A side seating infant carrier which is adapted to support an infant or young child on an adult wearer's hip and is provided with a retention strap arrangement which is specifically adapted to hold the infant or young child within a seat portion defined by the carrier. The infant carrier of the present invention is further provided with a waist belt arrangement adapted to provide optimal support to the lower back/lumbar of the wearer, as well as an adjustable shoulder strap arrangement which is configured to promote enhanced comfort and sizing flexibility.
Fig. 3
SIDE SEATING INFANT CARRIER
CROSS-REFERENCE TO RELATED APPLICATIONS
[0001] Not Applicable
STATEMENT RE: FEDERALLY SPONSORED RESEARCH/DEVELOPMENT
[0002] Not Applicable

BACKGROUND OF THE INVENTION
[0003] 1. Field of the Invention
[0004] The present invention relates generally to carriers adapted to be worn by an adult in order to support and carry an infant or young child. More particularly, the present invention is directed to a side seating infant carrier which is adapted to support an infant or young child upon one of the hip regions of an adult while being held by the one of the adult’s arms.

BRIEF SUMMARY OF THE INVENTION
[0009] In accordance with the present invention, there is provided a side seating infant carrier which is adapted to support an infant or young child upon an adult wearer’s hip. The carrier of the present invention is provided with a uniquely configured retention strap arrangement which is cooperatively engaged to the inner surface of the main panel thereof, and is specifically adapted to hold the infant or young child within a seat portion defined by the main panel where the same is positioned against the wearer in a prescribed manner. The infant carrier of the present invention is further provided with an adjustable waist belt arrangement adapted to provide optimal support to the lower back/lumbar of the wearer, as well as an adjustable shoulder strap arrangement which is interfaced to the main panel of the carrier in a manner promoting enhanced comfort and sizing flexibility.

BRIEF DESCRIPTION OF THE DRAWINGS
[0011] These, as well as other features of the present invention, will become more apparent upon reference to the drawings wherein:
[0012] FIG. 1 is a front perspective view of the side seating infant carrier constructed in accordance with the present invention, the broken lines showing an infant and adult to illustrate an exemplary manner of using the present infant carrier;
[0013] FIG. 2 is a rear perspective view of the infant carrier of the present invention;
[0014] FIG. 3 is a front elevational view of the infant carrier of the present invention; and
[0015] FIG. 4 is a rear elevational view of the infant carrier of the present invention.
[0016] Common reference numerals are used throughout the drawings and detailed description to indicate like elements.

DETAILED DESCRIPTION OF THE INVENTION
[0017] Referring now to the drawings wherein the showings for the purposes of illustrating a preferred embodiment of the present invention only, and not for purposes of limiting the same, FIGS. 1-4 depict a side seating infant carrier 10 which is specifically adapted to support an infant or young child 12 (shown in phantom FIG. 1) on either the right or left hip of an adult wearer 14 (also shown in phantom FIG. 1).
[0018] The carrier 10 comprises a main body or panel 16 which defines an arcuate top edge 18 and an opposed bottom edge 20. Extending between the top and bottom edges 18, 20 are first and second side edges 22, 24 which extend in spaced relation to each other. The main panel 16 further defines an
inner surface 26 and an opposed outer surface 28. In the carrier 10, the main panel 16, and in particular the inner and outer surfaces 26, 28 thereof, are defined by stitching various strips of material to each other in a prescribed pattern or arrangement. The material for the main panel 16 is selected such that substantially the entire inner surface 26 and portions of the outer surface 28 are fabricated from a breathable, mesh-like material. In addition, the main panel 16 is preferably fabricated such that a layer of sponge-like cushioning material is captured between the inner and outer surfaces 26, 28, thus imparting a soft, padded quality to the main panel 16. As best seen in FIG. 3, the outer surface 28 of the main panel 16 includes a pocket 25, the open end of which may be selectively closed through the use of a zipper or similar closure mechanism.

[0019] The main panel further includes a fold seam 27 which extends between the first and second side edges 22, 24 in spaced generally parallel relation to the bottom edge 20. The fold seam 27 is also disposed in relative close proximity to the bottom edge 20, with a lower panel section 29 of the main panel being defined between the bottom edge 20 and fold seam 27. As seen in FIGS. 1-4, when the carrier 10 is configured for proper fitting on the wearer 14, the main panel 16 is folded along the fold seam 27 in a manner which causes that portion of the inner surface 26 defined by the lower panel section 29 to directly face a portion of the remainder of the inner surface 26. The advantages attendant to folding the main panel 16 along the fold seam 27 will be discussed in more detail below.

[0020] Secured to the upper portion of the first side edge 22 is a sleeve 30 of the carrier 10. The sleeve 30 defines a distal, open end 32 which provides access into a hollow interior compartment defined by the sleeve 30. As is best seen in FIG. 1, the sleeve 30 is attached to the first side edge 22 such that one side of the sleeve 30 extends in substantially continuous relation to the top edge 18 of the main panel 16.

[0021] Attached to the upper portion of the second side edge 24 of the main panel 16 is the proximal end of an elongate shoulder strap 34 of the carrier 10. The attachment location of the shoulder strap 34 to the second side edge 24 essentially mirrors the attachment location of the sleeve 30 to the first side edge 22. In this regard, one side of the shoulder strap 34 extends in substantially continuous relation to the top edge 18 of the main panel 16.

[0022] In the carrier 10, the shoulder strap 34 defines a distal end 36 which is that end opposite to the proximal end attached to the second side edge 24. The distal end 36 is advanced through a buckle 38 which is secured to the interior of the sleeve 30 and protrudes slightly from the open end 32 thereof. Additionally, attached to the shoulder strap 34 in relative close proximity to the distal end 36 thereof is a male connector 40 which is sized and configured to be releasably engageable to a corresponding, complementary female connector 42 attached to the shoulder strap 34 at a location which is somewhat centrally disposed between the distal end 36 and the proximal end attached to the second side edge 24. In the carrier 10, the female connector 42 is permanently affixed to a prescribed location of the shoulder strap 34. In contrast, the male connector 40 is adapted to be adjustable, and thus positionable anywhere along that portion of the shoulder strap 34 extending between the buckle 38 and the distal end 36. The releasable connection of the male and female connectors to each other after the distal end 36 has been advanced through the buckle 38 effectively maintains the shoulder strap 34 in a looped configuration about the neck and one shoulder of the wearer 14 in the manner best shown in FIG. 1. The male connector 40 may be selectively positioned along the section of the shoulder strap 34 extending between the buckle 38 and the distal end 36 as needed to accommodate the particular size and body type of the wearer 14.

[0023] The shoulder strap 34 of the carrier 10 further preferably comprises an elongate, padded sleeve 44 which is advanced over portion of the shoulder strap 34 extending between the female connector 42 and the proximal end attached to the second side edge 24. The sleeve 44 is partially fabricated from a layer of breathable, mesh-like material which is backed by a sponge-like, cushioning layer. The sleeve 44 is adjustable, and may be selectively positioned anywhere along the length of that section of the shoulder strap 34 extending between the female connector 42 and the proximal end attached to the second side edge 24 to provide enhanced comfort to the shoulder and neck of the wearer 14 when the shoulder strap 34 is advanced there over as also shown in FIG. 1.

[0024] As is best seen in FIGS. 2-4, secured to the lower portions of respective ones of the first and second side edges 22, 24 is a pair of elongate lower flap portions 46 which extend in opposed relation to each other. More particularly, the lower flap portions 46 are attached to respective ones of the first and second side edges 22, 24 such that one side of each of the lower flap portions 46 extends in substantially continuous relation to the bottom edge 20 of the main panel 16. Additionally, one side of each of the lower flap portions 46 opposite that extending in continuous relation to the bottom edge 20 extends in substantially aligned relation to the fold seam 27 of the main panel 16.

[0025] Attached to the inner surface of that lower flap portion 46 protruding from the first side edge 22 is a female connector 48. Additionally, attached to the inner surface of the lower flap portion 46 protruding from the second side edge 24 is the proximal end of an elongate waist belt 50 of the carrier 10. In addition to the proximal end, the waist belt 50 defines a distal end 52 and includes a male connector 54 which is attached thereto in relative close proximity to the distal end 52 thereof. The male connector 54 is sized and configured to be releasably engageable to the corresponding, complementary female connector 48 attached to the other lower flap portion 46. Though the female connector 48 is permanently affixed to a prescribed location on the inner surface the lower flap portion 46 protruding from the first side edge 22, the male connector 54 is adapted to be adjustable and thus selectively positionable along the waist belt 50. The releasable connection of the male and female connectors 54, 48 to each other effectively maintains the waist belt 50 in a looped configuration about the waist of the wearer 14 in the manner also shown in FIG. 1.

[0026] As indicated above, in the carrier 10, the male connector 54 of the waist belt 50 may be selectively positioned along the waist belt 50 as needed to accommodate the waist size of the wearer 14. To provide a further measure of adjustability, it is further contemplated that the waist belt 50 may comprise separate first and second waist belt sections 50a, 50b which are cooperatively engaged to each other by a buckle 56. The first waist belt section 50a defines the proximal end of the waist belt 50 which is attached to the inner surface of that lower flap portion 46 protruding from the second side edge 24. The end of the first waist belt section 50a opposite that attached to the lower flap portion 46 is itself
advanced through the buckle 56. The second waist belt section 50b defines the distal end 52 of the waist belt 50, with that end of the second waist belt section 50b opposite that defining the distal end 52 itself being permanently attached to the buckle 56. Thus, the adjustability of the orientation of the buckle 56 relative to the first waist belt section 50a coupled with the adjustability of the orientation of the male connector 54 relative to the second waist belt section 50b allows the waist belt 50, as a whole, to be manipulated into any one of a wide range of different sizes as needed to accommodate the waist size of the wearer 14.

The waist belt 50 of the carrier 10 further comprises an elongate, padded sleeve 58 which is advanced over a portion of the second waist belt section 50b between the buckle 56 and the distal end 52. The sleeve 58, like the above-described sleeve 44, is also partially fabricated from a layer of breathable, mesh-like material which is backed by a sponge-like, cushioning layer. The sleeve 58 is also adjustable, and may be selectively positioned anywhere along the length of the second waist belt section 50b between the buckle 56 and the distal end 52. Typically, it is contemplated that the sleeve 58 will be positioned so as to provide comfort and support to the lower back/lumbar region of the wearer 14 when the waist belt 50 is advanced about the waist of the wearer 14.

In the carrier 10, the outer surfaces of the lower flap portions 46 are each defined by a layer of the breathable, mesh-like material which also defines the majority of the inner surface 26 of the main panel 16, including that portion of the inner surface 26 which is defined by the lower panel section 29. Additionally, that portion of the outer surface 28 of the main panel 16 defined by the lower panel section 29 is similarly preferably fabricated from such breathable, mesh-like material. In using the carrier 10 of the present invention, it is contemplated that the main panel 16 will be folded along the fold seam 27 in the above-described manner as a precursor to advancing the waist belt 50 about the waist of the wearer 14. As indicated above, the folding of the main panel 16 along the fold seam 27 causes that portion of the inner surface 26 defined by the lower panel section 29 to directly face a portion of the remainder of the inner surface 26. As a result, that portion of the outer surface 28 of the main panel 16 defined by the lower panel section 29 is presented for direct engagement to the wearer 14, as are the outer surfaces of the lower flap sections 46. In this regard, the female connector 48 and waist belt 50 which are attached to the inner surfaces of respective ones of the lower flap portions 46 are outwardly presented away from the wearer 14 as a result of the folding of the main panel 16 along the fold seam 27. Thus, when the waist belt 50 is thereafter extended about the waist of the wearer 14 and the male connector 54 cooperatively engaged to the corresponding female connector 48, the lower flap portions 46 provide an effective, padded barrier between the female connector 48 and the wearer 14, and further between a proximal portion of the waist belt 50 (i.e. the first waist belt section 50a) and the wearer 14.

The carrier 10 of the present invention further comprises a pair of upper flap portions 60 which are best shown in FIGS. 2 and 4, and are attached to the main panel 16 so as to extend along portions of respective ones of the first and second side edges 22, 24 thereof. More particularly, one end of one of the upper flap portions 60 is attached to the main panel 16 so as to extend substantially along the length of the seam defined between the first side edge 22 and the sleeve 30. Similarly, one end of the remaining one of the upper flap portions 60 is attached to the main panel 60 to extend substantially along the length of the seam defined between the second side edge 24 and the proximal end of the shoulder strap 34. The inner surfaces of the upper flap portions 60 are each preferably defined by a layer of the aforementioned breathable, mesh-like material.

As is further shown in FIGS. 2 and 4, attached to the outer surface of that upper flap portion 60 disposed adjacent the shoulder strap 34 is a female connector 62. Attached to the outer surface of the remaining upper flap portion 60 disposed adjacent the sleeve 30 is the proximal end of an elongate retention strap 64. The retention strap 64 defines a distal end 66 which is that end opposite to the proximal end attached to the upper flap portion 60 disposed adjacent the sleeve 30. Attached to the retention strap 64 in relative close proximity to the distal end 66 thereof is a male connector 68 which is sized and configured to be releasably engageable to the corresponding, complementary female connector 60 attached to the remaining upper flap portion 60. In the carrier 10, the female connector 62 is permanently affixed to a prescribed location on that upper flap portion 60 disposed adjacent the shoulder strap 34. In contrast, the male connector 68 is adapted to be adjustable, and thus selectively positionable anywhere along that portion of the retention strap 64 extending between the distal end 66 and the opposed proximal end attached to the upper flap portion 60 disposed adjacent the sleeve 30. In this regard, the male connector 68 may be selectively positionable along the retention strap 64 as needed to accommodate the infant 12 within the carrier 10 as will be described in more detail below.

As indicated above, the carrier 10 is used by initially advancing the shoulder strap 34 about the neck and one shoulder of the wearer 14, with the shoulder strap 34 being maintained in its looped configuration by the receipt of the male connector 40 thereof into the corresponding female connector 42. Thereafter, the main panel 16 is folded along the fold seam 27 in the above-described manner, with the waist belt 50 thereafter being advanced about the waist of the wearer 14 and maintained in a looped arrangement about the waist of the wearer 14 as a result of the receipt of the male connector 54 into the corresponding female connector 48. Upon both the shoulder strap 34 and waist belt 50 being cooperatively engaged to the wearer 14 in the aforementioned manner, the infant 12 may be placed between the body of the wearer 14 and the main panel 16 of the carrier 10. Due to the arrangement of the carrier 10 upon the wearer 14, the majority of the weight of the infant 12 within the carrier 10 is transferred to one of the hips of the wearer 14. In this regard, a lower portion of the inner surface 26 of the main panel 16, including that portion of the inner surface 26 which defines the lower panel section 29, defines a seat portion 70 for the infant 12 within the carrier 10, as is best shown in FIG. 1.

Upon the infant 12 being positioned upon the seat portion 70 of the carrier 10, the retention strap 64 is advanced over and along the chest of the infant 12, with the male connector 68 thereafter being releasably secured to the corresponding female connector 62. As will be recognized by those of ordinary skill in the art, upon the engagement of the male and female connectors 68, 62 to each other, the retention strap 64, which extends under the arms of the infant 12 within the carrier 10, effectively prevents the infant 12 from inadvertently falling out of the carrier 10. When the retention strap 64 is advanced over the infant 12 in the aforementioned
manner, the inner surfaces of the upper flap portions 60 are typically brought into direct contact with the infant 12, and provide a cushioned, padded barrier between the female connector 62 and the infant 12, and further between the proximal portion of the retention strap 64 and the infant 12.

[0033] This disclosure provides an exemplary embodiment of the present invention. The scope of the present invention is not limited by this exemplary embodiment. Numerous variations, whether explicitly provided for by the specification or implied by the specification, such as variations in structure, dimension, type of material and manufacturing process may be implemented by one of skill in the art in view of this disclosure.

What is claimed is:
1. An infant carrier, comprising:
   a main panel;
   an elongate shoulder strap having opposed proximal and distal ends secured to prescribed locations on the main panel;
   an elongate waist belt having opposed proximal and distal ends secured to prescribed locations on the main panel; and
   an elongate retention strap having opposed proximal and distal ends secured to prescribed locations on the main panel;
   the retention strap being sized an configured to be extensible over the chest and under the arms of an infant seated within the carrier.
2. The infant carrier of claim 1 wherein:
   the main panel defines an inner surface, an outer surface, a top edge, a bottom edge, and opposed first and second side edges extending between the top and bottom edges; the proximal end of the shoulder strap is permanently attached to a portion of the second side edge of the main panel; and
   the shoulder strap is releasably engageable to a portion of the first side edge of the main panel.
3. The infant carrier of claim 2 wherein:
   a shoulder strap buckle is permanently attached to the first side edge of the main panel;
   the shoulder strap is extensible though the shoulder strap buckle;
   a female connector is permanently attached to the shoulder strap between the proximal and distal ends thereof; and
   a male connector is adjustably mounted to the shoulder strap between the distal end thereof and the shoulder strap buckle;
   the releasable engagement of the male connector to the female connector subsequent to the advancement of the shoulder strap through the shoulder strap buckle being operative to maintain the shoulder strap in a looped configuration about the neck and one shoulder of a wearer of the infant carrier.
4. The infant carrier of claim 3 wherein the shoulder strap buckle is at least partially housed within a tubular sleeve attached and extending along a portion of the first side edge of the main panel.
5. The infant carrier of claim 3 wherein the shoulder strap further comprises an elongate, tubular shoulder pad sleeve which is selectively positionable therewith between the proximal end thereof and the female connector permanently mounted thereon.
6. The infant carrier of claim 1 wherein:
   the main panel defines an inner surface, an outer surface, a top edge, a bottom edge, and opposed first and second side edges extending between the top and bottom edges; a pair of lower flap portions are attached to and protrude from respective ones of the first and second sides edges in opposed relation to each other; the proximal end of the waist belt is permanently attached to one of the lower flap portions; and the waist belt is releasably engageable to the remaining one of the lower flap portions.
7. The infant carrier of claim 6 wherein:
   a female connector is permanently attached to the remaining one of the lower flap portions; and
   a male connector is adjustably mounted to the waist belt; the releasable engagement of the male connector to the female connector being operative to maintain the waist belt in a looped arrangement about the waist of a wearer of the infant carrier.
8. The infant carrier of claim 7 wherein the waist belt comprises:
   a first waist belt section defining the proximal end; a second waist belt section defining the distal end; and a waist belt buckle cooperatively engaging the first and second waist belt sections to each other; the first waist belt section being adjustably mounted to the waist belt buckle, with the second waist belt section being permanently attached to the waist belt buckle.
9. The infant carrier of claim 8 further comprising an elongate, tubular waist belt sleeve which is selectively positionable along the second waist belt section between the male connector and the waist belt buckle.
10. The infant carrier of claim 1 wherein:
    the main panel defines an inner surface, an outer surface, a top edge, a bottom edge, and opposed first and second side edges extending between the top and bottom edges; a pair of upper flap portions are attached to the main panel in spaced relation to each other; the proximal end of the retention strap is permanently attached to one of the upper flap portions; and
    the retention strap is releasably engageable to the remaining one of the lower flap portions.
11. The infant carrier of claim 10 wherein:
    a female connector is permanently attached to the remaining one of the lower flap portions; and
    a male connector is adjustably mounted to the retention strap;
    the releasable engagement of the male connector to the female connector being operative to maintain the retention strap in a looped arrangement about the chest of an infant within the infant carrier.
12. The infant carrier of claim 10 wherein:
    the proximal end of the shoulder strap is attached to a portion of the second side edge of the main panel along a shoulder strap seam;
    a tubular sleeve is attached to a portion of the first side edge of the main panel along a sleeve seam; one of the upper flap portions is attached to the second side edge of the main panel along the shoulder strap seam; and the remaining one of the upper flap portions is attached to the first side edge of the main panel along the sleeve seam.
13. The infant carrier of claim 1 wherein the main panel defines an inner surface, an outer surface, a top edge, a bottom
edge, opposed first and second side edges extending between the top and bottom edges, and a fold seam extending between the first and second side edges in spaced, generally parallel relation to the bottom edge, the folding of the main panel along the fold seam being operative to facilitate the formation of a seat portion in the main panel.

14. The infant carrier of claim 13 wherein the outer surface of the main panel defines a pocket.

15. An infant carrier, comprising:
a main panel defining an inner surface, an outer surface, a top edge, a bottom edge, and opposed first and second side edges extending between the top and bottom edges;
an elongate shoulder strap having opposed proximal and distal ends, the proximal end of the shoulder strap being permanently attached to a portion of the second side edge of the main panel;
a shoulder strap buckle permanently attached to the first side edge of the main panel, the shoulder strap being extensible though the shoulder strap buckle;
a female connector permanently attached to the shoulder strap between the proximal and distal ends thereof; and
a male connector adjustably mounted to the shoulder strap between the distal end thereof and the shoulder strap buckle;
the releasable engagement of the male connector to the female connector subsequent to the advancement of the shoulder strap through the shoulder strap buckle being operative to maintain the shoulder strap in a looped configuration about the neck and one shoulder of a wearer of the infant carrier.

16. The infant carrier of claim 15 wherein the shoulder strap buckle is at least partially housed within a tubular sleeve attached to and extending along a portion of the first side edge of the main panel.

17. The infant carrier of claim 15 wherein the shoulder strap further comprises an elongate, tubular shoulder pad sleeve which is selectively positionable therealong between the proximal end thereof and the female connector permanently mounted thereto.

18. An infant carrier, comprising:
a main panel defining an inner surface, an outer surface, a top edge, a bottom edge, and opposed first and second side edges extending between the top and bottom edges;
a pair of upper flap portions attached to the main panel in spaced relation to each other;
an elongate shoulder strap having opposed proximal and distal ends secured to prescribed locations on the main panel; and
an elongate retention strap having opposed proximal and distal ends, the proximal end being permanently attached to one of the upper flap portions, with the retention strap being releasably engageable to the remaining one of the lower flap portions;
the retention strap being sized and configured to be extensible over the chest and under the arms of an infant seated within the carrier.

19. The infant carrier of claim 18 wherein:
a female connector is permanently attached to the remaining of the one of the lower flap portions; and
a male connector is adjustably mounted to the retention strap;
the releasable engagement of the male connector to the female connector being operative to maintain the retention strap in a looped arrangement about the chest of an infant within the infant carrier.

20. The infant carrier of claim 19 wherein:
the proximal end of the shoulder strap is attached to a portion of the second side edge of the main panel along a shoulder strap seam;
a tubular sleeve is attached to a portion of the first side edge of the main panel along a sleeve seam;
one of the upper flap portions is attached to the second side edge of the main panel along the shoulder strap seam; and
the remaining one of the upper flap portions is attached to the first side edge of the main panel along the sleeve seam.

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