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Hansson

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[54]	4] INFANT CARRIER						
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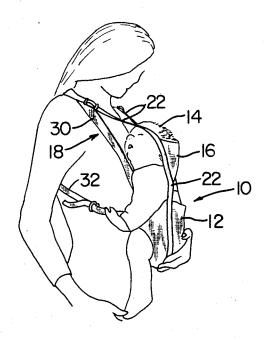
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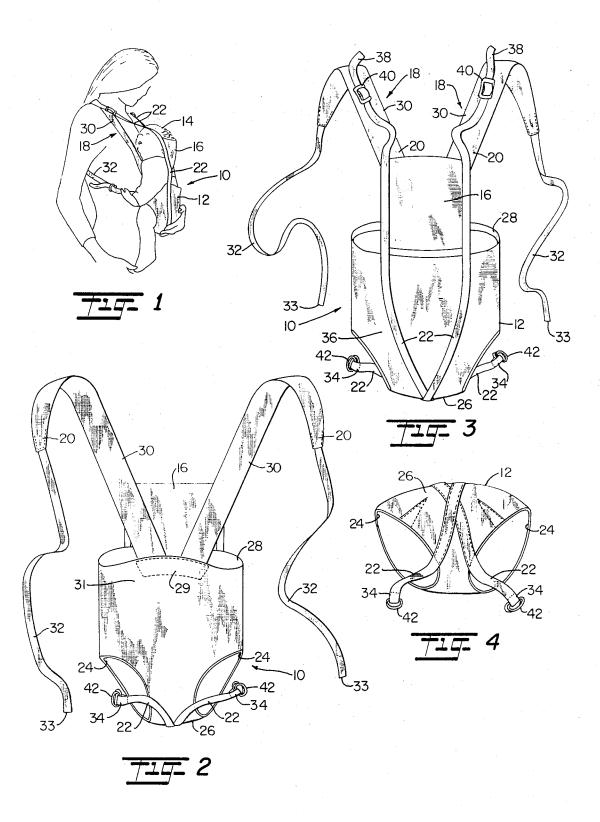
[57] ABSTRACT

A carrier for an infant child includes a fabric pouch in which the child can be seated having leg openings near its bottom end and a unique strap arrangement includes shoulder straps and reinforcing straps so connected to the pouch and to one another as to permit secure but adjustable suspension either from the front or back of the user. A head support is disposed between the open upper end of the pouch and the shoulder straps in a manner such that it can be retained in a head-supporting position or folded down into the pouch in an out-of-the-way position.

9 Claims, 4 Drawing Figures



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INEANT: CARRIER

The present invention generally concerns a carrier for an infant child and more particularly relates to a fabric carrier of the type which may be suspended from the shoulders of a user.

Child carriers of the type which are adapted to be suspended from the shoulders of a user are now in widespread use for carrying children in piggyback fashion over terrain not adapted for travel by wheeled carts, carriages and the like. Such carriers are often 10 tailed description taken in conjunction with the accomused by men and women in hiking and other extended walking activities so that it is important that the carrier be comfortable for both the user and the child. Generally, the carriers include a framework of metal or some other rigid material from which is suspended a fabric pouch in which the child can sit. This type of carrier, however; is practically speaking limited for use with children of at least the toddler stage because of the size of the frame necessary to comfort both the user and the child. An example of such a carrier is disclosed in U.S. Letters Pat. No. 3,097,773 issued to G. A. Cunningham. Carriers adapted for use with babies or infants of only a few months of age, generally speaking, are designed so that the infant is held close to the body of the user where the infant has a feeling of security. Typical of such infant carriers are those disclosed in U.S. Letters Pat. No. 3,481,517 to A. L. Aukerman and in U.S. Letters Pat. No. 2,411,331 to N. Nettleship.

In carriers for infants or babies of a very young age, it is preferably desirable that the carrier include a support for the infant's head; since it is frequently the case that the infant is not strong enough to independently hold his head erect. However, as the infant grows older and requires less head support, it is desirable for the 35 comfort and contentment of the infant that his head not be confined so that he is free to move his head and observe his surroundings.

The infant carrier of the present invention is made of a light flexible fabric material and includes a pouch in 40 which the child can be seated. The pouch is uniquely secured to strap means which are adapted to pass over the shoulders of the user so that the child can be supported either in front or in back of the user. A head support is flexibly connected to the shoulder straps so 45 that it is movable between an in-use position wherein it supports the head of the infant and an out-of-use position wherein it is folded down into the pouch with the infant so that the infant's head is free to move about without restriction. A pair of reinforcement straps are 50 attached to the pouch in such a manner that they reinforce the pouch at the bottom where the maximum amount of wear occurs and also serve to adjustably and releasably connect the head support to the shoulder straps for easy manipulation of the head support.

Accordingly, it is an object of the present invention to provide an infant carrier of the type adapted to be suspended from the shoulders of a user having a head support which is movable between in-use and out-ofuse positions.

It is another object of the present invention to provide an infant carrier with a head support movable between in-use and out-of-use positions, the head support being secured to the carrier in a manner such that it is easily and readily moved from one position to the other while the carrier is suspended from the shoulders of the

It is a further object of the present invention to provide an infant carrier of the type which can be suspended from the shoulders of a user either in front or in back of the user and has an adjustable reinforcing and shoulder strap arrangement which reinforces the carrier to extend its useful life.

Other objects, advantages and features of the present invention will become more readily appreciated and understood from a consideration of the following depanying drawings, in which:

FIG. 1 is a perspective view of the carrier suspended from the shoulders of a user with a child seated therein; FIG. 2 is a front elevation of the carrier shown in 15 FIG. 1:

FIG. 3 is a rear elevation of the carrier of FIG. 1; and FIG. 4 is a bottom plan of the carrier of FIG. 1.

Referring now to the drawings which show by way of illustrative example an infant carrier 10 constructed in 20 accordance with the present invention, the infant carrier 10 can be seen in FIG. 1 to include a pouch 12 in which the infant 14 can be seated, a head support 16: for holding the infant's head in an erect position, and supporting straps generally designated 18 including shoulder straps 20 and reinforcement straps 22.

The pouch 12 is made of a strong but flexible fabric material such as light canvas or the like and when not folded has a cup-like configuration with leg openings 24 near the bottom end 26 thereof and an open upper end 28 through which the upper torso and head of the infant can protrude when seated in the pouch. The supporting straps 18 for the carrier are also made of a strong but flexible fabric material such as light canvas and each includes a shoulder strap 20 and a reinforcement strap 22 which are secured to the pouch as by sewing in a specific arrangement to be described hereinafter.

Referring first to the shoulder straps 20, they can be seen in FIG. 2 to have one end sewn as at 29 to the front portion 31 of the pouch adjacent the open upper end 28. The shoulder straps extend away from the upper end of the pouch in a divergent angle so that they form a substantially V-shaped configuration whereby when the carrier 10 is in use, the shoulder straps can be comfortably extended over the shoulders of the user. The shoulder straps are comprised of a cushioning portion 30 and a fastening portion 32 each of which defines approximately one-half the length of the shoulder straps. The cushioning portion is wider than the fastening portion and comprises the segment of the shoulder strap which lies on the shoulder of the user and is sewn to the upper end of the pouch. The wide cushioning: portion 30 of the shoulder straps distributes the weight of the infant across a substantial area of the shoulders of the user for optimum comfort. The end of the cushioning portion 30 which is not sewn to the pouch is securely sewn to one end of the narrower fastening portion 32 so that the fastening portion has a free end 33 available to be attached to a reinforcement strap 22 as will be discussed hereinafter.

The reinforcement straps 22 are approximately the same width as the fastening portion 32 of the shoulder straps 20 and are also made of a strong but flexible material such as light canvas. They are secured to the pouch 20 as by sewing in such a manner that they have free lower ends 34 which extend away from the front artian of the naugh in hetween the les anenines 3d



and criss-cross at the bottom of the pouch before extending upwardly across the rear portion 36 of the pouch toward the open upper end 28. The upper portions of the reinforcement straps 22 extend beyond the open upper end of the pouch and each is sewn to one 5 side edge of the head support 16 so as to retain the head support in slightly spaced relation from the open upper end 28 of the pouch. The reinforcement straps extend on beyond the upper edge of the head support defining free upper ends 38 (FIG. 3) of the reinforce- 10 ment straps which are adapted to be adjustably and releasably attached to the shoulder straps 20 as by buckles 40 which are affixed to the shoulder straps at a position which is substantially equispaced between the two ends of the cushioning portion 30 of the shoulder 15 straps. The lower free ends 34 of the reinforcement straps are provided with fasteners 42, such as D-ring fasteners, so that the free ends 33 of the fastening portion 32 of the shoulder straps can be easily and readily adjustably attached to the lower ends of the reinforce- 20 ment straps. When the fastening straps are attached to the reinforcement straps, a closed loop is established whereby the carrier can be comfortably suspended from the shoulders of a user. The adjustment allowed by the D-ring fasteners 42 enables the user to position 25 the carrier for optimum comfort both to himself and the infant.

It will be appreciated that, with the reinforcement straps 22 criss-crossing at the bottom 26 of the pouch, the pouch will be reinforced to give added strength to the area where the infant's weight is concentrated. Thus, the useful life of the pouch is extended by providing additional strength to the fabric in the area where there is the greatest tendency for the fabric to wear.

It can be seen that, by disconnecting the upper free 35 ends 38 of the reinforcement straps from the buckles 40 on the cushioning portion 30 of the shoulder straps, the head support 16 along with the upper portion of the reinforcement straps can be folded down into the pouch 12 in the out-of-use position so that the infant's head movement will not be inhibited by the head support. In reverse, it is very simple to draw the head support and upper portion of the reinforcement straps back out of the pouch and quickly and easily attach the free upper ends of the reinforcement straps to the buckles on the shoulder straps to again secure the head support in its in-use position. The simple procedure for moving the head support between in-use and out-of-use positions makes the carrier 10 adaptable for use with infants in various stages of growth. It also makes the carrier useful when it is desirable that an infant's head be supported some of the time, perhaps when sleeping, and unsupported the remainder of the time. Also, the reinforcement straps are adjustably secured in the buckles 40 so that the position of the head support when in its in-use position can be adjusted to satisfy variables such as the size of the infant and particularly his head size.

Another important feature of the invention is the spaced relationship between the head support 16 and the open upper end 28 of the pouch which eliminates any bulk folds in the material when the head support is folded into the pouch in the out-of-use position as might be present if the pouch were integral with the head support. This prevents any undue discomfort for

Since the carrier is fabricated of a light fabric material, an important feature of the carrier is that the effective load supported by the user is not much different that the weight of the infant himself. Another important feature of the carrier is that it can be folded into a very small package because of the minimum amount of fabric used in its construction, and thus carried in the purse or pocket of the user when not in use.

Although the present invention has been described with a certain degree of particularity, it is understood that the present disclosure has been made by way of example and that changes in details of structure may be made without departing from the spirit thereof.

What is claimed is:

1. A carrier for an infant comprising in combination a pouch in which the infant can be seated, said pouch including a pair of lower leg openings and an open upper end, shoulder strap means affixed to the pouch and adapted to pass over the shoulders of a user, and a head support defining an extension of the pouch on the side thereof opposite the shoulder strap connection to the pouch, and means releasably connecting the upper portion of the head support to said shoulder strap means at a location along the length of the shoulder strap means in a manner such that the head support serves as a firm flexible support for the infant's head.

2. The carrier of claim 1 wherein said means releasably connecting the head support to the shoulder straps includes a pair of reinforcement straps secured to the pouch and the head support and having free ends adapted to be individually connected to the shoulder strap means to retain the head support in an in-use position.

3. The carrier of claim 2 wherein said head support comprises a piece of flexible fabric sewn to the reinforcement straps whereby when the reinforcement straps are disconnected from the shoulder strap means the reinforcement straps can be folded so that the head support is positioned within the pouch in an out-of-use position.

4. The carrier of claim 3 wherein said head support is connected to the reinforcement steaps in spaced relation to the open upper end of the pouch.

5. A carrier for an infant comprising in combination a pouch in which the infant can be seated, said pouch including a pair of leg openings near the bottom and open at the upper end, a pair of shoulder straps each having one end secured to the pouch near the open upper end of the pouch for extension of said shoulder straps over the shoulders of a user, reinforcement straps secured to the pouch including free lower ends adapted to be individually attached to the free ends of the shoulder straps and free upper ends adapted to be attached to the shoulder straps at a preselected location along the length of the shoulder straps, and a head support secured to the reinforcement straps near the free upper ends whereby when the free upper ends are secured to the shoulder straps the head of the infant will be supported and comfortably held in place.

6. The carrier of claim 5 wherein said reinforcement straps comprise a pair of elongated straps being secured to the pouch along an intermediate portion of the straps so that the free lower ends extend away from the pouch adjacent the leg openings and the free upper

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7. The carrier of claim 6 wherein said reinforcement straps cross each other at the bottom end of the pouch adjacent the leg openings.

8. The carrier of claim 6 wherein said pouch, shoulder straps, reinforcement straps, and head support are 5 made of a strong but flexible fabric material.

9. A carrier for an infant comprising in combination a fabric pouch in which the infant can be seated, said pouch including a pair of leg openings near the bottom and an open upper end through which the infant's head can protrude, a pair of flexible fabric shoulder straps secured at one end to one side of the pouch near the open upper end of the pouch, said shoulder straps having free opposite ends adapted to be passed over the shoulders of a user, a pair of flexible fabric reinforcement straps secured to the pouch with free lower ends extending away from the bottom of the pouch on said one side, said reinforcement straps criss-crossing at the bottom of said pouch and extending up the opposite side of said pouch from said one side and having free upper ends of use position.

the pouch on said opposite side, said free upper ends being adapted to be individually releasably attached to the shoulder straps at a preselected location along the length of the shoulder straps, said free lower ends of the reinforcement straps and the free opposite ends of the shoulder straps having fasteners whereby they can be individually fastened together to complete loops which pass over and under the shoulders of the user for supporting the carrier on the shoulders of the user, and a fabric head support secured to the reinforcement straps in spaced relation from the open upper end of the pouch whereby when the free upper ends of the reinforcement straps are fastened to the shoulder straps the head support will securely and comfortably support the head of an infant seated in the pouch and when the free upper ends of the reinforcement straps are not fastened to the shoulder straps can be folded to allow the head support to be positioned within the pouch in an out-of-

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