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SUPPORT ATTACHMENT FOR SLEEPING SURFACES

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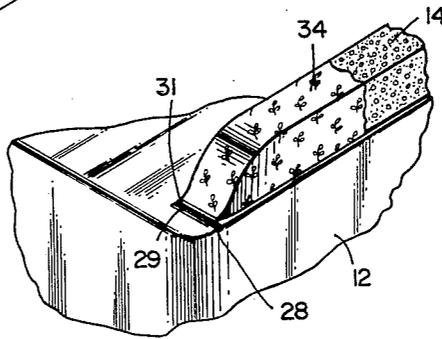
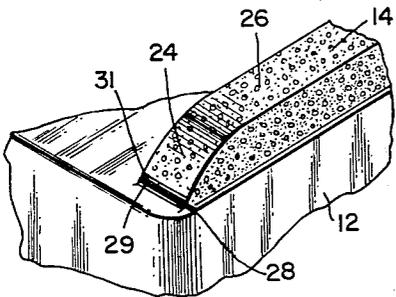
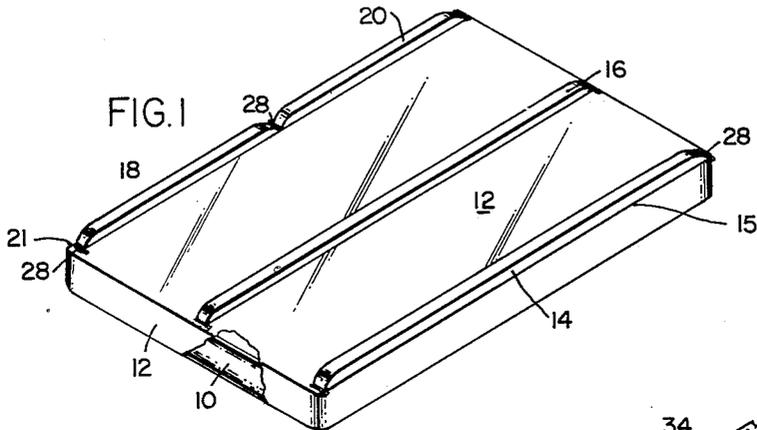


FIG. 3

FIG. 2

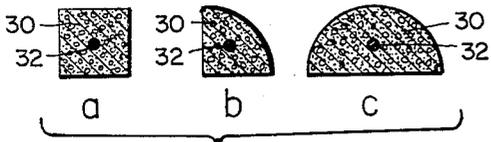


FIG. 4

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**SUPPORT ATTACHMENT FOR SLEEPING SURFACES**

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This invention relates to bed construction and more particularly to support attachments for use with a mattress.

It is customary in the construction of bed mattresses to provide a substantially smooth, flat, even mattress surface on which the sleeper lies.

It is also well known that for certain conditions such as insomnia, various circulatory and muscular diseases and the like it is often advantageous for the sleeper to be able to elevate one or more limbs above the plane of the mattress.

It is therefore an object of our invention to provide support members for use with a bed mattress whereby selected limbs of the sleeper may be elevated from the surface of the mattress.

It is a further object of our invention to provide support members which require a minimum of surface space on the mattress surface.

In the accomplishment of our invention in a preferred embodiment thereof, we construct a longitudinal support member which is removably attached to the surface of the mattress or to an overlying sheet to produce a raised portion thereof.

It is a feature of our invention that the support members are detachably connected to the mattress or sheet and may be removed when not wanted.

It is a further feature of our invention that the support members may be of modular construction whereby only selected portions of the mattress may be provided with such raised areas.

These and other objects and features of our invention will appear as the description proceeds with the aid of the accompanying drawings, in which:

FIG. 1 is a view in perspective of a mattress provided with support members of our invention;

FIG. 2 is a fragmentary view in perspective of a support member of the invention in attached position on a mattress;

FIG. 3 is a fragmentary view in perspective similar to FIG. 2 and showing an alternative construction of the support member;

FIG. 4 is a transverse sectional view showing three configurations of our support member.

Referring now to the drawings for a more particular description of our invention, FIG. 1 shows a mattress 10 having a form-fitting sheet 12 positioned thereon. A longitudinal support member 14 is shown positioned along a first longitudinal edge 15 of the mattress 10. A second longitudinal support member 16 is positioned centrally on the mattress 10 and longitudinal support members 18 and 20 are positioned in axial alignment on a second longitudinal edge 21 of the mattress 10.

FIG. 2 shows a corner of the mattress 10 provided with the form fitting sheet 12. In the preferred embodiment the member 14 is substantially square in cross-section and is dimensioned approximately six inches on a side. It is constructed of a suitable resilient material. It will be understood that the member 14 may be of any dimension suitable for supporting a limb. The member 14 is provided with a sloping end portion 24 which is formed by gradually reducing the height of an upper surface 26 of the member 14 as shown in FIG. 2. The end of the member 14 is attached to the sheet 12 by a zipper 28 which extends the full distance across the end

of the member 14. This is accomplished by attaching a first track 29 of zipper 28 to the sheet 12 and a second track 31 to the support member 14 as seen in FIG. 2.

In the preferred embodiment of our invention, a zipper 28 is provided at each end 24 of the member 14 as seen in FIG. 1. By this means the ends 24 of the member 14 are attached securely to the sheet 12 whereas the central portion is unattached. The member 14 is purposely unattached at its central portion so that bed clothes may be passed under it if desired.

The member 14 of FIG. 2 is shown in section in FIG. 4(a). The square configuration will be noted. The member 14 is preferably constructed of foam rubber 30 and has a longitudinally extending inner core 32 which comprises a rod of hard material, preferably steel, to give axial rigidity to the member 14.

FIG. 3 shows an alternative embodiment of the member 14 in which a covering 34 of decorative fabric is provided. The covering may be removable so that it can be taken off the member 14 and washed.

It will be noted that in this embodiment the second track 31 of the zipper 28 is attached to the covering 34 rather than to the member 14.

It will be appreciated that the member 14 may be attached either directly to the mattress 10 or to the sheet 12 by means of the zipper 28, it being a matter of choice as to which manner of attachment will be employed.

It will also be noted that whereas zippers 28 have been shown for attaching purposes it will be understood that buttons, snaps, or any like means may be employed for the purpose.

FIGS. 4(b) and (c) illustrate alternative embodiments of the invention in cross-sectional view. Each embodiment includes a central steel or other hard core 32 and an outer area of foam 30. FIG. 4(b) shows a support member having the configuration of a 90° circle segment. FIG. 4(c) shows an embodiment having the configuration of a 180° circle segment.

Referring again to FIG. 1 it will be noted that the longitudinal support member 16 is substantially identical to the member 14 and is placed midway between the edges 15, 21 of the bed to provide in a double bed means upon which a sleeper on either half of the bed may support a limb regardless of the side upon which he is sleeping.

FIG. 1 also shows smaller modular longitudinal support members 18 and 20 which extend each half way along the edge 21 of the bed. These are likewise secured to the mattress 10 or sheet 12 by means of zippers 28. Where identical modular units are used additional zippers 28 must be located midway along the edge 21 of the mattress or sheet. The purpose of the modular units 18, 20 is to provide support for the sleeper who wishes to rest one leg or one arm on the support member without encumbering the rest of the length of the mattress.

It will be also noted that the support members of our invention may be removed from the bed at will and consequently are especially suited for use where only intermittent use of the support members is desired.

What we claim as new and desire to secure by Letters Patent of the United States is:

1. A support member for use with a sleeping surface comprising a longitudinal member having substantial thickness, a width narrow relative to the width of said sleeping surface and dimensioned to support a limb above the sleeping surface for a major portion of the length of said sleeping surface, said member being positioned on said sleeping surface and entirely within the perimeter of said sleeping surface means on said support member for engaging said support member at its ends with the said sleeping surface, and means on said sleeping surface for cooperating with said means on said support

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member to securely engage said support member on said sleeping surface.

2. A support member for use with a sleeping surface comprising a longitudinal member dimensioned to support a limb above the sleeping surface, said member being positioned on said sleeping surface and entirely within the perimeter of said sleeping surface, means on said support member for engaging said support member at its ends with the said sleeping surface, means on said sleeping surface for cooperating with said means on said support member to securely engage said support member on said sleeping surface, said support member characterized by having an outer casing of a resilient material and having a centrally disposed core element comprising a rod of substantially rigid material, and tapered ends on said resilient material.

3. A support member as defined in claim 2 in which said resilient material comprises a foam rubber and said core element comprises a steel rod.

4. A support member as defined in claim 1 in which said means on said support member for engaging said support member at its ends with the said sleeping surface and said means on said sleeping surface for cooperating with said means on said support member comprise a zipper positioned at each end of said support member, having a first track secured to said sleeping surface and a second track secured to said support member.

5. A support member for use with a sleeping surface comprising a narrow longitudinal cushion member narrow

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relative to the width of said sleeping surface and dimensioned to support a limb a substantial distance above the sleeping surface, said cushion member extending along an edge of said sleeping surface and being supported entirely by said sleeping surface, means on said support member for engaging said sleeping surface and means on said sleeping surface positioned to cooperate with said means on said support member to securely hold said support member on said sleeping surface.

6. A support member as defined in claim 5 dimensioned to extend substantially the full length of said sleeping surface along an edge thereof.

7. A support member as defined in claim 5 in which said cross-sectional configuration is generally semi-circular.

8. A support member as defined in claim 5 in which said cross-sectional configuration is that of a 90° circle segment.

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