

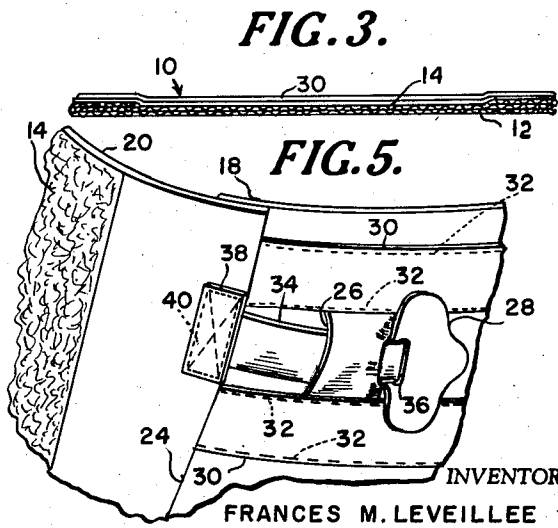
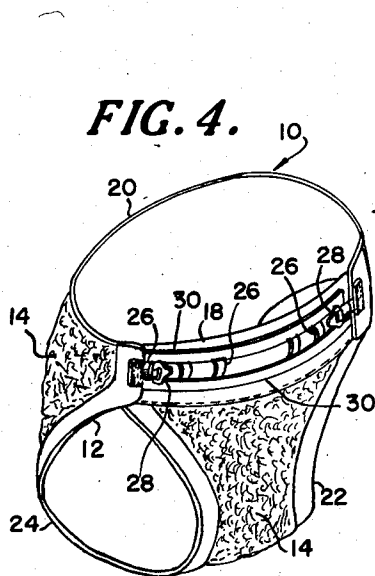
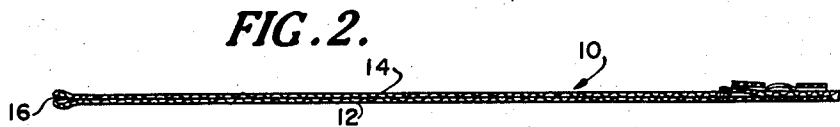
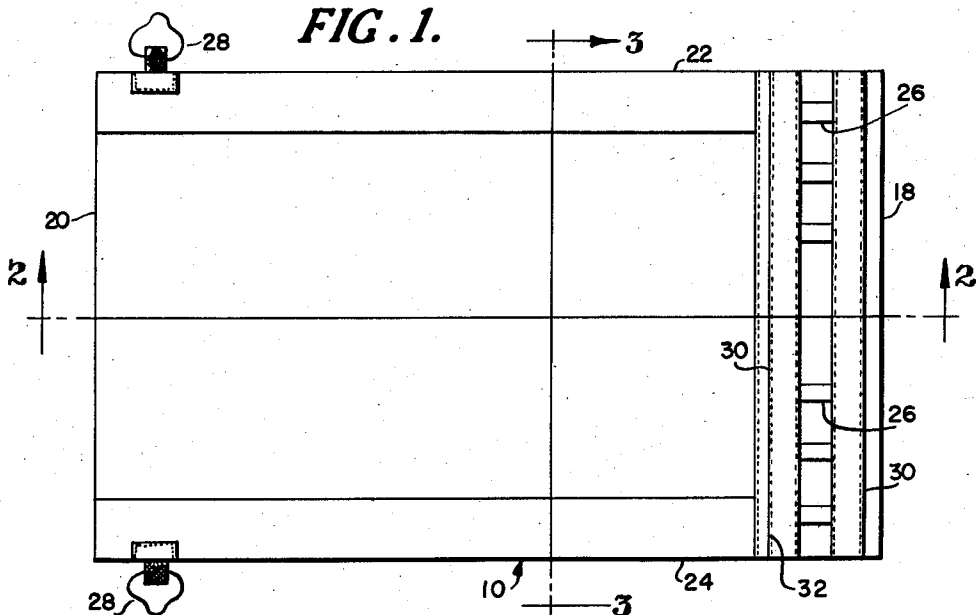
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2,837,096

ADJUSTABLE DIAPER

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ADJUSTABLE DIAPER

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3 Claims. (Cl. 128—284)

The present invention relates to a diaper and, more particularly, to a diaper of the pinless type.

Heretofore diapers for babies have been provided with fastening means eliminating the use of pins. Such diapers have used snaps, hooks, or other metallic fastening means permanently attached to the diaper, whereby the diaper may be adjusted for the size of the baby. In addition, diapers have been provided with fastening means including tabs adapted to be inserted through loops, the tabs and the loops being made of a non-metallic material. Although the prior fastening means for pinless type diapers have provided adjustability of the diaper so that the diaper may be utilized when the baby grows in size, the diapers do not provide for adjustability while on the infant. In other words, when the diaper is conformed to the body of the infant, the portion encircling the body is fixed in an adjusted position and, when the baby moves, the diaper will not compensate for changes in body size due to movement of the baby. The diapers have a tendency to cut into the baby's body when the baby twist or turns.

An object of the present invention is to provide an adjustable diaper which not only is adjustable for the particular size of the baby but which will conform to the baby's movements so that it is always firmly held onto the baby's body.

Still another object of the present invention is to provide a diaper utilizing non-metallic fastening means, the fastening means being attached to the diaper in such a manner as to insure maximum life and wear of the diaper without the danger of the fastening means wearing out before the main body portion of the diaper.

A still further object of the present invention is to provide a diaper which is substantially rectangular in shape and is formed of at least two layers of absorbent material, the diaper being so designed that it may be constructed easily and sold inexpensively.

These and other objects of the present invention will appear more fully in the following specification, claims and drawings, in which:

Figure 1 is a plan view of the diaper constructed according to the present invention.

Figure 2 is a cross-sectional view of the diaper taken on the line 2—2 of Figure 1.

Figure 3 is a cross-sectional view of the diaper taken on the line 3—3 of Figure 1.

Figure 4 is a perspective view of the diaper of the present invention as it would appear when employed on a baby.

Figure 5 is an enlarged fragmentary perspective view of the fastening means for the corners of the diaper.

Referring specifically to the drawings, wherein like character or reference numerals represent like or similar parts, the diaper of the present invention is generally designated as 10 and comprises inner and outer cloth sheets 12 and 14 respectively. The sheets 12 and 14 are rectangularly shaped and may be stitched or otherwise secured together with their edges tucked in, as

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shown at 16 in Figure 2. The outer sheet of cloth material 14 is made from a toweling material, such as terry cloth or the like, whereas, the inner sheet or layer 12 is made from a soft cotton flannel cloth. The cotton flannel cloth of the inner sheet 12 avoids chafing of the baby's skin, whereas the outer sheet 14, being made of a toweling material, provides maximum absorption.

When the sheets 12 and 14 are assembled as a unit by stitching, the plan shape of the diaper is rectangular, thereby providing a maximum amount of cloth in a minimum space. The ends 18 and 20 respectively, of the rectangularly shaped body portion form the waistband of the diaper, whereas the sides 22 and 24 respectively, form the crotch portion of the diaper. Since the diaper is of rectangular form, it may be fitted to the baby in conventional manner, that is, the four corners overlapped so that the ends of the rectangular body member form the waistband and the sides form the crotch portion as shown in Figure 4.

The means for fastening the overlapped ends of the diaper include a plurality of parallel spaced loops 26 positioned on the outer sheet 14 adjacent the end 18 and cooperating tab members 28 positioned adjacent the corners of the opposite end of the body member of the diaper 10. In more detail, the loops 26 are integrally woven or stitched between parallel spaced strips of tape 30, the tape being made of a heavy cotton binding material. The tapes 30, after having the loops 26 integrally woven thereto are stitched to the outer sheet 14 of the body member by stitching 32. By providing the loops between tapes 30 and then stitching the tapes 30 to the body of the member of the diaper the loops cannot pull loose from the body member as they are reinforced by the stitches which stitch the tapes 30 to the body member, as well as by the individual stitching or weaving of the loops to the tapes. Another advantage of assembling the loops 26 between the spaced tapes 30 as an integral unit, prior to the attachment of the loops to the body of the diaper, is that such an arrangement provides for easy construction of the diaper. In other words, all loops 26 may be fastened to the outer panel or sheet 14 at one time and by one stitching operation.

The tabs 28 may be made of a suitable flexible plastic material and are wider in width than the length of the loops 26 so that when the tabs 28 are inserted underneath a loop by folding and are then expanded out flat they will not pull out back through the loops. Tabs 28 are attached adjacent to the opposite end 20 of the diaper body by means of an elastic strip 34 which is passed through a slit 36 provided in the tab and doubled back upon itself and sewn to the diaper body. A piece of ducking material 38 is sewn over the ends of the elastic strip 34 and to the diaper body, as shown at 40, so as to firmly secure the strip 34 to the diaper body. As is shown in Figure 5, the elastic strip 34 is of less width than the width of the tab 28, as well as the width of the loop 26, so that it may easily pass beneath the loop 26.

When the diaper 10 of the present invention is positioned on the body of a baby it will assume the shape shown in Figure 4, with the corners of the end 20 overlapping the corners of the end 18. The tabs 28 are slipped under the loops 26 so that the waistband formed by the ends 18 and 20 will snugly fit the waist of the baby. By having the tabs fastened to the diaper body by means of the elastic strip 34, the baby may have free movement without the diaper waistband binding the baby's body. As shown in Figure 5, if the baby moves to a position where his waist size changes or where the back portion of the diaper is pulling against the front portion, the waistband of the diaper can automatically adjust for such a condition. The elastic strip 34 will stretch as the

tab pulls against the loop 26 and will thereby permit the overlapping corners to spread apart to give the baby more freedom of movement. The tension around the waistband of the diaper will stay substantially the same on the baby's body so that there is no chance for the diaper to slip off. By making the diaper rectangular in shape, a maximum protection for the baby can be obtained without binding his movements or making the diaper of such size as to make it cumbersome. Further, the making of the diaper body rectangular provides a minimum of work in the manufacture of the diaper. A feature of the invention, as previously mentioned, is providing a plurality of sheets to form the body portion of the diaper. The inner sheet 12 is made of soft flannel cloth and fits next to the baby's skin so as not to chafe the skin, whereas the outer sheet 14 is made of a relatively thick toweling which can absorb a maximum amount of moisture.

The terminology used in this specification is for the purpose of description and not limitation, the scope of the invention being defined in the claims.

I claim:

1. A diaper of the character described, comprising a substantially rectangular body member having ends and sides, a tab member attached to each corner adjacent one end of and extending transversely from the side of said body member, means to attach each of said tab members to said body member, said means including a strip of elastic material of less width than said tab member, said strip being secured at one end to said tab member and at the other end to said body member and being capable of extension and contraction, a plurality of parallel spaced loop members for selectively cooperating with said tab members to fasten the corners of the diaper, and means to attach said loop members to said body member, said means including spaced parallel tapes integrally secured to opposite ends of said loop members and stitched to said body member adjacent the end opposite the end portion to which said tabs are attached.

2. A diaper of the character described, comprising a substantially rectangular body member having ends and sides, said body member including an inner layer of cotton flannel material and an outer layer of absorbent

toweling material, a tab member attached to each corner adjacent one end of and extending transversely from the side of said body member, means to attach each of said tab members to said body member, said means including a strip of elastic material of less width than said tab member, said strip being secured at one end to said tab member and at the other end to said body member and being capable of extension and contraction, and a plurality of spaced loop members attached adjacent to the end of said body member opposite the end portion to which said tabs are attached, said loop members being parallel to each other and substantially normal to the end of said body member, said body member being fitted about a baby's body with its corners in overlapping relationship and said tabs being adapted to selectively engage said loop members.

3. A diaper of the character described, comprising a substantially rectangular body member having ends and sides, said body member including an inner layer of cotton flannel material and an outer layer of absorbent toweling material, a tab member attached to each corner adjacent one end of and extending transversely from the side of said body member, means to attach each of said tab members to said body member, said means including a strip of elastic material of less width than said tab member, said strip being secured at one end to said tab member and at the other end to said body member and being capable of extension and contraction, a plurality of parallel spaced loop members for selectively cooperating with said tab members to fasten the corners of the diaper, and means to attach said loop members to said body member, said means including spaced parallel tapes integrally secured to opposite ends of said loop members and stitched to said body member adjacent the end opposite the end portion to which said tabs are attached.

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