Oct. 31, 1967 C. L. PIEKARSKI 3,349,769

INCONTINENT PAD WITH BARRIER AROUND THE EDGE

Filed Jan. 20, 1964

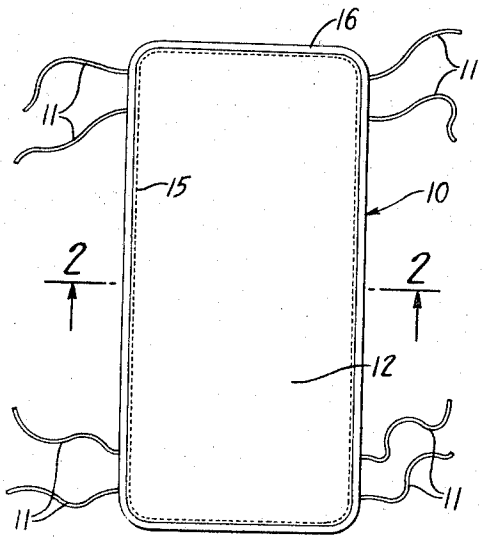


Fig. 1.

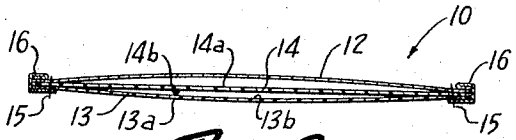


Fig. 2.

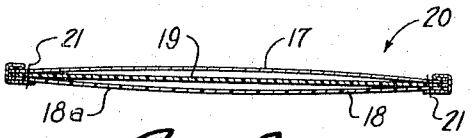


Fig. 3.

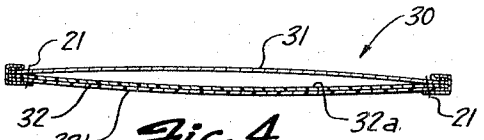
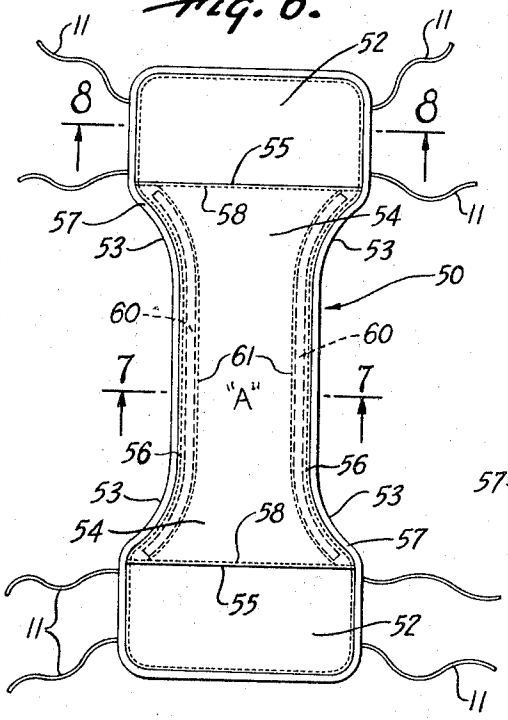


Fig. 4.

Fig. 6.



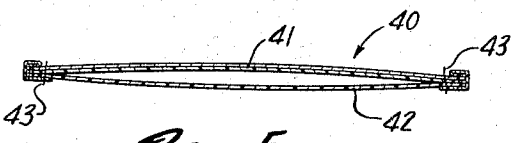


Fig. 5.

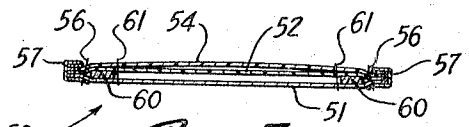


Fig. 7.

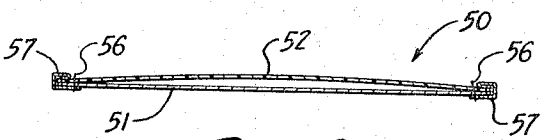


Fig. 8.

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INCONTINENT PAD WITH BARRIER AROUND THE EDGE

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5 Claims. (Cl. 128—284)

This invention relates to an incontinent pad, and more particularly to a pad having a plurality of layers of material wherein an outer layer of material has moisture absorbing quality and another outer layer serves as a moisture barrier and offers a minimum of sliding resistance when moved relative to a bed sheet or the like.

The primary object of the invention is to provide a multiple layered incontinent pad that may be comfortably worn by a patient wherein said pad has a water-absorbing layer of material adjacent to the body of a patient and wherein the exterior layer of the incontinent pad serves as a moisture barrier and affords a minimum of sliding resistance relative to a bed sheet or the like, and wherein an inner layer intermediate said outer layers also serves as a moisture barrier. Numerous prior art devices disclose pads, diapers and pants or the like for at least a partial retention of body fluids and the like. Many of the prior art devices provide an insertable plastic layer wherein the plastic layer acts as a moisture barrier. The disadvantage of this type of device is in the fact that additional labor is required to remove the intermediate plastic layer prior to laundering of the outer layers of the garment, and additional labor is required to reinsert said intermediate layer prior to using said garment or pad.

Also, prior art devices offer resistance to movement over bed sheets when worn by a patient in bed. The present invention overcomes this disadvantage by providing a multiple layered pad having an intermediate moisture barrier which is integral with the outer layers and is made from materials which are able to withstand laundering conditions as ordinarily exist in hospitals, nursing homes and the like, and also allows the patient to move freely in bed by providing a pad having a surface with little sliding resistance.

It is, therefore, another object of this invention to provide a multiple layered incontinent pad wherein each of the layers is capable of withstanding frequent laundering operations.

It is another object of this invention to provide an improved incontinent pad of simple construction wherein a patient wearing said pad is not restricted in movement on a bed sheet or the like as the incontinent pad has a surface which provides easy sliding movement over the bed sheets or the like.

It is a further object of this invention to provide a multiple layered incontinent pad wherein at least one of said layers has a sponge-like quality for providing an improved moisture barrier, while at the same time increasing patient comfort.

These and other objectives and advantages of the invention will become apparent from the following detailed description.

A clear conception of the several features constituting the present invention and mode of constructing same may be had by referring to the drawings accompanying and forming a part of this specification, wherein like reference characters designate the same or similar parts in the various views.

FIGURE 1 is a plan view of an incontinent pad constructed in accordance with the invention;

FIGURE 2 is a cross sectional view of the pad of FIGURE 1 taken along line 2—2 of FIGURE 1;

FIGURE 3 is a cross sectional view of a modification of the pad of FIGURE 2;

FIGURE 4 is a cross sectional view of another modification of the pad of FIGURE 2;

FIGURE 5 is a cross sectional view of a further modification of the pad of FIGURE 2.

FIGURE 6 is a plan view of another modification of an incontinent pad;

FIGURE 7 is a cross sectional view of the pad of FIGURE 6 taken along line 7—7; and

FIGURE 8 is a cross sectional view of the pad of FIGURE 6 taken along line 8—8.

While the improvements have been illustrated and described as being especially advantageously embodied in an incontinent pad for hospital or nursing home patients, it is not intended to thereby unnecessarily limit or restrict the invention since the improved pad may be used to like advantage with babies or young children as well as elderly patients. It is also contemplated that certain descriptive terminology used herein shall be given the broadest possible interpretation consistent with the disclosure.

Referring now to the drawings, an incontinent pad is shown provided with strings or fasteners **11** so that the pad **10** may be placed on a patient somewhat in the fashion of diapers and the strings **11** are then tied or otherwise secured so that the pad remains on the patient. Though a pad **10** is shown having the configuration of FIGURE 1, it is not meant that the configuration of the pad should be so limited, as other configurations or even pants-like type garments could be fashioned from multilayered material to be described in greater detail hereinafter. The strings **11** are only representative fastening means for the incontinent pad, and snaps, buttons or the like could also be used to secure the pad relative to the patient's body.

In the preferred embodiment, the pad **10** comprises three layers of material. The layer **12**, which is normally worn next to the patient's body, is a flannel material, which is soft and comfortable to the patient and, also the flannel material has the ability to absorb moisture and yet remain relatively dry in feeling at the surface touching the body of the patient. Another layer of material **13** is considered an outer layer which is in contact with bed sheets or the like when the pad is worn by a patient. The layer of material **13** is preferably made of a vinyl covered aviscose rayon which offers a smooth surface **13***a* to a bed sheet or the like so that the pad **10**, when worn by a patient, is allowed to move freely over the bed sheet. Thus the layers **12** and **13** provide both comfort and relative freedom of bed movement for the patient, while at the same time absorbing body fluids of the incontinent patient.

The pad **10** also has an intermediate layer of material **14**, which in FIGURE 2 is made of a vinyl covered aviscose rayon. The smooth surface **14***a* of layer **14** is contiguous the flannel layer **12**, and a less smooth surface **14***b* is contiguous surface **13***b* of layer **13**. Thus surfaces **13***b* and **14***b* tend to cling together and resist separation when a patient wearing the pad **10** moves on a bed sheet or the like. Further, by using two layers of vinyl covered aviscose rayon, body fluids are prevented by layers **13** and **14** from soaking from the flannel layer **12** to a bed sheet or the like. Thus any surrounding bed clothing or the like is maintained in a dry condition as the moisture or body fluids are retained by pad **10**.

In the preferred embodiment the layers **12**, **13** and **14** of the incontinent pad **10** are secured to one another as by stitching **15**, which also secures a border **16** or the like. The strings **11** may be fastened directly to the layers of material or to the border **16**.

By securing the layers of material together, it is pos-

ible to launder the entire incontinent pad in washing machines and dryers ordinarily provided in hospitals, nursing homes and the like. The pad **10** constructed of the materials hereinabove described will withstand repeated launderings without losing the requisite incontinent pad requirements of moisture retention in the flannel layer, and comfort and ease of movement of a bed patient, and with a minimum of labor expended by the hospital or nursing home personnel.

A modification of an incontinent pad **20** is shown in FIGURE 3 wherein a layer of material **17** is flannel and is again worn next to the patient's body, and is chosen for the water retention and comfort factors as described hereinabove. The layer **18** is a vinyl covered aviscose rayon to allow ease of movement of a bed patient over the bed sheets or the like as by surface **18***a* having little resistance to sliding, movement or the like. The intermediate layer **19** is a sheet of polystyrene plastic, which serves to prevent moisture or body fluids from soaking from the flannel to the layer **18**, and hence incontinent pad **20** serves to maintain the surrounding bed clothing and the like in a relatively dry condition, and at the same time affords the bed patient comfort and ease of movement.

The layers **17**, **18** and **19** of pad **20** are secured as by stitches **21**, so that the entire pad **20** may be laundered repeatedly in conventional washers and dryers without deleterious effects on the pad. It may be that intermediate layer **19** could be insertable and removable between layers **17** and **18**, but securement of the three layers is the most efficient insofar as hospital or nursing home handling of the pad **20** is concerned.

Another modification of an incontinent pad **30** is shown in FIGURE 4 wherein the layer **31** is a flannel material for purposes as hereinabove described, and layer **32** is a laminate of a polyurethane layer **32***a* to a vinyl covered aviscose rayon outer layer **32***b*. The flannel layer **31** is next to the patient's body and the layer **32***b* is next to the bed sheet or the like for ease of movement by the patient. As hereinabove described, the flannel layer **31** absorbs moisture or body fluids of the patient, and the polyurethane layer and vinyl covered aviscose rayon layer prevents the moisture or body fluids from reaching the bed sheets or surrounding bed garments. Thus comfort and ease of movement of the patient is also achieved when wearing incontinent pad **30**, and, the pad **30** may be subjected to repeated launderings without deterioration thereof.

In FIGURE 5 another modification of an incontinent pad **40** is shown wherein polyurethane is laminated to flannel to form layer **41**, and wherein the flannel is next to the body of the patient when pad **40** is worn. A layer **42** of vinyl covered aviscose rayon is secured to layer **41** as by stitches **43** or the like so that layer **42** affords the patient ease of movement relative to the bed sheets when the pad **40** is worn, and moisture or other body fluids are absorbed and retained by laminated layer **41**.

In all of the above incontinent pads, strings or other type fastening means may be used to secure the pad to a patient.

Thus incontinent pads have been described wherein a comfortable moisture absorbing layer of material is placed next to the body of a patient, and wherein other layers of material are provided to prevent the moisture from reaching surrounding bed garments or the like, and wherein the outer most layer of material provides a surface that has little sliding resistance with respect to bed sheets or the like for relative ease of movement of the patient while said patient is wearing the pad in a bed or the like.

Another modification of an incontinent pad is disclosed in FIGURES 6, 7, and 8, wherein a contoured incontinent pad **50** comprises a layer **51** of a soft water-absorbing material worn next to the body of a patient, and which, in the preferred embodiment is a flannel material; a layer **52** of water-resistant material substantially coextensive with layer **51**, and, in the preferred embodiment is contoured as indicated at **53** to adapt to the legs of a patient when covering the lower portion of the body of the patient; and a layer **54** of water-resistant material contoured as at **53** but terminating as at **55**.

The layers **51**, **52**, **54** are secured together as by stitches **56**, which may also include a border or hem **57**. Also stitching **58** may secure terminations **55** of layer **54** to layer **52**. It should also be noted that, in the preferred embodiment, the surface of layers **52** and **54** away from the flannel layer **51** is relatively smooth to allow little resistance to sliding over the surface of a bed sheet or the like, thus affording patient movement while wearing incontinent pad **50** in bed or the like. The incontinent pad **50** thus absorbs moisture in the layer **51** and it is retained by layers **52** and **54** to prevent the moisture from reaching and staining the bed sheets or the like.

Further, a moisture barrier **60** is shown secured along the contours **53** as by stitching **61** and **56**. The moisture barrier **60** of the preferred embodiment is of a resilient, moisture-resistant material of which strips of polystyrene plastic and polyurethane plastic materials are examples. The moisture barrier **60** aids in containing any moisture or fluids within the area A between the contours **53**, and are of such material that the moisture barrier **60** remanis a part of the incontinent pad during laundering and drying operations when the pad is being cleaned after patient use of the pad.

While the layer **54** is shown terminated as at **55**, it could also be coextensive with layers **51** and **52**, but it is shown shortened to effectuate a savings in amount of material, which could be substantial in the mass production of such incontinent pads **50**.

Thus incontinent pads have been described wherein a comfortable moisture absorbing layer of material is adapted to be placed next to the body of a patient, and wherein other layers of material are provided to retain the moisture in said moisture-absorbing layer to prevent the moisture or fluids from reaching surrounding bed garments or the like; and, wherein a plurality of resilient strips constitute a moisture barrier to further retain moisture along contoured portions of an incontinent pad; and, overall afford comfort and relative ease of movement for a patient wearing an incontinent pad in bed or the like, without allowing moisture or fluid from reaching the bed garments, sheets or the like; and, wherein said incontinent pads may be readily laundered and dried without deleterious effect thereto.

Various modes of carrying out the invention are contemplated as being within the scope of the following claims particularly pointing out and distinctly claiming the subject matter which is regarded as the invention.

I claim:

1. In an incontinent pad comprising a plurality of layers of material, said layers being secured at their edges to constitute an integral pad to be worn by a patient, said layers also being contoured at their respective edges to provide a pad having a medial portion of lesser extent than at the end portions of said layers, a resilient moisture barrier means interposed between one of said layers and another of said layers adjacent the contoured edges thereof to prevent moisture from at least one of said layers from leaving said layers at the contoured edges thereof.

2. In an incontinent pad comprising a plurality of layers of material secured at the edges of the respective layers, one of said layers being soft and moisture absorbing, another of said layers being moisture resistant to substantially contain moisture in the moisture-absorbing layer, and a moisture barrier means interposed between said layers adjacent the respective edges thereof to further contain the moisture in said moisture-absorbing layer.

3. The incontinent pad of claim **2** wherein the moisture-resistant layer has at least one surface that offers little or no resistance to sliding over a bed sheet or the like.

4. The incontinent pad of claim 2 wherein said moisture barrier means comprises a resilient strip of water-resistant plastic material located adjacent to the edges of said layers and interposed therebetween.

5. The incontinent pad of claim 3 wherein the moisture-absorbing layer in flannel material and the moisture-resistant layer is vinyl covered aviscose rayon material.

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