Sept. 27, 1955 C. A. MERONEY 2,718,888

ADJUSTABLE DIAPER

Filed June 19, 1953

Fig. 1

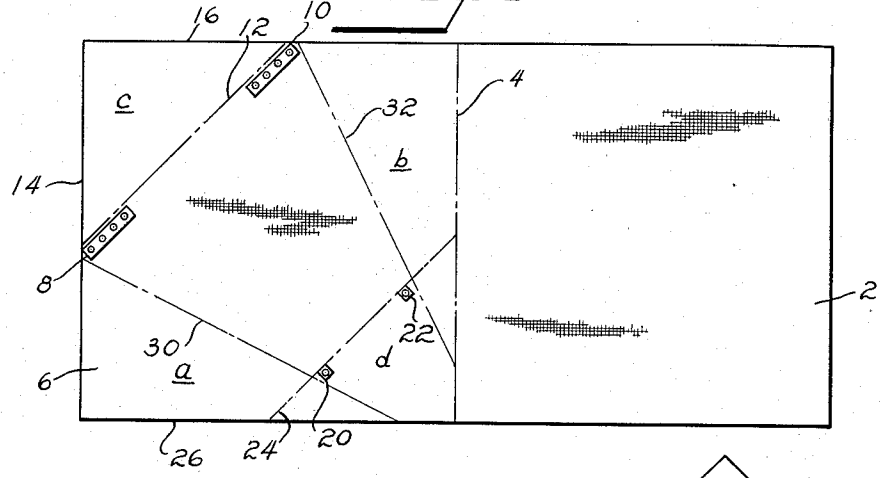



Fig. 2

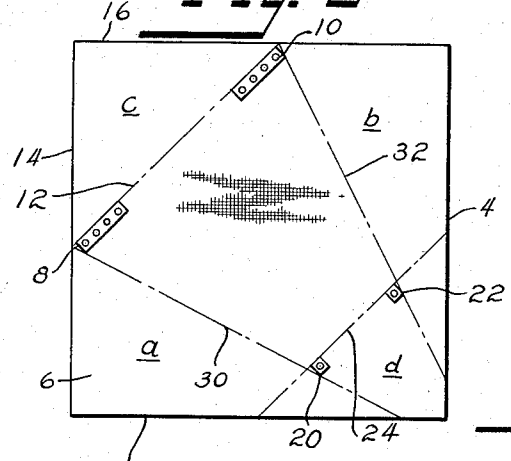



Fig. 3

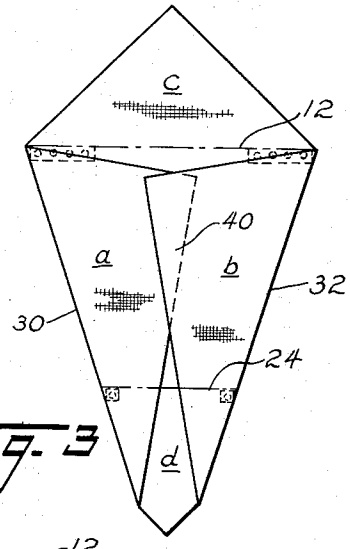



Fig. 5

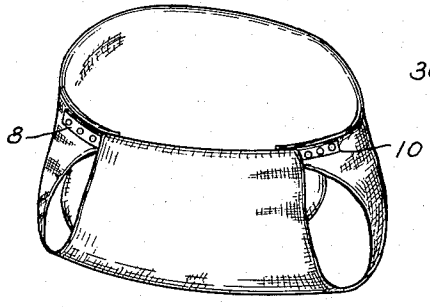
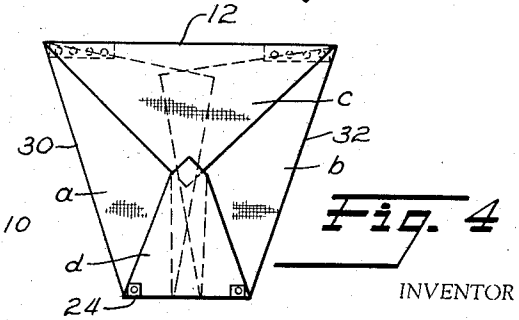



Fig. 4




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2,718,888

Patented Sept. 27, 1955



2,718,888

# ADJUSTABLE DIAPER

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Application June 19, 1953, Serial No. 362,789

2 Claims. (Cl. 128—284)

This invention provides a diaper of new and improved construction.

It has been the principal object of this invention to provide a diaper which, when folded in the manner intended and required by its construction and configuration, will have a trapezoidal shape by reason of which it will fit an infant in the most comfortable manner and which, by reason of the construction, arrangement and folding of its parts, will provide a maximum amount of absorbent material at the central area of the diaper, where it is most needed. A further principal object of the invention has been to provide a diaper having adjustable fastening means permanently attached thereto, thereby removing the necessity of using pins, which fastening means are so arranged and positioned that the diaper may be adjusted in both length and girth, whereby a diaper of one size may be comfortably and efficiently fitted to infants of varying sizes. Other objects and features of novelty of the invention will be made apparent by the following description, the appended claims and the annexed drawings.

An embodiment of the invention is described in the following specification and illustrated in the accompanying drawings, in which:

Fig. 1 is a plan view of a preferred embodiment of the invention in its unfolded condition;

Fig. 2 is a plan view of the diaper of Fig. 1 folded to double thickness, and also showing the lines about which the parts of the diaper are subsequently folded;

Figs. 3 and 4 are plan views showing subsequent folding steps in preparing the diaper for use, and

Fig. 5 shows the diaper in folded condition with the parts attached and arranged as they will be in actual use.

A diaper formed in the preferred manner according to my invention is preferably made from a rectangular sheet of textile material **2** which is preferably approximately twice as long as it is wide whereby it may be folded about its center line **4** to form a substantially square piece of textile material of double thickness. Such a rectangular sheet is disclosed in Fig. 1 and may be made of any material which is suitable for diaper use, such as gauze, muslin or cotton, woven in any desired manner.

One of the halves of this rectangular sheet, which half is indicated by numeral **6**, has two sets of fastening means attached to one of its faces. One set of these fastening means comprises two groups **8, 10** each comprising a plurality of snap fastener parts, which groups are aligned with each other and are spaced apart at the extremities of a diagonal line **12** which joins the center points of two adjacent sides **14, 16** of the part **6** of the rectangular sheet of material and which provides one of the fold lines about which the square double-thickness piece is folded to form a diaper. The two groups of fastener parts **8, 10** are disposed inwardly of the fold line **12**, by which it is meant that they are between the fold line and the center of the square **6**. Each group of fastener parts comprises a plurality, preferably four, of snap fastener parts spaced apart in a line parallel to the fold line **12** and positioned adjacent the sides **14, 16** respectively at the ends of the fold



line **12**. These fasteners may be separately attached to the material of the part **6** or the fastener parts of each group may be attached to a strip of textile material which is itself attached to the part **6**. The second set of fastening means comprises two single snap fastener parts **20, 22** which are attached to the part **6** and are spaced apart along a diagonal fold line **24** which is parallel to fold line **12** and extends between the fold line **4** and the fourth side **26** of the part **6**, being relatively close to the corner formed by the intersection of the fold line **4** and side **26**. These two snap fastener elements **20, 22** are positioned inwardly from the fold line **4** and the side **26** closely adjacent and outside of fold line **24**, by which it is meant that they are between that fold line and the corner of part **6** which is formed by the intersection of fold line **4** and side **26** of the square **6**. Two additional fold lines **30, 32** are provided and respectively extend from the outer ends of fold line **12** to the side **26** and fold line **4**, passing outside of, but closely adjacent to, the single snap fastener parts **20, 22**. The fold lines **12, 24, 30** and **32** form a trapezoid at the center of the square **6** with its major axis, i. e. its height, extending diagonally of the square. The fastener parts **8, 10** are within the trapezoid at the opposite ends of the fold line **12** which forms the base of the trapezoid, while the fastener parts **20, 22** are outside the trapezoid at the opposite ends of the fold line **24** which forms the upper or smaller side of the trapezoid.

In forming a diaper in accordance with my invention from material constructed and foldable in the described manner, the rectangular sheet **2** is first folded about its center line **4** to the rear of the side to which the fastener parts **8, 10, 20, 22** are attached, whereby the fastener parts are not covered, thus providing a square **6** of double thickness with the fastener parts exposed, as shown in Fig. 2. The triangular side wings *a* and *b*, which lie outside the fold lines **30, 32** are now folded about these lines to the side of the square **6** opposite to that to which the fastener parts are attached. These side wings are shown in their folded positions in Fig. 3 and it will be seen that they overlap at the center of the square, as shown at **40**, thus providing additional thicknesses of material at the area where it will be most needed. The triangular pieces *c, d* which lie outside the fold lines **12, 24**, respectively, are now folded on top of the folded triangular parts *a, b*, as shown in Fig. 4, thus providing additional thicknesses of absorbent material in the central area of the diaper. It will be seen that because of the positioning of the snap fastener groups with respect to the fold lines **12, 24**, the folding of the parts in the described manner will cause the snap fastener groups **8, 10** to be on the outside of the folded diaper, by which is meant the side opposite to that to which the parts *a, b, c, d* are folded, while the fastener elements **20, 22** will be on the inside of the folded diaper, by which is meant the side to which the parts, *a, b, c, d* are folded. This relation of the parts is illustrated in Fig. 4 in which the snap fastener groups **8, 10** are shown in dotted lines and the fastener parts **20, 22** are shown in full lines.

A diaper constructed and folded in the described manner may be placed on an infant with the narrower end in front and the wide end to the rear. In this position the groups **8, 10** of snap fasteners will be on the outside of the wider back part of the diaper and on each side of the infant, while the single snap fasteners **20, 22** will be on the interior of the diaper at each side of the narrower, front part thereof, where they may be selectively coupled to any of the fasteners of the groups **8, 10** to accommodate the diaper to the girth of the infant to which it is applied. If a longer or shorter diaper is required, the adjustment may be made by shifting the fold line **24** toward or away from the fold line **12**. The over-lapping of the outlying wing parts *a, b, c, d* at the center area of the diaper pro-

vides a maximum amount of absorbent material at this area.

While I have described and illustrated one embodiment which my invention may take, it will be apparent to those skilled in the art that other embodiments, as well as modifications of that disclosed, may be made and practised without departing from the spirit or scope of the invention, for the limits of which reference must be had to the appended claims.

What is claimed is:

1. A sheet of absorbent material of rectangular shape adapted to be formed into a diaper of trapezoidal shape having multiple layers, said sheet being provided with a center fold line whereby it may be folded into a square form by two superposed pieces, two sets of fastener parts attached to one of the faces of one of said square pieces and being respectively adjacent the opposite ends of a diagonal fold line which joins the approximate centers of two adjacent sides of said square and the fastener parts of each set being aligned in parallelism with and inside said diagonal fold line, two single fastener parts which are attached to the same side of said square piece as the first fastener parts and which are outside of and spaced apart along a second diagonal fold line which is substantially parallel to the first diagonal fold line and which extends between two adjacent sides of said square which are not the sides connected by the first diagonal fold line, said square having two additional converging fold lines which extend from the outer ends of said first diagonal fold line toward and outside of and adjacent said single fastener parts, all of said fold lines forming a trapezoid at the center of said square with its major axis extending diagonally of the square, and said fold lines being so formed that the material of the square outside the trapezoid is folded away from the face of the square piece to which the fastener parts are attached, the first sets of fastener parts being disposed within the trapezoid and the single fastener parts being disposed outside the trapezoid whereby the said fastener parts are disposed on opposite faces of the diaper after the square has been folded into trapezoidal shape.



2. A substantially square sheet of absorbent material adapted to be folded to provide a diaper of trapezoidal shape, said sheet having two sets of fastener parts attached to one face thereof and being respectively adjacent the opposite ends of a diagonal fold line which joins the approximate centers of two adjacent sides of said sheet and the fastener parts of each set being aligned in parallelism with and inside said diagonal fold line, two single fastener parts which are attached to the same side of said sheet as the first fastener parts and which are outside of and spaced apart along a second diagonal fold line which is substantially parallel to said first diagonal fold line and which extends between two adjacent sides of said sheet which are not the sides connected by the first diagonal fold line, said sheet having two additional converging fold lines which extend from the outer ends of the first diagonal fold line toward and outside of and adjacent said single fastener parts, all of said fold lines forming a trapezoid at the center of the sheet with its major axis extending diagonally of the sheet, and said fold lines being so formed that the material of the square outside the trapezoid is folded away from the face of the square piece to which the fastener parts are attached, the first sets of fastener parts being disposed within the trapezoid and the single fastener parts being disposed outside the trapezoid whereby the said fastener parts are disposed on opposite faces of the diaper after the sheet has been folded into trapezoidal shape.

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