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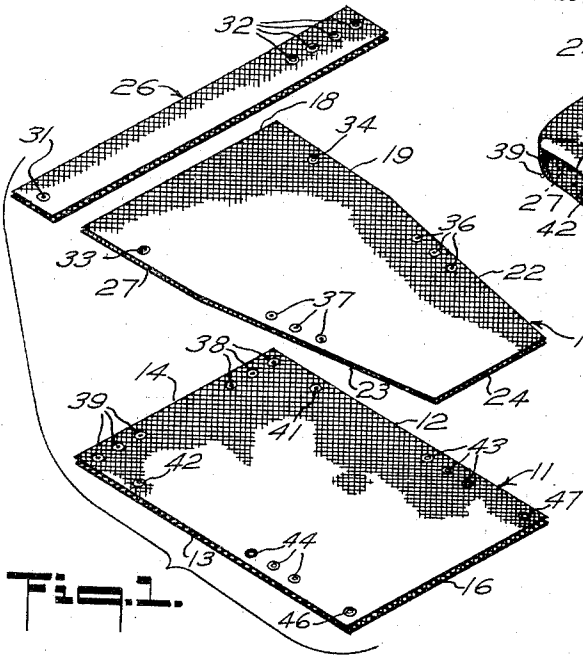


Fig. 1.

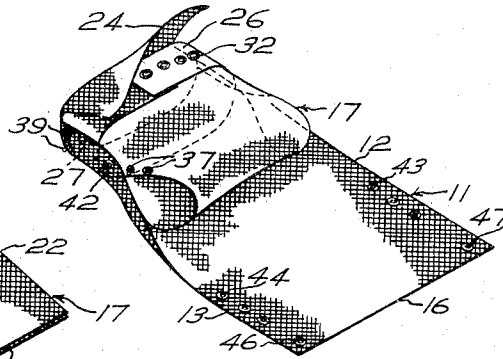


Fig. 4.

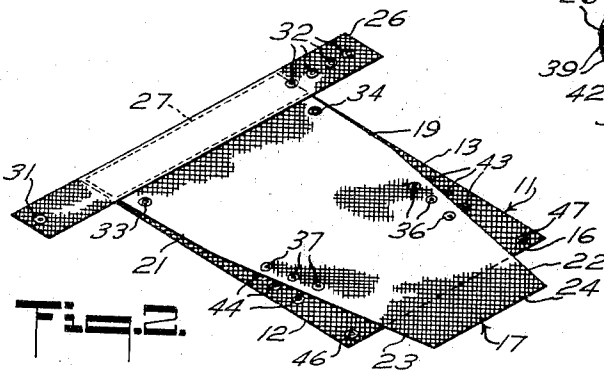


Fig. 2.

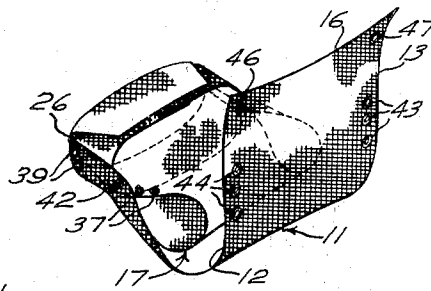


Fig. 5.

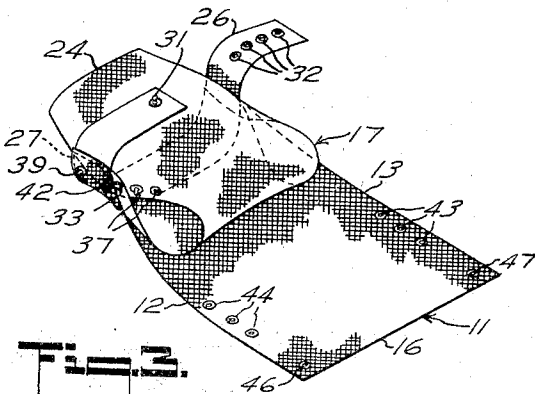


Fig. 3.

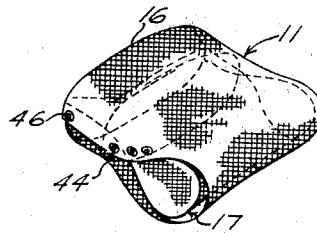


Fig. 6.

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The present invention relates to an improved diaper or infant's breech cloth having integral fastening and adjusting means so as to be readily and rapidly utilized in the clothing of infants of different sizes.

Conventional infant's breech cloths, or diapers as they are commonly termed, consist only of large rectangles of absorbent material which are adapted to be folded in a variety of ways, sometimes in a triangle, to accommodate an infant's breech or posterior portion, with the free ends being then fastened together by such as safety pins to complete the enclosure. It is in the fastening of the diaper that difficulty is encountered for in order to obtain the snug fit desired it is necessary that the folded material ends be stretched or at least very tightly held and the pin inserted. Inasmuch as infants of the age to wear diapers are quite active and restless, diaper fastening is quite exacting, requiring some dexterity and patience. Also, danger lies in the penetration of the material with the sharp pointed pin for unexpected movement of the infant being clothed may well result in pricking the child's skin or causing an even greater wound, likewise pricking of fingers by those clothing the infant is quite common.

The present invention entirely overcomes the above noted difficulties in that the diaper includes as an integral portion thereof fastening means which readily mate together for facile completion of the operation of "changing diapers." Additionally, the fastening means herein employed have no sharp points or other angular configurations which could in any way harm the infant or the one clothing same. As a further feature of the present invention there is provided a degree of adjustability which provides for a single diaper readily and snugly fitting infants of various sizes.

It is an object of the present invention to provide an improved diaper having integral fastening means.

It is another object of the present invention to provide an improved diaper having fastening means that include no points or sharp angles to harm the infant.

It is a further object of the present invention to provide an improved diaper having integral fastening means and adapted to snugly fit infants of different sizes in that the effective diaper size is adjustable.

The invention possesses other objects and features of advantage, some of which, with the foregoing, will be set forth in the following description of the preferred form of the invention which is illustrated in the drawing accompanying and forming part of the specification. It is to be understood, however, that variations in the showing made by the said drawing and description may be adopted within the scope of the invention as set forth in the claims.

The invention is illustrated in the accompanying drawing wherein:

Figure 1 is a perspective exploded view of a preferred embodiment of the invention.

Figure 2 is a perspective view of the diaper.

Figures 3 to 6 are perspective views of the diaper in

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progressive stages of folding and fastening to complete the diaper closure.

Considering now the details of the invention as illustrated, and referring to Figures 1 and 2 of the drawing, there is provided and outer diaper 11 formed as a rectangle of suitable material such as a diaper net. The outer diaper includes long sides 12 and 13, a top edge 14 and a bottom end 16. This outer diaper is shown formed of a double layer of material as would be the case where conventional diaper material is employed, however, other materials may be used for the outer diaper, as for example plastic, rubber sheet, or close knitted waterproof material. Another inner diaper 17 of conventional diaper net or other absorbent material, preferably in two layers, is provided. The inner diaper has a rectangular upper end matching the outer diaper 11 and including a top edge 18. The side edges 19 and 21 perpendicular to the top edge extend about one half the total inner diaper length, which is longer than the outer diaper 11, and side edges 22 and 23 taper toward each therefrom toward the inner diaper bottom end 24, which is slightly greater than one-half the length of the top edge 18. It will be appreciated that the foregoing ratios need not be exactly followed for adjustment of the folded diaper size is provided, as set out below. One further cloth member is provided in the form of a waistband 26 comprising an elongated rectangle of material such as conventional diaper net and having a length greater than the length of the top edges of the inner and outer diapers. Permanent joiner is made of the inner and outer diapers and the waistband by placing the upper ends of the inner and outer diapers in alignment with the inner diaper on top and placing the waistband atop same with the upper edge thereof aligned with the top edges 14 and 18 of the outer and inner diapers. The combination is sewn to form a stitch 27 along the top edges of the diapers, down the sides thereof to the lower edge of waistband, and across same to form a closed path.

There are provided upon the above-described cloth elements of the invention a plurality of fasteners particularly oriented to provide maximum closure and adjustability. While various types of fasteners may be employed in this respect there are illustrated conventional grip fasteners made up of two parts, the first being a male fastening element including a pedestal having an enlarged head with a narrow neck and flanged base and the other being a female fastening element including a ring adapted to snap over the pedestal head about the neck. Such fasteners are readily joined by pressure and are only separated by high local stress. It will be appreciated that the same size fasteners are herein employed throughout although if desired stronger or varying types of fasteners may be used at points of maximum stress. As regards the waistband 26, there is provided at one end thereof a male fastener 31 extending downward from the waistband, and herein note that both male and female fasteners extend through the material with the female clamping about a hole therein and the male clamping about a hole therein but filling same. Thus in certain views of the drawing a male fastener is shown from the opposite side of the material from the extension thereof and is not to be confused with a female fastener which has a similar appearance. At the opposite end of the waistband are aligned a number of female fasteners 32 spaced apart lengthwise of the waistband and aligned with the male fastener 31. Considering the inner diaper 17, there are provided midway along the straight edges thereof and adjacent same a pair of female fasteners 33 and 34 respectively. There are additionally provided adjacent the tapered edges 22 and 23 near the centers thereof a plurality of spaced male fasteners 36 and 37,

there being shown three in each group. These male fasteners 36 and 37 are adapted for connection one each to the female fasteners 33 and 34 in folded diaper position. The outer diaper 11 is provided with two sets of male fasteners 38 and 39 aligned along the top edge 14 thereof with one group 38 including, for example, three fasteners spaced apart and extending from one side edge 12 and the other group 39 similarly extending from the other side edge 13. These fasteners 38 and 39 extend downward from the under surface of the diaper. A pair of male fasteners 41 and 42 are disposed one adjacent each side 12 and 13 respectively and extend outward from the back surface of the outer diaper. The outer diaper 11 is also provided with two groups of female fasteners 43 and 44 disposed adjacent the side edges 12 and 13 and displaced substantially the same distance from the top edge 14 as the fasteners 36 and 37 of the inner diaper are displaced from the top edge thereof. As in the case of the inner diaper these side fasteners 43 and 44 are adapted for connection one each to the fasteners 41 and 42 in the folded diaper position for adjusted side closing. One further pair of female fasteners 46 and 47 are provided with one disposed in each of the lower corners of the outer diaper 11 and displaced from the bottom edge 16 thereof substantially the same amount as the fasteners 38 and 39 are displaced from the top edge 14.

Considering now the folding of the improved diaper of the present invention and referring first to Figure 3, the inner diaper is folded back upon itself with the bottom edge 24 extending beyond the waistband 26 whatever amount is required to make the inner diaper snugly fit the posterior portion of an infant being clothed thereby. The waistband is then folded over the inner diaper with the end having the male fastener 31 innermost and the end having the plurality of female fasteners 32 overlapping same and the appropriate female fastener 32 engaged with the male fastener 31 to provide the proper waistband circumference for fitting the infant being clothed. As shown in Figure 4, the excess of the inner diaper 17 at the edge 24 thereof is then folded back over the top of the connected waistband 26 and for small infants provides added layers of material at the front of the diaper.

It will be seen that with the inner diaper 17 folded as above described there are provided a pair of leg holes or openings at the corners of the inner diaper fold and that the spacing of same from the waistband is variable by changing the amount of overlap of the inner diaper end at the waistband. Note further that the upper corners of both inner and outer diapers are turned upwards by fastening of the waistband so that they are actually disposed on the sides of the folded diaper.

As regards the outer diaper 11, same is folded over in the same manner as the inner diaper 17 and secured in position by joining the female fastener 46 to one of the male fasteners 39 and the female fastener 47 to one of the male fasteners 38 which of the male fasteners 38 and 39 are connected to the female fasteners 46 and 47 respectively is determined by the waistband connection, i. e., the outer diaper 11 is made substantially the same circumference about the top as is the waistband. The outer diaper covers the overlapping or return folded portion of the inner diaper and holds same from flapping free. Final connection made along the diaper sides by connecting one each of the male fasteners 36 and 37 of the inner diaper to the female fasteners 33 and 34 respectively of the outer diaper so as to snugly fit the

completely folded diaper along the sides of the infant being clothed. Also the outer diaper sides are closed by connecting one of the female fasteners 43 to the male fastener 41 and one of the female fasteners 44 to the male fastener 42.

The completely folded diaper, as shown in Figure 6, forms a snugly fitting envelope about an infant and with the numerous adjustments available is adapted to fit infants having a wide range of sizes. Note also that all male fasteners employed are directed outward in the folded position of the diaper so as not to irritate or discomfort the infant clothed with the diaper.

What is claimed is:

1. An improved diaper comprising a rectangular outer diaper with fastening means adapted to connect two adjacent corners to adjustable points between opposite corners with folding of the diaper, a waistband connected across one end of said outer diaper and extending longitudinally therefrom with fastening means at opposite ends thereof for adjustable waistband closure, and an inner diaper secured at one end to said outer diaper waistband connection and generally aligned with said outer diaper with a length greater than same and having a narrower unconnected end than said outer diaper for folding through said waistband and back over same.

2. An improved diaper as defined in claim 1 further defined by said inner diaper being formed of multiple layers of absorbent material and said outer diaper formed of a waterproof material.

3. An improved diaper comprising a rectangular outer diaper having a plurality of male fasteners aligned across the upper end thereof extending from the under side thereof and a pair of female fasteners disposed one in each of the other diaper corners, an inner diaper having a rectangular end mating with upper end of the outer diaper and affixed thereto and an inwardly tapering lower end extending beyond the lower end of the outer diaper, and a waistband secured across the connected ends of said inner and outer diapers and extending therefrom with a male fastener at one end thereof extending from the under side thereof in the same direction as the outer diaper fasteners and a plurality of female fasteners spaced progressively further from the other waistband end with individual ones of which said male fastener is adapted to connect for adjustable waistband closure.

4. An improved diaper as claimed in claim 3 further defined by said outer diaper including a pair of male fasteners extending from the under side of same and spaced from the connected diaper end and a plurality of female fasteners disposed along opposite diaper edges, and said inner diaper including a pair of male fasteners extending from the under side of the diaper and disposed in alignment with said pair of female fasteners on said outer diaper for connection thereto and a plurality of male fasteners extending from the under diaper surface along opposite diaper side edges individually spaced from the connected diaper ends the same distances as individual female fasteners of said outer diaper for connection therewith in folded diaper position.

References Cited in the file of this patent

UNITED STATES PATENTS

2,545,761	Brink	Mar. 20, 1951
2,566,193	Grossman	Aug. 28, 1951
2,568,305	Slusser	Sept. 18, 1951