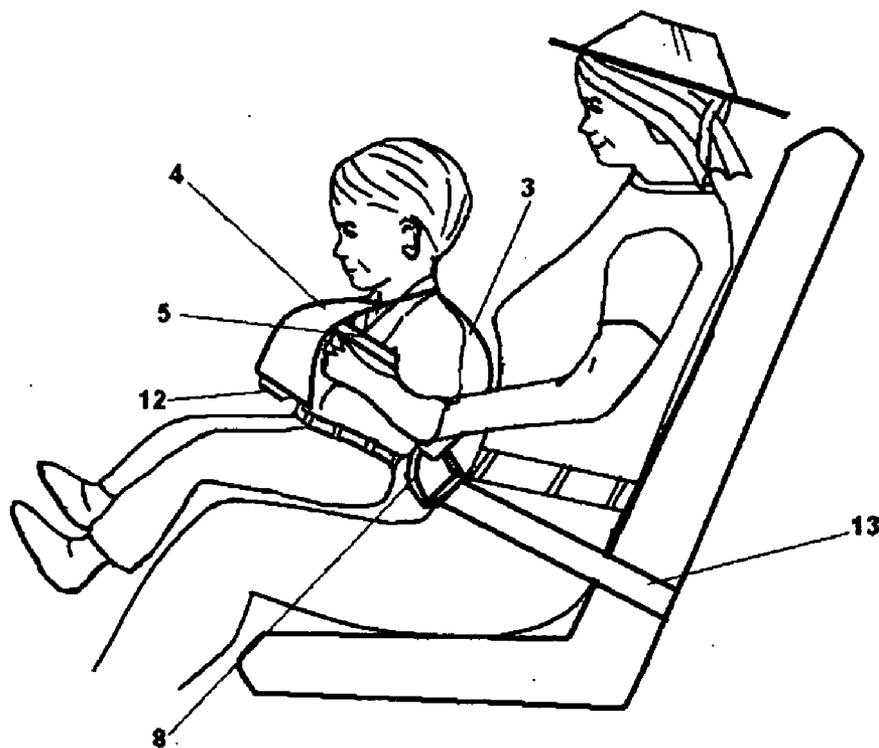


Fig. 4

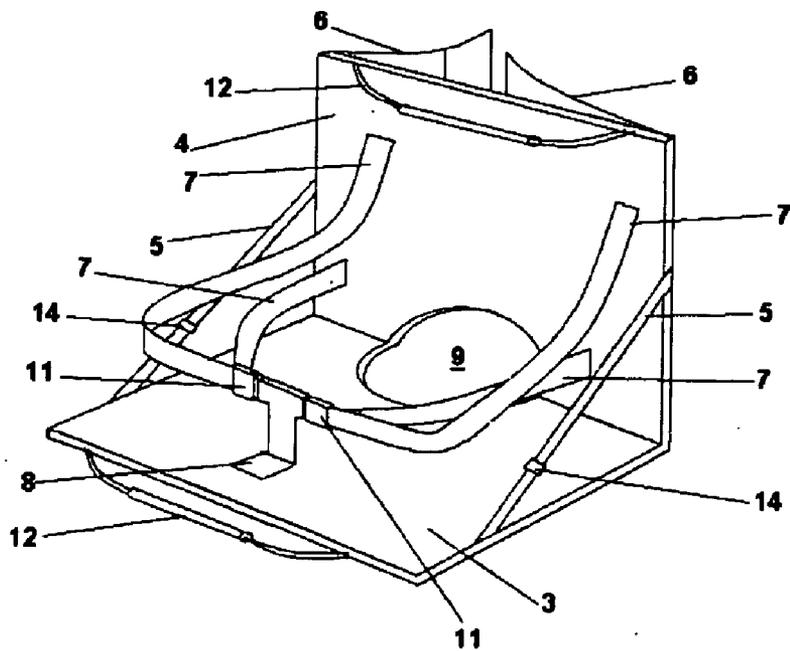


Fig. 5

COMBINATION CHILD SEAT AND TRAVEL SAFETY VEST FOR WHEELED LUGGAGE

FIELD OF THE INVENTION

[0001] The present invention relates to an article of luggage with telescoping handles and to a juvenile travel seat, which is transformable from an travel seat to a juvenile travel safety serape'. The invention is suitable for adaptation to wheeled luggage with retractable handles of the type permitting the luggage to be rolled and guided. The juvenile seat may be completely separated from the article of luggage. When in its storage condition, the juvenile seat is compactly contained within the luggage. Alternatively, the invention may further be utilized as a juvenile travel safety vestment or serape', to secure smaller children onto the parents seat belt during flight travel.

BACKGROUND OF THE INVENTION

[0002] There are many types of luggage, carry-on cases, and other bags currently sold with wheels attached to the luggage, enabling it to be rolled on a surface, thereby saving the owner the exertion of carrying the luggage. To allow the owner to hold onto the luggage while it is rolling and to control the direction and speed of the luggage while it is rolling, the luggage will conventionally have an extensible and retractable support handle generally referred to as a telescoping support handle. For ease of grip and for maximum control by the user during rolling, these telescoping handles are conventionally U-shaped with two legs capable of telescoping relative to the luggage and a horizontal bar connecting the legs, at the end of the legs nearest the owner, for gripping by the owner, although other configurations are known.

[0003] Today, there are many types of infant strollers, baby carriers, and car seats available for use in transporting a child safely. Adaptors exist to affix a juvenile car seat upon the face of wheeled luggage. Even though these configurations provide for stability, the size and subsequent weight of the combination is generally substantial. As such, these car seat based systems are occasionally carried themselves and are heavy and bulky, and can become quite tiresome when being carried for extended periods of time or distance.

[0004] It is therefore recognized that it would be advantageous to provide a lightweight and durable juvenile seat for use in conjunction with an article of luggage, which would readily permit user ease and security of transporting a juvenile while moving through an airport or travel facility.

[0005] The present invention is directed to a device for use in travel with wheeled luggage, where an infant or small child (juvenile) is traveling with an adult. Under such circumstances, it is desirable to be able to easily transport the juvenile, while allowing the parent to obtain rest from carrying the infant during long walks.

[0006] Recognizing the desirability of providing increased independence between luggage and a juvenile seat unit, while still permitting ease of transporting of a seat unit upon luggage, an intent of the present invention is to substantially enhance the versatility and simplicity of a luggage mountable juvenile seat unit, while providing the purchaser an added value in the transformable provision into a juvenile travel safety serape'.

[0007] It is known to provide a chair, which is so constructed that it may be folded or collapsed from a position of

use into a more compact package for transport or storage. Examples of such chairs are generally disclosed through viewing the prior art of:

[0008] Thebaud, U.S. Pat. No. 4,186,959—the foldable chair;

[0009] Boudreau, U.S. Pat. No. 4,226,467—the foldable play set with wheels;

[0010] Day, U.S. Pat. No. 4,229,039—the travel chair for handicapped;

[0011] Carmichael et al, U.S. Pat. No. 4,335,893—the foldable infant carrier;

[0012] Fernandez, U.S. Pat. No. 4,387,924—the combination back pack and seat;

[0013] Krulik, U.S. Pat. No. 5,957,349—the luggage with seat

[0014] Nord, U.S. Pat. No. 6,783,135—the transformable infant transporter

[0015] Combinations in which the child seat is connectable to the luggage are typically shown as those found within the art of:

[0016] Cox U.S. Pat. No. 4,291,915—the combined suitcase and child safety seat;

[0017] Browning, U.S. Pat. No. 4,550,813—the molded luggage with a child seat attachment;

[0018] The Tote-A-Tot car seat adaptor product currently available from www.toteatot.com.

[0019] Other prior art discloses a number of carrying bag and seat combinations.

[0020] Hargraves, U.S. Pat. No. 1,767,925, illustrates a wicker basket which serves as both a carrier of goods and a seat.

[0021] A briefcase designed to be used as a backrest in conjunction with an existing seat can be seen in Chilewich, U.S. Pat. No. 3,876,247.

[0022] A strap to engage extensible luggage handles is illustrated in U.S. Pat. No. 5,829,559 to Nordstrom et al.

[0023] An infant transporting means for airplanes is shown in the U.S. Pat. No. 5,697,580 to Reinhardt.

[0024] What is presently needed is means of transporting an infant or a small child safely, using a conveyance that is more portable, easy to use, and that can be stored conveniently. The present invention is specifically intended to serve in a dual capacity, both as a juvenile seat in cooperation with a conventional wheeled suitcase and serve as a readily utilized juvenile safety serape' for use in travel, particularly air travel. It is felt that there has been a need for such a device, and that the present invention fulfills the demand in a straightforward, economical manner.

[0025] It is therefore the primary object of the present invention to provide for a juvenile travel apparatus that provides a safe, durable and value added means of transporting a baby, an infant, or a young child, particularly during airport or travel facility use.

[0026] It is still another object of the present invention to provide for an juvenile seat apparatus that is capable of being releasably mounted to wheeled luggage, that is substantially reduced in weight and occupies a minimal area, for space savings within aircraft or other travel conveyances.

[0027] It is another object of the invention to provide in combination, a foldable juvenile seat device which is capable of functioning as a seat, and further as a juvenile travel safety serape, which combination is lightweight, separable from, and stow able within luggage.

[0028] Other objects, features and advantages of the invention shall become apparent from the following detailed description of a preferred embodiment thereof, when taken in conjunction with the drawings wherein like reference characters refer to corresponding parts in the several views.

SUMMARY OF THE INVENTION

[0029] The invention provides a flexible, independently detachable and compact juvenile seat device, preferably attached to a telescoping handle of wheeled luggage. The device may be advantageously separated from the luggage and stored within the luggage. The present invention can be used with virtually any conventional suitcase of the wheeled type with telescoping handle. Today's infant strollers and baby carriers are bulky, awkward and heavy should one wish to carry it onboard an airliner. The present invention provides a juvenile conveyance, one that can find greater application and use in modem travel. Parents traveling with small children or infants often bring along a conventional car seat for child transport safety, greatly increasing the weight and bulk being carried. Energy conservation has resulted in the various modes of transportation, such as airlines, trains and buses, to become more efficient in operation by reducing the weight carried by each traveler in the way of clothing and goods, and by reducing the space that each passenger and their luggage occupy. To an airline, a reduced passenger and freight payload that occupies a smaller area results in increased efficiency, thereby reducing the passenger mile and fuel cost.

BRIEF DESCRIPTION OF THE DRAWINGS

[0030] FIG. 1 is a perspective view of the invention upon luggage in the unfolded, seat mode.

[0031] FIG. 2 is a rear view showing telescoping handle attachment means

[0032] FIG. 3 is an underside view of the present invention

[0033] FIG. 4 is a side view of the invention in juvenile travel safety mode.

[0034] FIG. 5 is a perspective view in seat mode, shown without luggage

DETAILED DESCRIPTION OF THE INVENTION

[0035] In FIG. 1, a piece of wheeled luggage 1 of a generally rectangular box shape is shown equipped with the combination juvenile seat and safety serape' of the present invention shown in its unfolded, seat-oriented position. A singular, rectangular, cushioned, folding panel serves as both seat 3 and backrest 4. As shown in FIG. 1, the device is disposed in an unfolded position so that it may function as a juvenile seat.

[0036] The transition from storage condition to safety seat begins by pivotally opening the juvenile seat from the folded storage condition and attaching the backrest 4 portion to the luggage 1 telescoping handle 2 via the wide nylon fabric split sleeve 6 with its Velcro end portions that are to be joined together. Thereby, the backrest 4 panel is releasably attached to the telescoping handle 2, which is in turn attached to the wheeled luggage 1. The seat 3 and backrest 4 panels may be fabricated of a reinforced fabric material such as canvas, flannel or nylon. It is noted that alternative materials, or for provision of the panels 3, 4 to be fitted with removable covers may be utilized according to the requirements of the specific unit. Comfort for the juvenile is attained by the addition of cushioning in the seat 3 and backrest 4 panels. The cushioned backrest 4 panel comprises the upper half, and is connected

along a fold line to the cushioned seat 3 panel, or lower half. The cushioning material may typically be foam, although other cushioning materials may be utilized.

[0037] A pair of torso restraining, shoulder engaging belts 7 comprised of an elongated, flexible strap of material, such as nylon webbing, are bonded at both ends to receive a conventional snap buckle 11, and are bonded to the split sleeve 6 telescoping luggage handle 2 attachment means. The torso restraint shoulder belts 7 pass through the backrest panel 4. A center restraint 8 is a common safety device that prevents the juvenile from sliding beneath a seat belt, and in the present invention, the center restraint 8 projects from the upper center of the seat panel 3, near the leading edge, and interconnects with the torso restraint belt 7 ends at the snap buckle 11.

[0038] Side bolster web straps 5 are bonded to the outer edges of both panel 3, 4 portions, and engage adjustable buckles 14 to allow for length adjustability. The bolster straps 5 serve as seat side bolsters to reduce sideways movement of the juvenile within the unfolded seat and assist in orientation and extension of the seat. The bolster straps 5 are bonded to the split sleeve 6. For added security, the lower seat panel 3 is secured to the wheeled luggage 1 by a second attachment means, removable from the wheeled luggage, which may use mating Velcro surfaces 10 on the lower face of the seat panel 3, and the top wall of the wheeled luggage 1 (the wall nearest the telescoping handle 2). After placing the juvenile seat upon the luggage 1, the child is seated upon the seat panel 3, then the juvenile's legs are guided around the center restraint 8, and the torso restraining shoulder belts 7 are passed over the child's shoulders and individually latched, using the buckles 11 connecting onto the center restraint 8 above the child's lap. The juvenile is now able to sit in an elevated position while being held securely by the torso restraining shoulder belts 7, interconnected center restraint 8, and the side bolster straps 5. Pressure from the weight of the juvenile upon the seat panel 3 secures the Velcro attachment means 10 onto the luggage 1. Attentive parental hand control of the luggage 1 handle at ALL times while the juvenile seat is occupied provides for sure stability and safety and will prevent tipping.

[0039] The rectangular seat 3 and backrest panel 4 is provided with a round opening 9 passing completely through the panels 3, 4, upon the fold line to enable conversion to the serape' mode of operation. The opening 9 is centered and evenly portioned along the fold line. The opening 9 provides an aperture through which the unit may be placed over the head and shoulders of the juvenile, to be worn as the serape' article of clothing as illustrated in FIG. 4 of the drawings. In the present invention serape' mode, the adjustable side bolster 5 straps perform as drawstrings or cinches for the sleeve openings, through which the arms of the juvenile may project. During this use, the fold line is placed atop the juvenile shoulders, the seat 3 portion is facing the juveniles back and the backrest 4 portion is facing the juvenile chest. The side bolster 5 straps are tightened or cinched snugly about the juvenile once placed within the serape'. The serape' is then connected to the parents aircraft seat belt 13 during takeoff and landings. The center restraint 8 is folded under the seat 3 portion to connect with the Velcro 10 upon the underside of the seat 3 portion, and the torso shoulder restraint belts 7 are coupled to the center restraint, and tightened, allowing for a secure serape' attachment to the adult aircraft flight seatbelt 13 with the juvenile placed upon the seated adult lap. An alternative flight seatbelt 13 attachment method utilizes the

carrying handles **12** and lightweight carabiner clips engaging the carrying handle **12** to enable removable attachment onto the adult seat belt **13**.

[0040] When no longer needed, the juvenile seat is uncoupled from and disengaged from the luggage **1** and telescoping handle **2**, and folded into a compact unit that can easily be carried onto an airliner, a train, or bus. The backrest **4** panel and the seat **3** panel are folded to face together along the fold line and compressed (after safely removing the juvenile from the seat unit). The storage condition is characterized by being pivoted closed to a nested flat condition, and compactly folded into a planar assembly. In its storage condition, the device is sized to snugly fit within the article of luggage **1**. A set of carrying handles **12** are attached to both the seat **3** panel and backrest **4** panel leading edges, thusly providing twin carrying handles **12**. The handles **12** function together to enable two-handed ease of carrying the juvenile for a short duration while placed within the seat unit, after removal from the luggage **1**. The handles **12** also serve as a releasable closure for retaining and carrying the unit in a closed position, through use of mating Velcro portions upon the handle **12** straps.

[0041] Although the present invention is shown in conjunction with a suitcase type article of luggage, it could be used with other articles of luggage. Further, the luggage may be factory modified to selectively interface with the present invention. In example, for additional safety against luggage tip-over, an optional set of folding leg extensions can be employed. The leg extensions are removed or attached to the luggage as desired. An adjustable web strap with Velcro end portions provides attachment means to the luggage, and the strap and legs may be attached to the luggage **1** at the base of the luggage **1**, nearest the wheels. For use the legs are folded outwardly when the juvenile is present in the seat, and folded to the luggage **1** for travel, disconnected for storage. Additionally, for added safety and comfort, a hinged headrest portion can be provided, attached along the upper leading edge of the backrest **4** portion. An alternative lightweight embodiment of the seat **3** and backrest **4** panel portions can be constructed of coated, inflatable material and is in construction similar to a domestic flocked air mattress.

[0042] Thus, while preferred embodiments of the present invention have been described in detail, various modifications, alterations, and changes may be made without departing from the spirit and scope of the present invention as defined in the claims.

I claim:

1. An improvement to luggage adaptors comprising:

A combination juvenile seat and travel safety vestment, attachable and detachable to telescoping, extensible handles for conventional wheeled luggage, wherein said combination includes;

a cushioned seat portion and a cushioned backrest portion, each having a front face and a back face, and each having right, left and leading outer edges;

said portions are connected together along a central fold line, to form an elongated rectangle shape integrally formed into one sheet, for disposition between an unfolded position in which the portions form a seat, and a folded position in which the portions define an over the shoulder travel safety vestment sized to fit a small child;

said seat portion is adapted to rest on the top face of said item of wheeled luggage, and said backrest portion is adapted to engage the extensible handle of said wheeled luggage;

said backrest portion has an attachment sleeve bonded to its back face, including Velcro closure bonded to the free ends of said attachment sleeve, said sleeve is sized to fit over, encompass and engage said telescoping handle upon said wheeled luggage, forming a first attachment means;

said attachment sleeve has two opposing lengths of web strap bonded on to said sleeve; and

said web straps have individual length adjuster and snap buckles upon the free ends; and

said web straps cooperate to serve as a torso and shoulder restraint belt for said juvenile seat; and

a widened web strap center restraint member, bonded to said seat portion, and upon the upper face of said seat portion; and

said center restraint has a duplicity of snap buckle receivers upon its free end, with Velcro portions upon said web surface exterior; and

said center restraint and said torso shoulder restraint belt elements interconnect to one another through use of said buckles and buckle receivers; and

a duplicity of adjustable length side bolster web straps, bonded to the right and left outer edges of both said seat portion and said backrest portion, providing means to define a seat

from said portions, said seat portion has a portion of Velcro upon its back face, forming a second attachment means to said wheeled luggage; and

a central opening passing completely through said seat and backrest portions, at said fold line, said central opening is sized to permit safe passage through of a juvenile head and neck while worn as a juvenile travel vestment; and said torso and shoulder restraint belt buckles enable connection to one another, for use as a strap to engage an adult seat belt while used as a juvenile travel vestment; and

said adjustable length side bolster straps further serve as side cinches to hold close said travel vestment upon and onto said juvenile; and

said backrest portion has a flexible primary carrying handle and Velcro closure bonded upon said leading edge, and said seat portion has a complementary Velcro section upon its leading edge, wherein said backrest portion and seat portion may be folded together forming a closed position package that can be carried alone or stored inside said wheeled luggage.

2. The improvement to luggage adaptors according to claim 1 wherein:

said cushioned portions are covered with material of the types relating to nylon, rayon, canvas, leather, flannel, cotton, reinforced plastic and the like.

3. The improvement to luggage adaptors according to claim 1 wherein:

the cushioned portions are backed with a semi rigid material.

4. The improvement to luggage adaptors according to claim 1 wherein:

said cushioned portions are constructed entirely of durable, flexible foam material.

5. The improvement to luggage adaptors according to claim 1 wherein: said seat and backrest portions are constructed of inflatable cushion materials.

6. The improvement to luggage adaptors according to claim 1, providing means for stabilizing the wheeled luggage in an upright position during use with said juvenile seat.

7. The improvement to luggage adaptors according to claim 1 wherein:

a Velcro portion is attached at center upon the uppermost face of said luggage, near said telescoping handle, and complementary Velcro portion engages said seat underside portion mating Velcro element, completing said second attachment means.

8. The improvement to luggage adaptors according to claim 1 wherein:

said closures are snap type, shoelace type, or zipper type closures.

9. The improvement to luggage adaptors according to claim 1 wherein:

said juvenile seat has a weight capacity up to 50 pounds.

10. The improvement to luggage adaptors according to claim 1 wherein:

a foldable flexible cushioned flap, sized to fully cover and overlap said central opening, is bonded on a first edge

onto the top face of said seat portion, said foldable flap has a Velcro closure upon the edge opposing said first edge.

11. The improvement to luggage adaptors according to claim 1 wherein:

no closure flap is provided to cover said central opening.

12. The improvement to luggage adaptors according to claim 1 wherein: no central opening is provided upon said seat and backrest portions, for use solely as a juvenile seat.

13. The improvement to luggage adaptors according to claim 1 wherein: a secondary carrying handle is attached to said seat portion leading edge, and said secondary carrying handle also serves as a closure means, in cooperation with said primary carrying handle.

14. The improvement to luggage adaptors according to claim 1 wherein: said backrest portion uppermost leading edge has a foldable headrest extension attached.

15. The improvement to luggage adaptors according to claim 1 wherein: a duplicity of carabiners mounted to said back face of said seat portion near said fold line serve as attaching adaptors for use during attachment of said juvenile travel seat onto a transport conveyance mounted seat belt.

* * * * *