Sept. 18, 1951 J. R. SLUSSER 2,568,305

DIAPER

Filed May 28, 1949

Fig. 1.

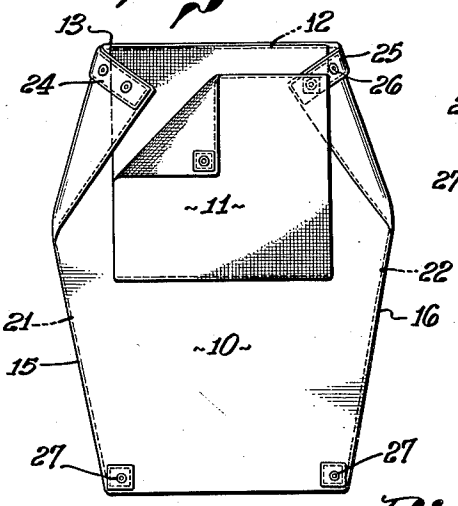


Fig. 2.

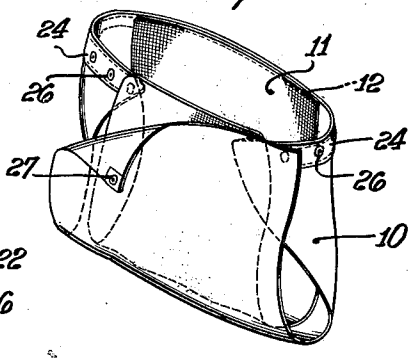


Fig. 3.

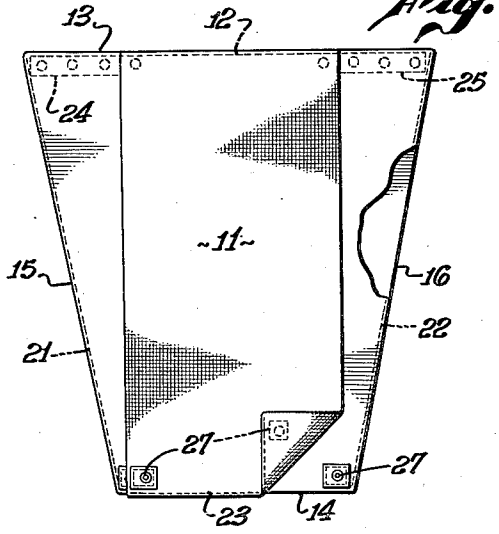


Fig. 4.

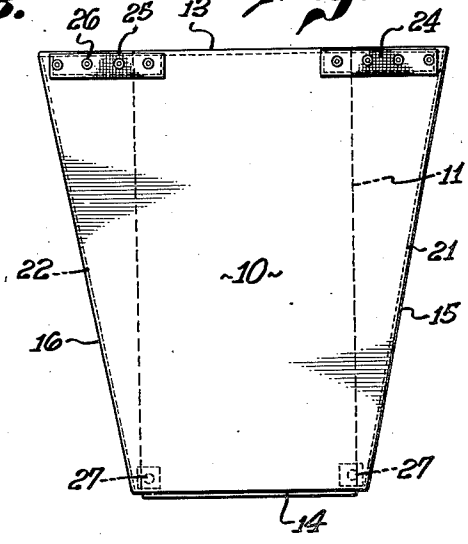
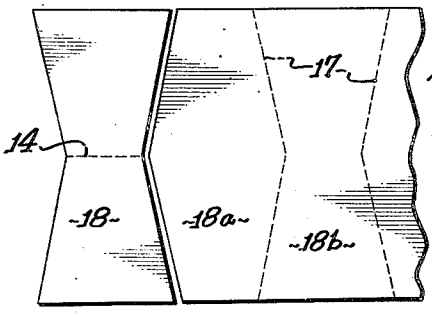


Fig. 5.



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DIAPER

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4 Claims. (Cl. 128—284)

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This invention relates to improved diapers comprising a pair of specially formed sections secured together in novel manner to attain certain advantages in use and handling not found in the various previously proposed types of diapers.

Specifically, diapers embodying the invention include an outer body section formed of suitable sheet material, and a smaller pad or liner section carried by the outer section and preferably overlying its central region. An important object of the invention is to provide such a pair of normally overlying sections permanently secured together to facilitate handling and use, and yet secured in a manner permitting separation of the sections along practically the entire extent of their normally engaging surfaces during laundering.

An additional object is to provide a two section padded or lined diaper of the above type having novel fastening means carried by the diaper itself for maintaining it about an infant without the use of any pins or other separate fasteners. Preferably, each of the two sections is independently secured in a desired condition, as by snap fasteners. It has been discovered that such independent fastening has advantages in maintaining the interconnected portions of the diaper in a relatively fixed relation to prevent an undesired pivoting effect which often results when a single snap fastener is relied upon at each side of the diaper.

A further object is to provide a diaper having the above features and formed with a simplicity permitting its manufacture at a cost closely comparable to that of the ordinary single panel rectangular or square diaper.

Preferably, the outer or body section of the diaper is of trapezoidal configuration and formed of relatively heavy material, as for instance that known as bird's-eye diaper material, and the inner liner or pad is rectangular comprising a number of plies of a highly absorbent material such as gauze.

The above and other features and objects of the invention will be better understood from the following detailed description of the typical embodiment illustrated in the accompanying drawing, in which:

Fig. 1 is an elevational view of the inner side of the diaper showing the outer section extended and the liner or pad section disposed approximately as it is when worn;

Fig. 2 is a perspective view showing both sections of the diaper substantially as they are when worn;

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Fig. 3 is an elevational view of the inner side of the diaper showing both sections extended;

Fig. 4 is an elevational view of the outer side of the diaper; and

Fig. 5 illustrates the method of cutting a roll of diaper material in manufacturing the outer sections of a number of diapers.

The diaper illustrated in the drawing comprises an outer or body section 10, preferably formed of a relatively heavy material such as bird's-eye diaper material, and an inner pad or liner section 11 formed of several plies or layers of a highly absorbent material such as gauze. The two sections are secured together along only one end by transverse stitching at 12, and are thus freely separable along substantially their entire extents to facilitate laundering.

Outer section 10 is of trapezoidal configuration, having two parallel end edges 13 and 14 and a pair of converging lateral edges 15 and 16. Preferably, section 10 comprises two superimposed plies formed of a single sheet of material folded back upon itself along one of the end edges 13 or 14, the two plies being secured in overlying relation by stitching along their converging lateral edges at 21 and 22. This particular design for the outer section of the diaper is especially desirable because of the ease with which it may be manufactured in quantity from stock rolls of material without the wasting of any material in cutting. Referring to Fig. 5, in which the method of cutting sections 10 is illustrated, the material as it is taken from a roll is cut along the dotted lines 17 to form a series of pieces of material, 18, 18*a*, 18*b*, etc., each including two trapezoidal portions meeting along the original center line of the material. As will be understood, each of these pieces of material may then be folded at its center to bring the two trapezoidal portions into overlying relation. The first section 10 formed from the roll of material in Fig. 5 would be folded along the shorter of its two parallel edges, that is, edge 14, while the second section 10 would be folded along edge 13.

The inner liner section 11 is rectangular in shape, as shown, being of a length approximately equal to the length of outer section 10 and extending longitudinally of that outer section along its central region. Section 11 is made from a single relatively large sheet of gauze or similarly absorbent material folded several times to form a multiple ply pad. Preferably this pad or liner comprises five or six plies of gauze. The sheet from which section 11 is formed is retained in its folded condition by stitching along its free

end at 23, and along its upper attached end at 12.

Section 10 carries on its outer surface a pair of transversely extending tapes 24 and 25 stitched adjacent edge 13 at either side of the diaper. Each of these tapes carries several transversely spaced snap fastener halves 26 to engage other snap halves 27 carried on the inner surfaces of the diaper sections at their lower or free corners. As best seen in Fig. 3, to compensate for the relatively great shrinkage of gauze as compared with bird's-eye material, section 11 is initially formed of a sufficient width to at least partially overlie the snaps 27 of section 10, and of a length slightly greater then section 10. Thus, the pad is originally rather large, but shrinks upon washing to a size permitting snapping of the two sections to the condition of Fig. 2 without either fullness or drawing.

As previously indicated, an important advantage of the illustrated type of diaper is that its two sections are permanently secured together to facilitate handling, and yet are freely separable along practically their entire extents for ease in laundering and drying. In use, the free ends of the two sections are doubled back and independently snapped at each side to the upper end of section 10 (see Fig. 2). This independent retention of each of the sections in its desired condition serves to retain the interconnected edges of the sections in relatively fixed relation in a manner preventing an undesirable pivoting effect which results when only one snap is employed at either side of the diaper. As will be understood, the snap halves 27 may be selectively interconnected with any of the various halves 26 to enable adjustment of the diaper size as desired.

With reference to the claim terminology, it is specifically noted that when in the claims reference is made to a diaper comprising two interconnected "sections," in combination with fastening means "carried by said sections," it is meant to define the fastening means as carried by the diaper sections as a unit, without specifying to which section or sections the fasteners are directly attached.

I claim:

1. A diaper comprising a first sheet section, a liner section normally overlying said first section, means permanently securing said sections together along a common edge, each of said sections having an outer free end spaced from said common edge, fastening means releasably securing said outer edge of the first section to one of the sections at a pair of spaced locations adjacent said common edge, and additional fastening means independently releasably securing the outer edge of the second section to one of said sections at a pair of spaced locations adjacent said common edge.

2. A diaper comprising a first elongated sheet section, an elongated liner section normally overlying said first section and extending longitudinally thereof, means permanently securing said sections together along a first pair of their end edges, said sections being separable along a second pair of end edges to render their normally adjacent surfaces freely accessible for laundering, snap fasteners carried by said diaper for releasably securing together the second end of the liner section and the first end of the first section at their corresponding sides, and additional snap fasteners carried by said diaper for independently releasably securing together the first and second ends of said first section at their corresponding sides.

3. A diaper comprising a first elongated flat section formed of sheet material, a second and narrower elongated liner section overlying said first section and extending longitudinally therealong substantially midway between its lateral edges, means permanently securing said liner section at one of its ends to the first section, said sections being separable except at said one end of the liner section to render their normally adjacent surfaces freely accessible for laundering, and fastening means carried by said sections for releasably securing together corresponding corners at opposite ends of said first section.

4. A diaper comprising a first elongated flat section of sheet material having a pair of parallel end edges and a pair of converging side edges, a rectangular liner section overlying said first section and extending longitudinally therealong substantially midway between its lateral edges, means permanently securing said sections together along one end of the liner section, said sections being separable except at said end of the liner to render their normally adjacent surfaces freely accessible for laundering, and snap fasteners carried by said first section for releasably securing together the corresponding corners at its opposite ends.

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