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2,709,293 5/1955 Schwaderer et al. 5/334
 2,924,833 2/1960 Klogether 5/335

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[54] **DISPOSABLE MATTRESS COVER FOR BASSINET
 OR CRIB**
12 Claims, 7 Drawing Figs.

[52] U.S. Cl. 5/335
 [51] Int. Cl. A47g 9/00
 [50] Field of Search 5/334, 335,
 336

[56] **References Cited**
UNITED STATES PATENTS
 2,516,363 7/1950 Block et al. 5/334

ABSTRACT: A mattress cover made of a length of thin water-proof plastic sheet material which covers a bassinet mattress with a water-pervious sheet across the top of the plastic sheet having edge portions bonded to the plastic. Plies of cellulose wadding may be used between the water-pervious sheet and the plastic to provide additional cushioning and/or absorbency. Parts of the plastic extend under the mattress to hold the cover in place. One modification is tubular for receiving the mattress and another has diagonal slits near the corners of the cover so that the mattress corners can be put through the slits to hold the cover on the mattress.

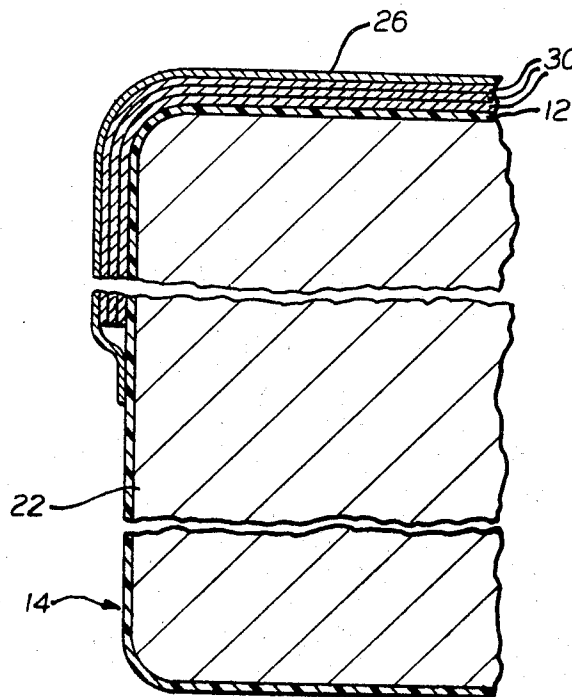


FIG. 4.

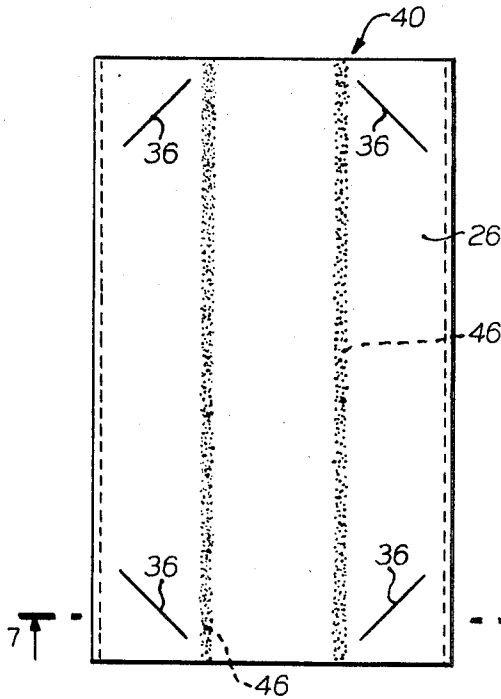


FIG. 5.

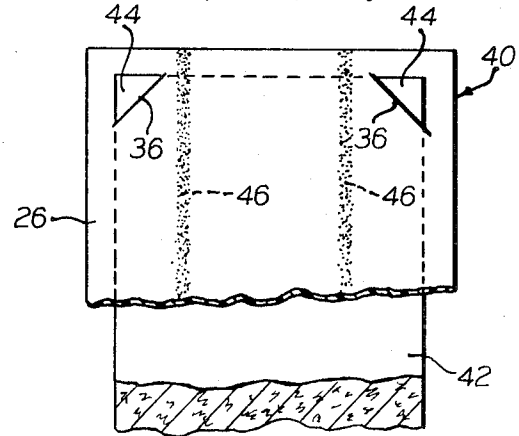


FIG. 6.

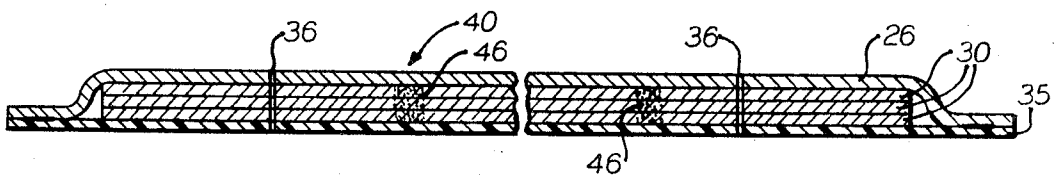
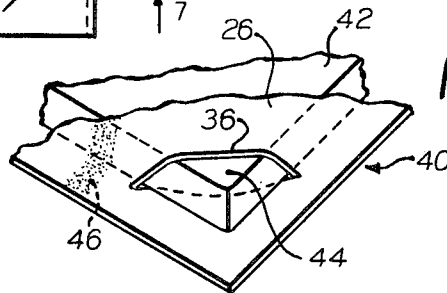


FIG. 7.

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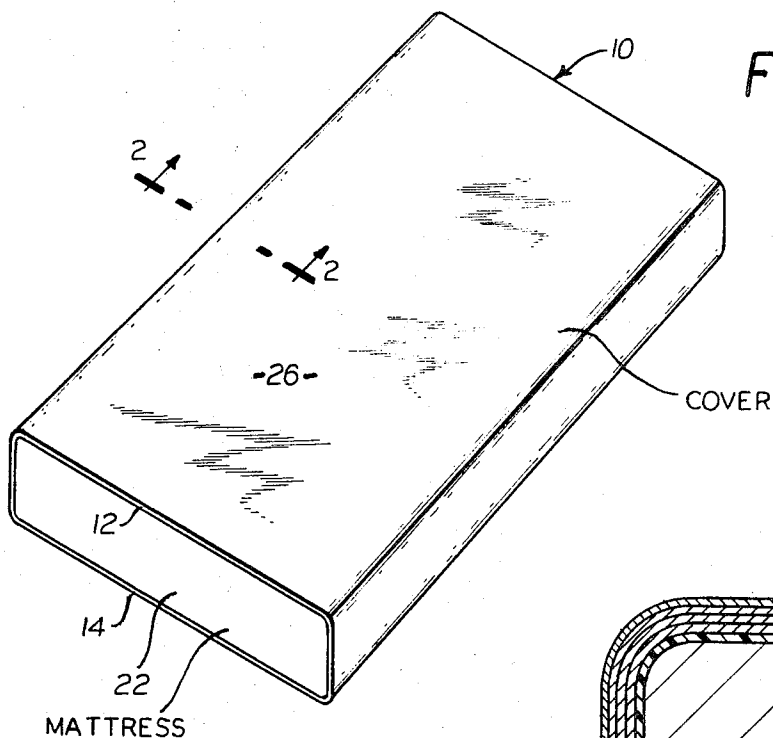


FIG. 2.

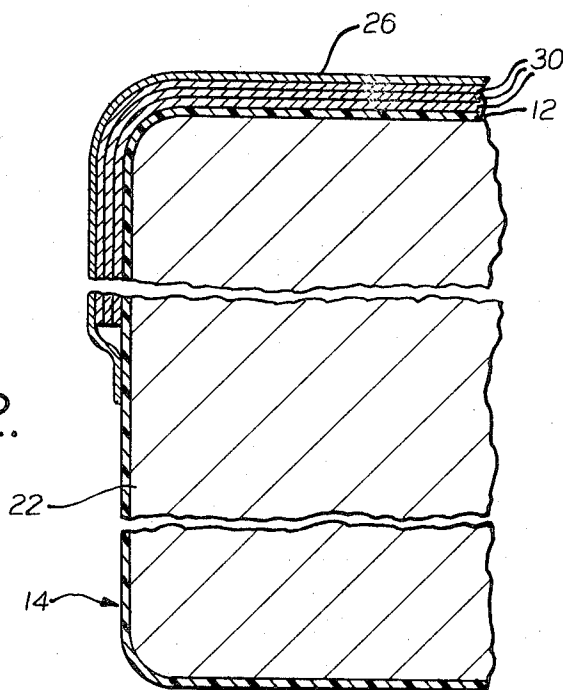
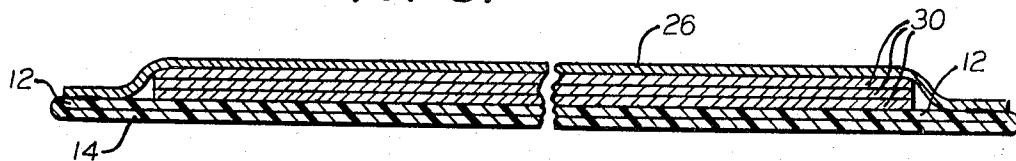


FIG. 3.



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DISPOSABLE MATTRESS COVER FOR BASSINET OR CRIB

SUMMARY OF THE INVENTION

The invention is a disposable mattress cover intended especially for use in cribs and bassinets. A length of thin plastic is used to provide a waterproof cover over the mattress, and absorbency is provided by having absorbent material over the top of the plastic held in place by a pervious upper sheet bonded at its edges to the plastic. In the preferred construction, the plastic is a flat tube.

Wadding to make the cover absorbent and softer can be confined between the upper sheet and the surface of the plastic over which the upper sheet extends. This wadding is preferably in a number of plies and is wide enough so that it cannot shift excessively without coming up against the connection of the upper sheet to the plastic; but the wadding is preferably not bonded to the upper sheet or to the plastic. This simplifies the construction and makes it more economical to produce.

The upper sheet is preferably made of nonwoven material and is preferably moisture absorbent; but it is sufficient that the upper sheet be pervious since a nonabsorbent pervious sheet permits moisture to be absorbed by the underlying wadding.

Both the wadding and the upper sheet are preferably cellulose materials of low cost since it is important to have the cover inexpensive in order to make it a disposable item. The plastic is preferably of some color other than white so that it can be easily distinguished from linens in the hospital which are to be saved and laundered.

One modification of the invention is constructed so that the cover can be put on the mattress with one hand while a nurse holds a baby with her other hand. This modified construction has diagonal slits through the cover near each corner and the cover can be applied by putting it on top of the mattress and then displacing the corner of the cover beyond each slit so that it extends under a corner of the mattress. With this modification the plastic can be a single thickness instead of a plastic tube.

Other objects, features and advantages of the invention will appear or be pointed out as the description proceeds.

BRIEF DESCRIPTION OF THE DRAWING

In the drawing, forming a part hereof, in which like reference characters indicate corresponding parts in all the views:

FIG. 1 is an isometric view showing a cover made in accordance with this invention and applied to a mattress;

FIG. 2 is a greatly enlarged, fragmentary sectional view taken on the line 2-2 of FIG. 1;

FIG. 3 is a greatly enlarged, fragmentary sectional view through the cover of FIG. 1 before the cover is applied to a mattress;

FIG. 4 is a plan view of a modified form of the invention having slits through which corners of a bassinet mattress can extend to hold the cover on the mattress;

FIG. 5 is a fragmentary view showing the way in which the cover of FIG. 4 is applied to a mattress;

FIG. 6 is a fragmentary, isometric view showing a corner of a mattress extending through one of the slits of the cover of FIGS. 4 and 5; and

FIG. 7 is a greatly enlarged sectional view taken on the line 7-7 of FIG. 4.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

FIG. 1 shows a mattress cover 10 having a flattened tube which provides top and bottom sheets 12 and 14, respectively, of the cover. The tube is of one piece construction and is preferably made of polyethylene film having a thickness between approximately 0.0005 and 0.002 inches.

When the cover 10 is put over a mattress 22, as shown in FIG. 1, the folds of the flattened tube are located approximately midway between the top and bottom surfaces of the mattress 22. Thus the cover 10 has a top consisting of the portion of the sheet 12 which overlies the top of the mattress, and a bottom which is located under the bottom of the mattress. Sides of the cover are formed by the adjacent portions of the sheets 12 and 14 which extend up and down between the top and bottom of the mattress, as clearly shown in FIG. 1.

There is an upper sheet 26 (FIGS. 2 and 3) which extends across the top of the cover 10 and which extends halfway down both sides of the mattress 22.

Between the upper sheet 26 and the top sheet 12 of the tubular portion of the mattress cover, there are preferably plies of fluff or wadding 30 and these plies 30 extend across substantially the full width of the upper sheet 26. This upper sheet 26 is preferably a facing material such as paper or nonwoven cellulose material. Facing material, when nonwoven, has longer fibers impregnated with resin orientation which gives it a greater directional strength than other nonwoven material, and in this invention, where nonwoven facing material is used for the upper sheet 26, the greater directional strength is in the longitudinal direction in which the strain is greatest when the cover is being pulled onto a mattress.

This facing material is preferably moisture absorbent. The upper sheet 26 is preferably a nonwoven cellulose material of greater tear strength than the wadding and preferably of high wet strength. Usually the upper sheet 26 is also moisture absorbent, but it is sufficient to make the upper sheet 26 pervious so that moisture can penetrate to the underlying wadding 30, as previously explained.

The wadding 30 can be bonded to the sheets between which it is located, and plies of the wadding can be bonded together, as by adhesive, but this is unnecessary and increases the cost of material and manufacture. Experience has shown that the mattress covers of this invention can be folded for packing and unfolded for use without having the wadding 30 wrinkle, even though it is not physically connected to any part of the mattress cover.

In some hospitals it is preferred to have the mattress cover capable of being held on the mattress without having to insert the mattress through a tubular portion of the cover. FIGS. 4-7 show a modified construction which can be made with a single sheet 35 of plastic and with slits 36 cut through all the layers of the mattress cover while the cover is in a flat condition. This mattress cover, with the diagonal slits 36, is indicated by the reference character 40. It will be understood that material can be removed so as to have slots in place of the slits 36, but experience has shown that it is unnecessary to remove any material.

FIGS. 5 and 6 show a mattress 42 with corners 44 extending through the slits 36. The bottom of the cover 40 is laid flat on the top surface of the mattress 42 and each successive corner portion of the mattress is then manipulated by displacing the outer edge of each slit 36 around the corner 44 of the mattress so that the inner edge of the slit remains on top of the mattress and the outer edge of the slit extends under the mattress, as shown in FIGS. 5 and 6. Covers which are to be applied to the mattress in this way have to be slightly larger, in proportion to the size of the mattress, than covers into which the mattress is inserted, as shown in FIGS. 1 and 2.

FIG. 7 is a sectional view through the mattress cover 40. The construction is the same as in FIG. 3 except for the slit 36 which extends through all layers of the cover, as previously explained.

Additional strength is added to the mattress cover by applying adhesive along zones 46. This adhesive bonds the lowermost wadding 30 to the plastic sheet and bonds the layers of wadding 30 to one another and to the upper sheet 26. These adhesive zones serve to limit tears if the mattress cover is used roughly and any slit tears to an increased length.

The preferred embodiments of the invention have been illustrated and described, and the invention is defined in the appended claims.

We claim:

1. A mattress cover including, in combination, a plastic portion having a thin waterproof plastic sheet area for extending across the top, sides and at least a portion of the surface of a mattress, a water-pervious upper sheet of material that covers the top of said plastic sheet area and having longitudinal edges bonded to the plastic portion along the sides of the cover that are adjacent to both sides of the mattress and below the top surface of the mattress when the cover is assembled with the mattress, and means for holding the cover on a mattress including parts of the plastic portion that extend under the mattress.

2. The mattress cover described in claim 1 characterized by the upper sheet being a nonwoven facing material, and different material under the upper sheet of facing material including water-absorbent wadding between the upper sheet and said plastic sheet area, said wadding comprising a plurality of plies of nonwoven material.

3. The mattress cover described in claim 1 characterized by the upper sheet being bonded along its longitudinal edges to the upper surface of the plastic portions and extending across the full width of the top of the plastic portion but terminating at the edges of the plastic portion whereby the material of the upper sheet is entirely covered and protected by the plastic when the cover is folded with the upper sheet on the inside of the fold.

4. The mattress cover described in claim 2 characterized by the facing sheet and wadding being cellulose and at least one of the plies of wadding being creped.

5. The mattress cover described in claim 2 characterized by adhesive bonding the upper sheet to the plastic along side edges of the cover, and the wadding being held in place by its confinement between the upper sheet and the plastic.

6. The mattress cover described in claim 2 characterized by the cover being a plastic tube into which a mattress can be inserted, and the wadding extending across substantially the full width of the top surface and only the top surface of the tube so as to cover the top of a mattress and to extend part way down the sides of the mattress.

7. The mattress cover described in claim 6 characterized by the tube being made of polyethylene and being a lay-flat tube which opens to a generally rectangular cross section when filled with a mattress.

8. The mattress cover described in claim 6 and a mattress within the tube and of a size over which the cover fits with a free-sliding fit.

9. A mattress cover including, in combination, an underlying plastic portion having a thin waterproof plastic sheet for extending across the top surface of a mattress, a water pervious upper sheet of material overlying the plastic sheet and having longitudinal edges bonded to the plastic sheet along both sides of the cover, means for holding the cover on a mattress, the cover having four corners which extend beyond corresponding corners of the mattress with which the cover is intended to be used and having openings through the cover along diagonal lines inward from the corners of the cover in position to permit the corners of the cover beyond the openings to be displaced under the corners of the mattress to hold the cover on the mattress whereby said displaced corners are the means for holding the cover on the mattress.

10. The mattress cover described in claim 9 characterized by water-absorbent wadding between the upper sheet and plastic, and the openings being slits through the plastic sheet, upper sheet and wadding.

11. The mattress cover described in claim 9 characterized by the plastic being a single sheet, and adhesive bonding the plastic to the upper sheet along zones that extend across the cover near the ends of the slits for stopping further tearing of the plastic if the plastic tears in a direction to extend the length of the strips.

12. The mattress cover described in claim 11 characterized by the plastic being polyethylene, water-absorbent wadding between the upper sheet and the plastic, the adhesive bonding extending from the plastic through the wadding to the upper sheet so as to bond the plastic wadding and upper sheet together at the zones which extend across the cover near the ends of the slits, and said zones being parallel to the longitudinal edges of the mattress cover.

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