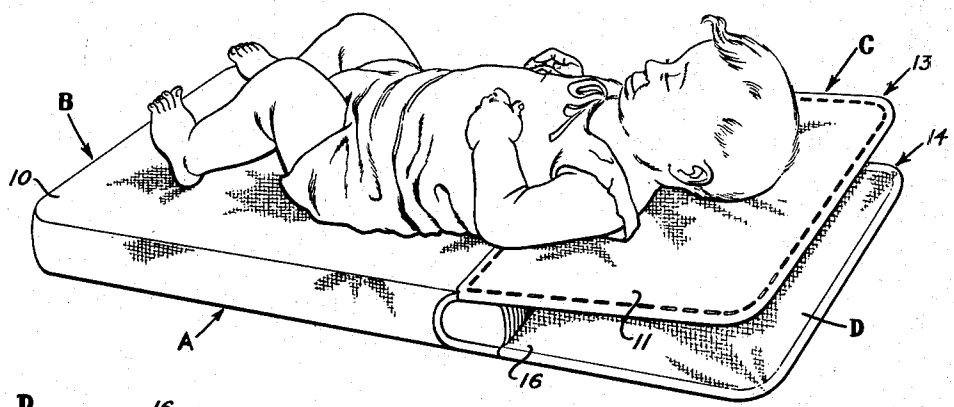
Nov. 30, 1954 F. C. HOLTON 2,695,415

MATTRESS

Filed July 7, 1952

Fig. 1



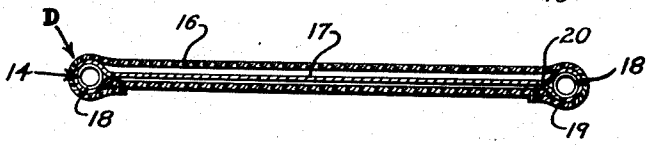


Fig. 3

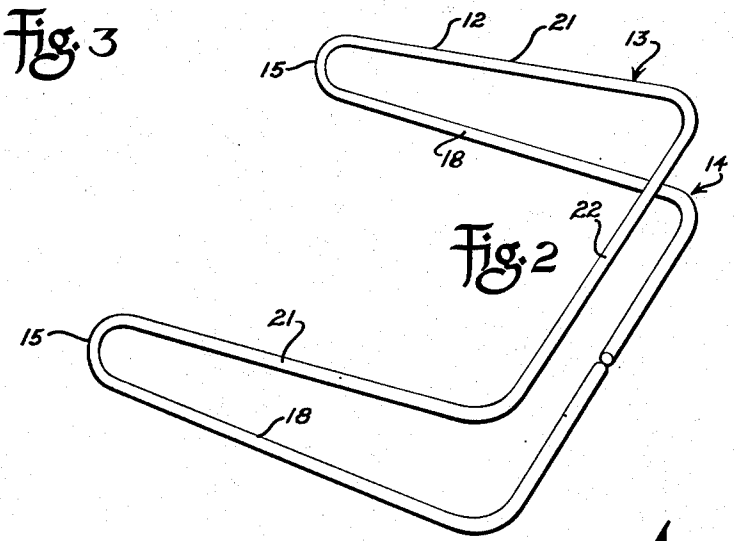


Fig. 2

Inventor
F. C. HOLTON.
by: Fetherstonhaugh & Co.
Attys.

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MATTRESS

Francis C. Holton, Centre Island, Toronto, Ontario, Canada

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11 Claims. (Cl. 5—345)

This invention relates to a mattress construction, particularly for infants.

It has been usual to employ a conventional mattress for infants, the covering for which may or may not be an impervious material. In any case, the mattress is usually covered with a sheet and the infant lies upon it without a pillow. In most cases, the infant's head becomes very warm as the head indents the mattress, whereas there is always some danger of smothering when the infant may roll over and lie on its stomach. Furthermore, it is difficult to maintain the bed in a really sanitary condition as an infant often tends to expel its food, with the result that the sheet must be changed and the mattress washed, which presents substantial difficulty with conventional mattresses.

The present invention generally avoids disadvantages of the conventional type of mattress and provides additional advantages.

According to the invention generally, a mattress is provided including a cushion-like body supporting section and a relatively thin porous head supporting section co-extensive therewith, with means for supporting the latter substantially in the plane of the upper surface of the body supporting section and providing therebelow an air space. Preferably, the head supporting section takes the form of a skeleton frame-work connected to the cushion-like body section of the mattress and is designed to receive thereover a slip cover of thin porous material such as muslin or the like, the intermediate portion of which, suspended between elements of the frame-work, forms the support for the head and/or upper portion of the torso.

Preferably, also, the frame-work provides an apron therebelow in vertically spaced relation to the head supporting section, the cushion-like body supporting section of the mattress and the apron being formed of an impervious washable material.

The invention may take various forms within the principle thereof and will be clearly understood by reference to the following detailed specification taken in conjunction with the accompanying drawings, illustrating a preferred form of structure.

In the drawings:

Figure 1 is a perspective view of a preferred form of mattress construction according to the invention, illustrating the manner in which the infant may lie thereon and be supported thereby;

Figure 2 is a perspective detail of the skeleton frame forming part of the head supporting section in the preferred form of structure; and

Figure 3 is a transverse section taken through the lower part of the skeleton frame which provides an underlying apron below the head supporting section.

Referring to the drawings, A indicates a mattress as a whole which is made up of a body supporting section B and a head supporting section C. These general terms are used for the purpose of clarity of definition, it being understood that the head supporting section may also serve to support a section of the upper torso, such as the shoulders, as indicated in the drawings.

The body supporting section B is of generally conventional form, to provide a cushion-like element of well-known construction. This preferably is covered with an impervious covering **10** which is washable. The head supporting section includes a relatively thin porous support **11** which, in the preferred form of structure, takes the form of an envelope or slipcover which is designed

to slip over a portion of the skeleton frame-work **12** of the head supporting section, as will be clearly referred to hereinafter.

As indicated, the preferred form of head supporting section comprises the skeleton frame-work **12** which may be formed from light tube or light rod, bent to form upper and lower substantially U-shaped elements **13** and **14** from one continuous tube or rod which is bent intermediately as at **15** to dispose the upper element **13** in vertically spaced relationship to the lower element **14**. The width of the frame-work **12** is slightly greater than the width of the body portion **10** of the mattress structure so that the skeleton frame-work adjacent the bends **15** will overlap the side edges of the body section B as shown in Figure 1.

The lower element **14** of the head supporting section C is designed to be covered with an impervious material such as that employed for the body portion B and this covering, indicated by the numeral **16** may, in fact, be a continuation of the material covering the body portion B; the preference being, in any case, that the head supporting section is swingably connected to the body portion B, which may be effected through the flexible covering material, whether it is a continuation of the mattress or a separate material which may be sewn to the body portion to establish such a connection.

It is preferable that the lower element **14** of the head supporting section C includes an intermediate stiffening member extending between the side arms of the element such as the stiffening element **17** (Figure 3) of fibreboard or other suitable material, which extends between the side members **18** of the element **14** and is wrapped around these members as at **19** and secured to itself as at **20** adjacent the free lapped edges thereof by stapling or other suitable means. The stiffening element **17** is not necessarily essential but may be advantageously employed where the side members **18** are terminated in free ends below the side members of upper section **13**. The covering **16** suitably envelopes the lower section **14** thus providing, in effect, an apron generally indicated by the letter D. This apron, as shown in Figure 1, is disposed in vertically spaced apart relationship to the section **13** which thus provides a complete and substantial air channel between the apron and the head supporting element **11**.

As previously indicated, the head supporting element **11** takes the form of a thin porous material made into an envelope or slip-cover which is suspended intermediately between the side members **21** and end member **22** of the upper section **13** of the head supporting section C. This, therefore, provides a reasonably suitable and comfortable support for the infant's head, eliminates the possibility of the head indenting into a cushioning element such as a conventional mattress and consequent overheating which may result in chills or other harmful effects and, by reason of the free air circulation between the apron D and the head supporting element **11**, the infant's head will not become excessively warm, overheated or generally uncomfortable. Likewise, it is perfectly obvious that if the infant were to roll over on to its stomach so that its face was in direct contact with the head supporting element **11**, the infant would be able to breathe reasonably through the porous covering which would eliminate possibility of smothering as in the case of a conventional mattress.

Of equal importance is the facility for maintaining the mattress sanitary. As indicated, the body supporting section B is of impervious material and washable. The head supporting section embodying the thin porous head supporting element in the form of an envelope or slip-cover can be readily changed with little difficulty, is easily washable and of particular importance is the fact that if the infant expels food and/or saliva, it will tend to pass through the thin porous element **11** below which extends the readily washable apron D.

Likewise, milk from a leaking bottle will pass through the element **11**. Thus, as compared to a porous conventional mattress, unsanitary conditions are avoided; as compared with a conventional mattress having an impervious covering, accumulation of liquid or the like and possibility of smothering of the child, is avoided.

Accordingly, therefore, the invention provides substantial advantages from the point of view of baby health and sanitation.

While the invention is primarily directed to an infant's mattress, it will, however, be appreciated that such a construction might be employed for adults such as invalids, or bed-ridden patients.

Obviously, variations may well be made in the principle of the invention above described, in relation to the preferred form. It is therefore intended that the foregoing should be interpreted as illustrative of the invention and that it should not be interpreted in a limiting sense and that no limitations should be imposed other than those set forth in the appended claims.

What I claim as my invention is:

1. In a mattress, a cushion-like body supporting section and a head supporting section of substantially the same width, said head supporting section including a pair of supports in parallel spaced relation, supported substantially in the plane of the upper surface of the body supporting section, and a relatively thin porous head rest extending between said pair of supports, said body supporting section being insertable between said pair of supports.

2. In a mattress as claimed in claim 1, a covering for the cushion-like body support of impervious washable material.

3. In a mattress as claimed in claim 1, a covering for the cushion-like body support of impervious washable material, said head supporting portion also including an apron extending below said pair of supports in spaced apart parallel relation thereto and substantially in a plane co-incident with the lower surface of the body supporting section, said apron including a covering of impervious washable material.

4. In a mattress as claimed in claim 1, said head supporting portion including an apron extending below said pair of supports in spaced apart parallel relation thereto and substantially in a plane co-incident with the lower surface of the body supporting section, said apron including a covering of impervious washable material.

5. In a mattress, a cushion-like body supporting section, and a head supporting section including a frame having a pair of side supports disposed in substantially parallel relation, spaced apart a distance substantially equal to the width of the body supporting portion and having means to dispose said supports in a plane substantially co-incident to the top surface of the body supporting section, a relatively thin porous head rest extending between said pair of supports, and means for flexibly securing said frame to the body supporting portion.

6. In a mattress as claimed in claim 5, said means for disposing said supports including a second pair of supports disposed in vertically spaced relation to the first pair a distance substantially equal to the thickness of the body supporting portion, and an impervious element extending between said second pair of supports forming an apron below and in spaced relation to said head rest.

7. In a mattress as claimed in claim 6, said pair of supports being formed from a single piece of material.

8. In a mattress as claimed in claim 1, a stiffening element extending between the second pair of supports.

9. In a mattress, a cushion-like body supporting section and a separate head supporting section, removably connected thereto, the latter comprising a frame having a pair of parallel supports disposed in a common plane and spaced apart a distance substantially equal to the width of the mattress body-supporting section and supporting means in combination therewith and spaced apart therefrom perpendicularly to their plane a distance substantially equal to the thickness of the body supporting portion of the mattress.

10. In a mattress as claimed in claim 9, said supporting means comprising a second pair of supports integral with the first pair and bent in spaced relation thereto.

11. In a mattress as claimed in claim 9, said supporting means comprising a second pair of substantially parallel supports disposed in a common plane substantially parallel to and spaced from the plane of the first pair and a flexible impervious material extending between said second pair of supports forming an apron, said first pair forming supports for a thin porous head rest disposed therebetween in a plane parallel to said apron.

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