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(54) **Unit for supporting a baby**

Einrichtung zum Unterstützen eines Kleinkinds

Unité de support pour bébé

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Description

[0001] The present invention relates to a unit for supporting a baby and particularly to a seat.

[0002] Conventional seats and mattresses for babies are basically scaled down adult versions. It has been realised, however, that such seats and mattresses can adversely affect a baby's health. This is because the skull of a baby is disproportionately large in relation to the remainder of its body compared with the skull of an adult. A consequence of this is that when a baby is placed on its back on a flat surface its chin is pushed towards its chest or its head rotated to one side. The same occurs when a baby is placed in a conventional chair, for example a car seat. The forcing of a baby's chin towards its chest can cause a number of problems including restriction of airflow into the baby's lungs, restriction of upper chest movement and pressure being placed on the back of its skull, especially the occipital bone. Problems associated with rotation of a baby's head include stretching of one side of the neck musculature, pressure being exerted on one side of the skull and on blood vessels in the neck. The above problems can potentially adversely affect the health of a baby as well as cause the baby to feel discomfort which can lead to the natural process of relaxation being impeded.

[0003] The present invention has been made in realisation of this problem, which it aims to solve, or at least reduce.

[0004] According to one aspect of the present invention there is provided a unit for supporting a baby, comprising: a supporting surface having first and second parts, the first part being adapted to accommodate the head of the baby and the second part being adapted to accommodate the remainder of the baby's body, the second part including a backrest portion adapted for supporting the baby's back, the backrest portion having a direction of elongation; characterised in that the unit comprises a seat adapted for supporting a baby while travelling; in that the supporting surface is sized and shaped so that, when a baby is supported on the surface in a supine position, the baby's normal anatomical cervical spine curvature is maintained; and in that the first part comprises an elongate channel formed in the supporting surface, the elongate channel extending transverse to said direction of elongation.

[0005] The second part comprises a base and backrest portions. In this arrangement it will be appreciated that the distance between the first part and the base portion of the seat will need to be varied to accommodate bodies of different size. This can be achieved by placing an appropriately sized booster cushion on the base portion of the seat so that the head of a body being supported on the seat will be accommodated by the first portion. The seat may be adapted for fitment to a vehicle.

[0006] Units according to the invention are used to correctly support a more comfortable position. Sleep patterns also appear to benefit.

[0007] In order that the invention may be more clearly understood embodiments thereof will now be described, by way of example, with reference to the accompanying drawings in which:

Figure 1 shows a baby supported on a conventional chair;
 Figure 2 shows a baby supported on a chair according to the invention; and
 Figure 3 shows a booster cushion for use with the chair of Figure 2;

[0008] Referring to Figure 1, when a baby is supported on a conventional chair because the baby's head is disproportionately large compared to its body it is thrown forward so that the baby's chin is pushed toward its chest.

[0009] Referring to Figure 2, a chair according to the invention comprises a supporting surface comprising a base portion, a backrest and a legrest. The supporting surface can be divided into two parts, the first part being indicated by the reference numeral 17, and the remainder being the second part. The first part 17 comprises a recessed portion, defining a cavity 18 to accommodate a baby's head. Particularly, it accommodates the back of a baby's head so that it is thrown forward, as with the conventional chair shown in Figure 2. The first and second parts are in fact so arranged that the baby's head is supported relative to its upper body so that normal anatomical cervical spine curvature is maintained.

[0010] The dimension 20 will clearly depend upon the size of baby to be supported. In order to accommodate growth of a baby a booster cushion, or several booster cushions, possibly of different sizes, are provided. One such cushion is illustrated in Figure 3. This can be placed onto the base portion 14 of the chair to raise a baby so that its head is accommodated in the first part 18. As the baby grows a smaller booster cushion may be employed and ultimately removed.

[0011] The chair and booster cushion may take any suitable form and be made from any suitable material. The chair could have provision for reclining the back rest and could be a car seat or high chair.

[0012] The chair enables a baby to be supported with its head in the correct position which can confer numerous health advantages, as mentioned herein, as well as helping a baby to become more relaxed and comfortable than with conventional chairs and mattresses.

[0013] The above embodiments are described by way of example only, many variations are possible without departing from the invention.

Claims

1. A unit (13) for supporting a baby, comprising:

a supporting surface (14-17) having first (17) and second (14-16) parts, the first part (17) being adapted to accommodate the head (19) of the baby and the second part (14-16) being adapted to accommodate the remainder of the baby's body, the second part including a backrest portion (15) adapted for supporting the baby's back, the backrest portion having a direction of elongation;

characterised in that the unit (13) comprises a seat (13) adapted for supporting a baby while travelling; **in that** the supporting surface (14-17) is sized and shaped so that, when a baby is supported on the surface in a supine position, the baby's normal anatomical cervical spine curvature is maintained; and **in that** the first part (17) comprises an elongate channel formed in the supporting surface (14-17), the elongate channel extending transverse to said direction of elongation.

2. The seat of claim 1, wherein the elongate channel has a 'C' shaped cross-section, wherein the ends of the 'C' lie in the plane of the backrest portion.
3. The seat of claim 1 or 2, further comprising a booster cushion.
4. The seat of any of claims 1 to 3, adapted for fitment to a vehicle.

Patentansprüche

1. Vorrichtung (13) zur Lagerung eines Babys, welche aufweist:

eine Stützfläche (14-17) mit einem ersten Teil (17) und einem zweiten Teil (14-16), wobei das erste Teil (17) derart angepasst ist, um den Kopf (19) des Babys aufzunehmen und wobei das zweite Teil (14 bis 16) derart angepasst ist, um den verbleibenden Körper des Babys aufzunehmen, wobei das zweite Teil zusammen mit einem Rückenabschnitt (15) zur Lagerung des Rückens des Babys angepasst ist, wobei der Rückenabschnitt eine Erstreckungs-Richtung aufweist;

dadurch gekennzeichnet, dass die Vorrichtung (13) einen Sitz (13) aufweist, welcher daran angepasst ist, das Baby während des Transports oder während einer Reise zu stützen; und wobei die Stützfläche (14-17) derart ausgeformt ist und eine derartige Größe aufweist, so dass wenn ein Baby auf der Oberfläche in Rückenlage gestützt wird, dass dann die normale anatomische Biegung der Halswirbelsäule beibehalten wird;

und wobei das erste Teil (17) einen länglichen Kanal umfasst, der in der Stützfläche (14-17) ausgebildet ist, wobei der längliche Kanal transversal zu der Erstreckungs-Richtung verläuft.

2. Vorrichtung oder Sitz von Anspruch 1, **dadurch gekennzeichnet, dass** der längliche Kanal einen "C"-förmigen Querschnitt aufweist, wobei die Enden des "C" in der Ebene des Rückenabschnitts liegen.
3. Vorrichtung oder Sitz nach Anspruch 1 oder nach Anspruch 2, welche ferner ein erhöhtes Kissen aufweist.
4. Vorrichtung oder Sitz nach einem der Ansprüche 1 bis 3, **dadurch gekennzeichnet, dass** diese für die Befestigung an oder in einem Fahrzeug angepasst ist.

Revendications

1. Unité (13) pour supporter un bébé, comportant :

une surface de support (14-17) ayant des première (17) et seconde (14 à 16) parties, la première partie (17) étant adaptée pour recevoir la tête (19) du bébé, et la seconde partie (14-16) étant adaptée pour recevoir le reste du corps du bébé, la seconde partie comportant une partie de dossier (15) adaptée pour supporter le dos du bébé, la partie de dossier ayant une direction d'allongement,

caractérisée en ce que l'unité (13) comporte un siège (13) adapté pour supporter un bébé pendant un déplacement, **en ce que** la surface de support (14-17) est dimensionnée et mise en forme de sorte que lorsqu'un bébé est supporté sur la surface dans une position allongée, la courbure anatomique normale de la colonne vertébrale du bébé est maintenue ; et **en ce que** la première partie (17) comporte un canal allongé formé dans la surface de support (14 à 17), le canal allongé s'étendant transversalement à ladite direction d'allongement.

2. Siège selon la revendication 1, dans lequel le canal allongé a une coupe transversale en forme de "C", dans lequel les extrémités du "C" s'étendent dans le plan de la partie de dossier.
3. Siège selon la revendication 1 ou 2, comportant en outre un rehausseur de siège de sécurité.
4. Siège selon l'une quelconque des revendications 1 à 3, adapté pour être agencé sur un véhicule.

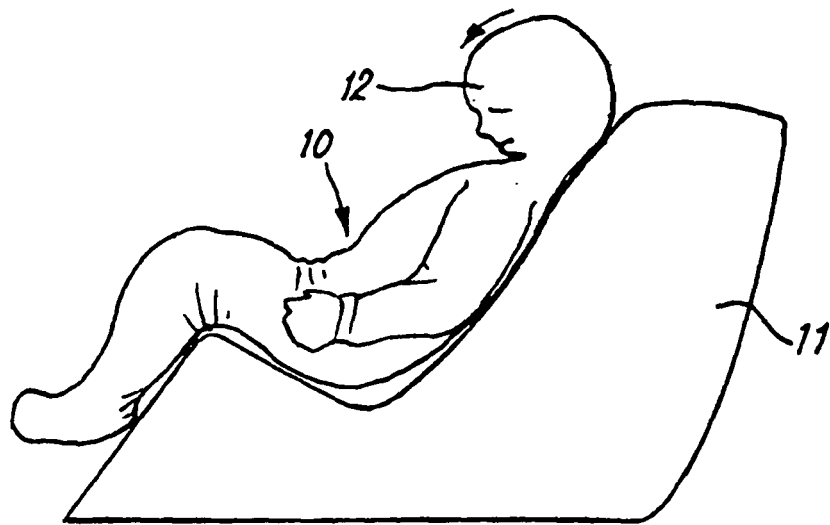


FIG. 1 (Prior Art)

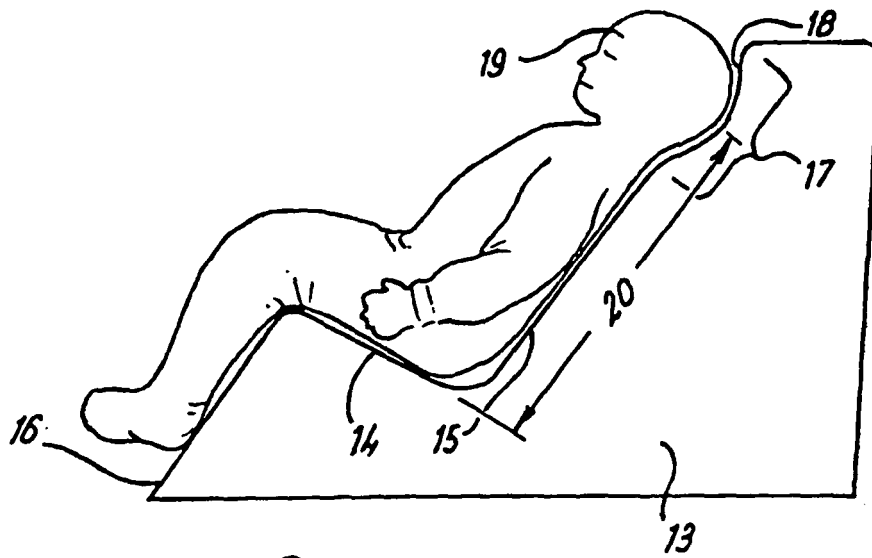


FIG. 2

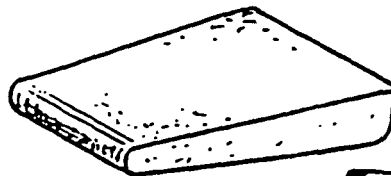


FIG. 3