May 3, 1955 D. C. TAGGART 2,707,289

BED PAD

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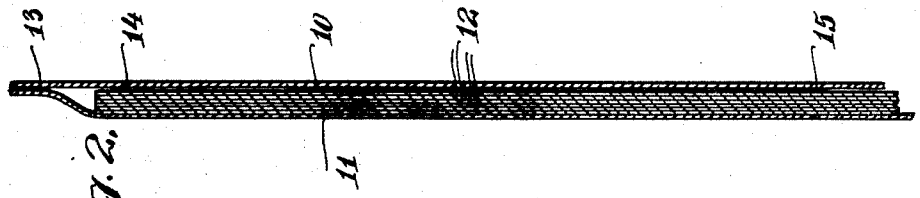

Fig. 2.

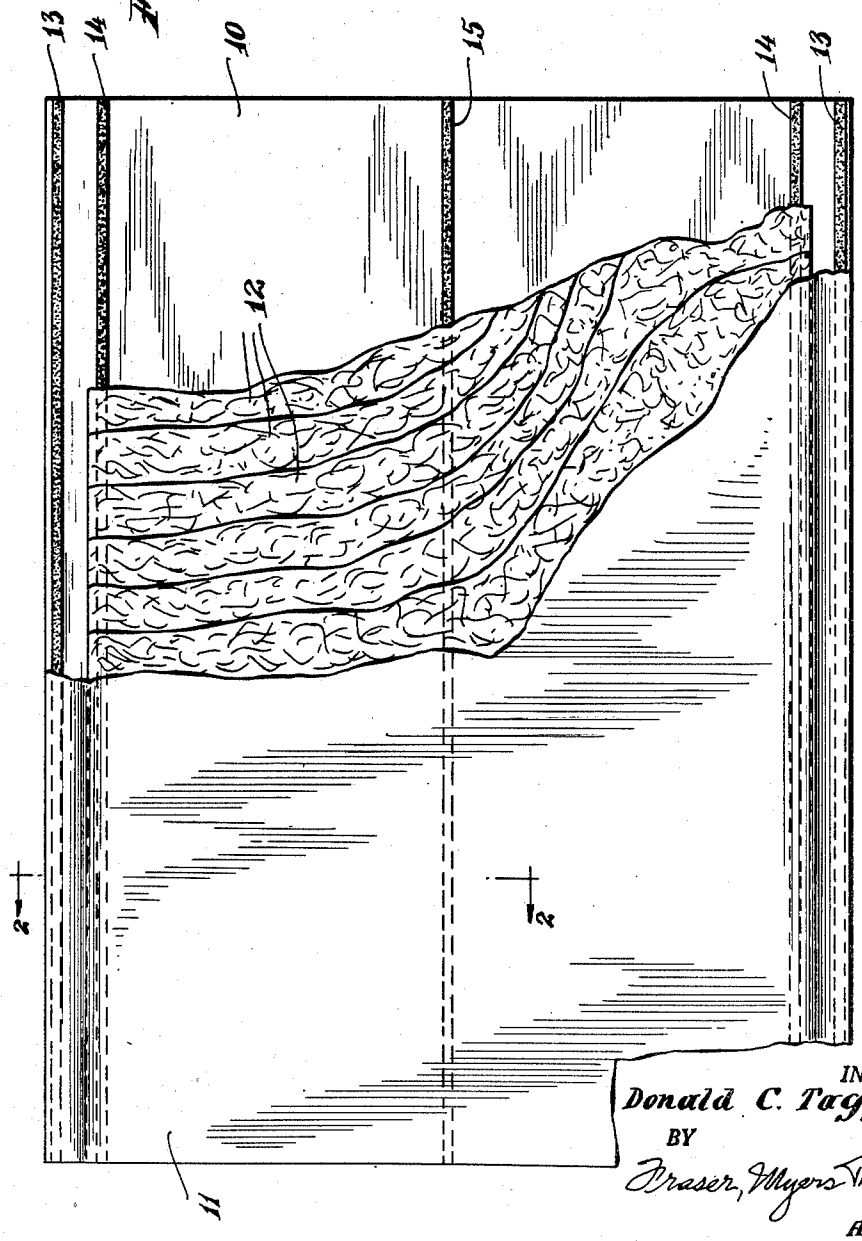

Fig. 1.

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BED PAD

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2 Claims. (Cl. 5—354)

My present invention relates to bed pads and aims to provide certain improvements therein.

Bed pads as heretofore made usually consisted of two outer sheets of woven cotton fabric having therebetween a layer of cotton wadding, the composite material being held together against bunching by quilting stitching. Such bed pads under conditions of excessive body liquid discharge would soak through to soil the bedding, were difficult to launder, and costly to produce.

Among the objects of my present invention are to provide a disposable bed pad: (*a*) which will obviate the aforementioned objections inherent in conventional bed pads; (*b*) which will provide maximum patient comfort and convenience; (*c*) which will have the capacity to absorb liquids instantly in relatively large volume; (*d*) which will be free from bunching or collapse caused by body movements and posture changes of a patient; (*e*) which will eliminate laundering; and (*f*) which will save valuable nursing time.

The foregoing and other objects and advantages of my invention, not specifically enumerated, I accomplish by providing a disposable bed pad formed of a plurality of superposed plies of non-woven, cellulosic material, preferably consisting of a backing sheet of liquid-impermeable paper, a top sheet of water-permeable tissue paper having a high dry and wet strength, and an intermediate layer of absorbent cellulose wadding, the top sheet and the intermediate layer being bonded to the backing sheet at strategic points with water-repellent adhesive. The invention will be better understood from the detailed description which follows, when considered in connection with the accompanying drawings, wherein:

Figure 1 shows a top plan view of a bed pad embodying my invention, parts of the top and intermediate plies being broken away to better illustrate the construction.

Fig. 2 shows a sectional view on an enlarged scale, said section being taken along the lines **2—2** of Fig. 1.

Referring to the drawings, the bed pad which is formed of a laminated material may be said to consist of a backing sheet **10** of liquid-impermeable paper, a top sheet **11** of water-permeable tissue paper having a high dry and wet strength, and an intermediate layer of cellulose wadding having high liquid absorbency, said component parts being superposed and bonded together at strategic points. The members **10**, **11** and **12** have longitudinal parallel edges, the backing sheet and the top sheet being of substantially equal width and somewhat wider than the intermediate layer. The component members may be bonded together in any desired manner, but I prefer to bond the intermediate layer and the top sheet adjacent their lateral, longitudinal edges to the backing sheet by line coatings of waterproof adhesive **14** and **13**, respectively applied to the backing sheet. I also prefer to provide an additional line coating of applied adhesive **15** extending longitudinally of the backing sheet substantially centrally of the lateral edges thereof for additionally bonding the intermediate layer to the backing sheet.

The backing sheet **10**, as aforementioned, is formed

of liquid-impermeable paper which is preferably impregnated with a waterproofing plastic composition, the said sheet having a relatively high tensile strength and weighing between 35 and 40 pounds per 480 sheets measuring 24 x 36 inches.

The top sheet **11** herein referred to as tissue paper is preferably of the type variously known as "Japanese tissue," "tea bag tissue" or the like, and weighs about 0.35 to 0.40 ounce per square yard and is such that a drop of water applied to the surface thereof shall disappear into the fabric in less than two seconds.

The intermediate layer **12** preferably consists of a plurality of independent plies of cellulose wadding, the composite layer weighing about 12 pounds per 500 sheets measuring 24 x 36 inches and having the capacity of absorbing and retaining not less than fifteen times its weight of water within ten seconds when applied upon the surface thereof.

The composite laminated material may be made in any desired manner, such, for example, by applying the line coatings **13**, **14** and **15** of adhesive to one surface of the backing sheet of any definite or indefinite length and then successively applying to said backing sheet so as to become adherent thereto the intermediate layer **12** and the top sheet **11**. When formed of indefinite length the laminated material may be wound up in rolls and used in arbitrary lengths as required, or it may be cut up into predetermined lengths most adaptable for bed pads.

From the foregoing detailed description it will be appreciated that I have provided a novel laminated material which is particularly adaptable for use as disposable bed padding, and while I have shown and described a preferred embodiment of my invention, it is to be understood that changes in the form, construction and specific character of materials used may be made within the range of engineering and mechanical skill without departing from the spirit of the invention as hereinafter claimed.

What I claim is:

1. A disposable laminated bed pad comprising a backing sheet of liquid impermeable paper, a top sheet of water permeable tissue paper having a high dry and wet strength and of substantially the same width as the backing sheet, and an intermediate layer, narrower than the backing sheet and the top sheet, consisting of a plurality of plies of cellulose wadding having high liquid absorbency, the top sheet being adhesively bonded to the backing sheet along their edges adjacent but beyond the intermediate layer, and the intermediate layer having only the ply adjacent to the backing sheet adhesively bonded to said sheet along lines adjacent the lateral edges of said intermediate layer.

2. A laminated bed pad according to claim 1 wherein the ply of the intermediate layer adjacent the backing sheet is also bonded to the backing sheet along a longitudinal line intermediate the longitudinal edges of said intermediate layer.

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