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A. AMBARIAN
SANITARY GARMENT

2,638,899

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2 Sheets-Sheet 1

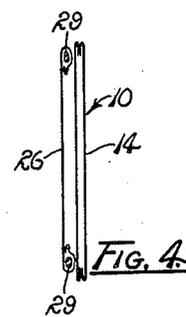
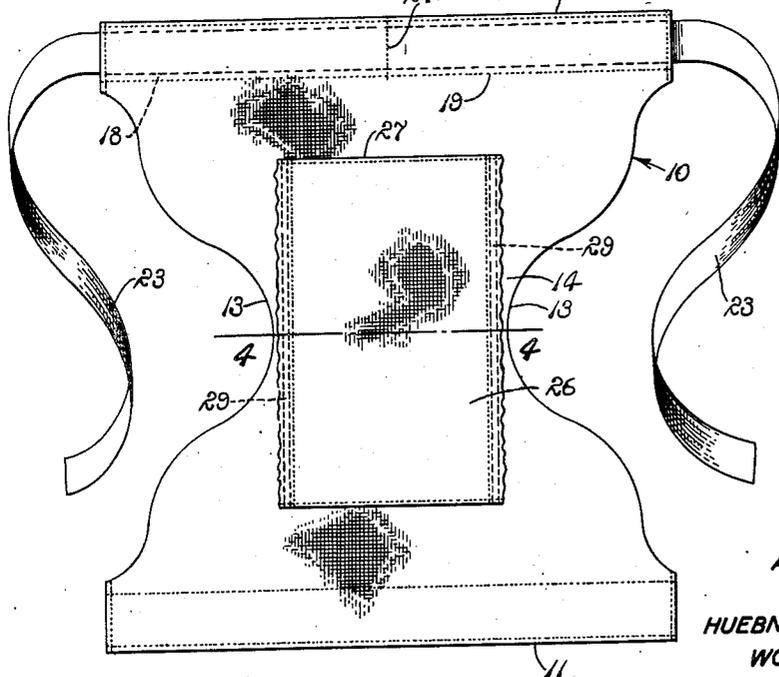
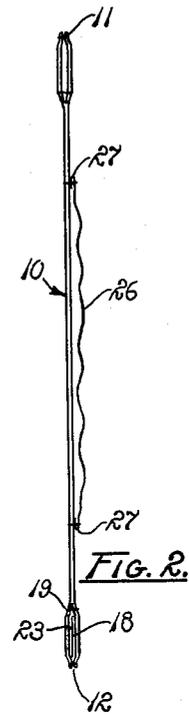
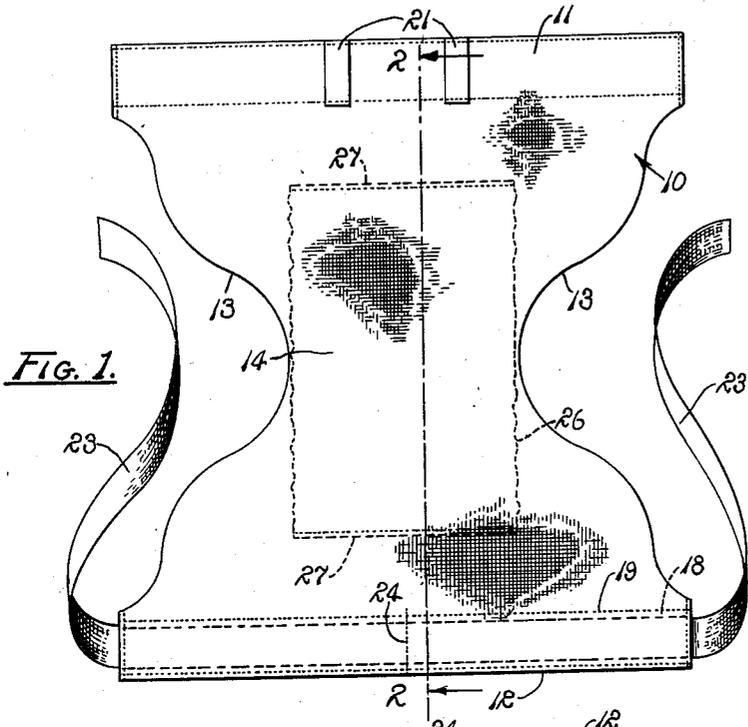


FIG. 3.

ALICE AMBARIAN
INVENTOR
HUEBNER, BEEHLER,
WORREL & HERZIG
ATTORNEYS

BY *Richard M. Wood*

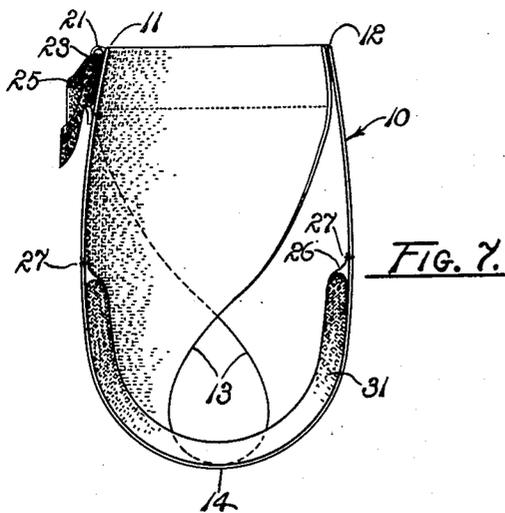
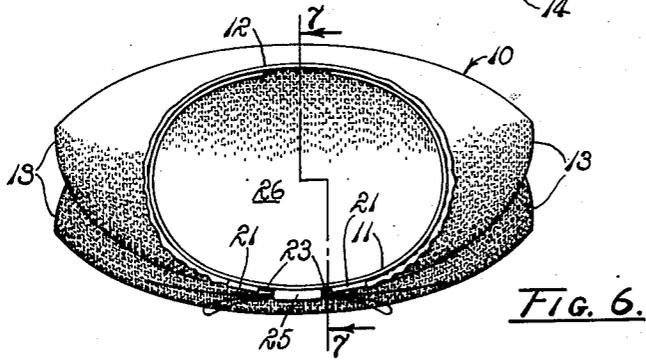
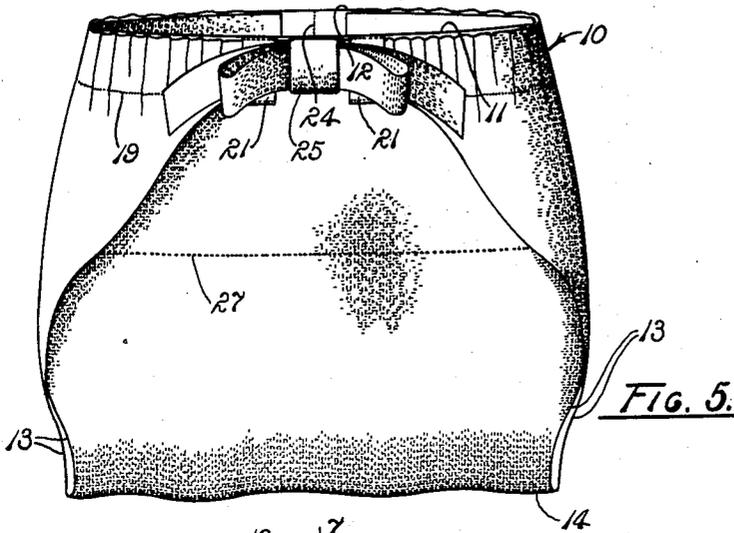
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2 Sheets-Sheet 2



ALICE AMBARIAN
INVENTOR
HUEBNER, BEEHLER,
WORREL & HERZIG
ATTORNEYS

BY *Richard M. Worrel*

UNITED STATES PATENT OFFICE

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SANITARY GARMENT

Alice Ambarian, Fresno, Calif.

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4 Claims. (Cl. 128—284)

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The present invention relates to garments and more particularly to a sanitary garment of the diaper type having therapeutic advantages.

The dangers incident to the employment of pins to secure conventional diapers on infants are well known. Pin pricks have proved a source of discomfort during the wearing of such diapers and have provided foci for infection. The pins rust and discolor the diapers. Seldom washed, the pins frequently are unsanitary.

These and other difficulties have caused the development of well-known, relatively new diaper forms avoiding the use of pins and other pointed fasteners but generally continuing the use of metallic members for securing purposes which have been found not entirely dependable, occasionally to cause discomfort, to rust, and to provide a sanctuary for germs.

Of perhaps even greater significance, both new and old forms of diapers are known frequently to fail in their absorption function either because of their partial displacement or deficiencies in absorbent capacities. In spite of their frequent requirements for removal and replacement such changes are tedious to perform.

Further, diapers generally make no provision for the banding of infants' backs and abdomens, functions which the applicant has discovered are readily performed by the subject garment.

An object of the present invention therefore is to provide an improved garment of the diaper type.

Another object is to eliminate all pins and metallic or other hard members in garments of the diaper type.

Another object is to provide a diaper having therapeutic utility in its ability to band the backs and abdomens of infants.

Another object is to provide a garment adapted to hold a disposable pad of absorbent material which is adapted to be cleansed by boiling without deterioration thereof.

Another object is to provide a diaper having improved wearing convenience and dependability.

Another object is to provide a diaper adapted by the replacement of a disposable pad thereof to have its absorption capacity indefinitely extended.

Another object is to provide a diaper which is more speedily and easily changed than those generally employed.

Another object is to provide a garment of the character described adapted for wear in circum-scribing relation to a wearer's waist having a

portion of sheet material in crotch engagement in which a pair of substantially parallel elastic strips are provided for tensioning against the crotch for dependability of engagement with the wearer.

Other objects and advantages will become apparent in the subsequent description in the specification.

In the drawings:

Fig. 1 is a plan view of the outside of the garment of the present invention as spread in flattened condition for illustrative convenience.

Fig. 2 is a longitudinal section of the garment as taken on line 2—2 of Fig. 1.

Fig. 3 is a plan view somewhat similar to Fig. 1 but showing the inside of the garment.

Fig. 4 is a transverse section taken on line 4—4 of Fig. 3.

Fig. 5 is a perspective of the garment illustrated as it is secured for use.

Fig. 6 is a top view of the garment viewed in its condition shown in Fig. 5.

Fig. 7 is a fore and aft section taken on line 7—7 of Fig. 6.

Referring in greater detail to the drawings:

The garment employs an elongated member 10 of flexible preferably absorbent sheet material such as muslin, gauze, flannelette, or other suitable fabric material. As will subsequently become apparent, the member 10 may be fabricated from non-absorbent sheet material but under such conditions loses its full utility.

The member 10 has a forward end edge 11, a rearward end edge 12 in substantially parallel relation to the forward end edge, and a pair of concave side edges defining an appreciably transversely narrowed central portion 14. The preferred generally hyperbolic form of the side edges is evident in Figs. 1 and 3. It will be noted that the hyperbolic edges are of compound curvature, being of arcuately interconnected ogee form, as shown in Figs. 1 and 3. This results in imparting a graceful appearance to the garment and assures snug engagement with the legs of infants by whom the garment is worn.

The sheet member 10 is preferably formed of double thickness of two congruent pieces of the overall shape shown in Figs. 1 and 2 which are superimposed and stitched along the side edges 13. The two pieces are conveniently of a single sheet in end to end relation so that when superimposed the rearward end edge 12 is defined by a fold line 16 intermediate the pieces, or two congruent sheets may be utilized which are stitched along the end edge 12 and the side edges

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13. The member is then turned right side out so as to leave the unfinished edges of the pieces inwardly disposed. The sheet member is stitched in parallel spaced relation to the end edge 12, as at 17, to provide a drawstring receiving tube 18. The forward end edge 11 is hemmed, as at 19, in any suitable manner.

A pair of spaced loops 21 are stitched to the outside of the sheet member 10 adjacent to the forward end edge 11 thereof transversely centrally of said end edge and in substantially right angular relation thereto.

A drawstring 23 receivable by the loops 21 is inserted through the tube 18 and preferably has a central portion secured centrally to the tube, as by being stitched at 24. It is conveniently tied between the loops, as shown at 25.

The drawstring is preferably of ribbon form of appreciable width, as shown, so as to constitute a belt fitted to the tube 18 and loops 21 that may be conveniently tied. The width of the string 23 is significant in its resultant banding effect when employed in cooperation with the end edges 11 and 12 of the sheet member 10. It will be obvious that elastic material may be employed for the drawstring 23 without departing from the spirit or scope of the present invention but the applicant prefers to avoid such elastic because greater dependability of mounting and infant comfort is attained by the utilization of a suitable fabric material such as that suggested for the sheet member 10.

A substantially rectangular panel 26 of similar absorbent sheet material is located centrally of the sheet member 10. The panel is of a width approximating but less than the width of the sheet member at its central portion 14 and of a length appreciably less than the length of the sheet member. The panel is longitudinally aligned with the sheet member and has opposite ends 27 stitched to the sheet member in substantially equally spaced parallel relation to the end edges 11 and 12 thereof. The panel is free of the sheet member 10 intermediate its ends 27.

A strip of elastic material 29 is secured to each side edge of the panel 26 as by having the panel rolled thereabout and stitched. Each elastic strip has opposite ends secured to the sheet member 10 at the ends 27 of the panel 26.

As shown in Figs. 4 and 7, the panel 26 in association with the sheet member 10 provides a pocket which has open sides and closed ends. The pocket is adapted to receive a pad 31 of absorbent preferably disposable material such as folded cloth, soft paper, cotton, or the like. The pad is preferably generally rectangular in form and of a size somewhat smaller than the panel 26 for inserting convenience. It will be obvious that the ends of the pad may be rounded or beveled as comfort suggests.

Operation

The utility and operation of the subject invention is believed to be clearly apparent and is briefly summarized at this point. In mounting the device on an infant, not shown, it is the usual practice first to insert the pad 31 between the panel 26 and sheet member 10. The sheet member is preferably spread, as shown in Fig. 3, and the infant placed thereon with his back rested on the rearward end edge 12. The forward end edge 14 is drawn upwardly between the infant's legs over his abdomen so that the panel 26 is in dependable crotch engagement. The sides of the forward end edge 11 are fitted downwardly at the sides of the infant and the sides of the

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rearward end edge 12 drawn upwardly in overlying relation thereto.

The drawstring 23 is threaded through the loops 21 and tied therebetween, as at 32, with the arcuately rearwardly directed sides of the end edge 11 dependably secured in position between overlying arcuately forwardly directed sides of the rearward end edges 12. So assembled, the garment is of the form shown in Figs. 5, 6 and 7.

When supported on an infant, the infant's legs extend past the side edges of the panel 26 and thus assist the elastic strip material 29 in confining the pad 31 in place. More significantly, the elastic strip material 29 arranged in parallel spaced relation is tensioned against the crotch of the infant when the garment is properly positioned, thus assuring resilient and continuous dependent engagement.

During normal use, the pad 31 absorbs substantially all moisture through the panel 26. Inasmuch as the central portion 14 of the sheet member 10 in crotch engagement is slightly wider than the panel 26 or pad 31, any moisture which is diverted laterally of the pad is absorbed in the sheet member adjacent to the arcuate side edges 13, thus providing an auxiliary absorbent effect.

Because of the multiple thickness of the panel 26 and sheet member 10, in some instances it is preferable to omit the removable pad 31 and simply to rely on the absorbent properties of the panel and sheet member.

When secured in place, the end edges 11 and 12 and the drawstring 23 exercise a banding effect desirable in supporting an infant's back and abdomen. The garment is removable by simply untying the single knot 25 which conveniently may take the form of a bowknot, and unfolding the sheet member 10 from the infant. The pad 31 may be easily removed by sliding the same laterally from beneath the panel 26 past an elastic strip 29 and a fresh pad inserted by the reverse procedure.

The garment provides no metallic or other hard fasteners or other elements which may rust, provide a haven for germs or the like, or constitute a source of wearer discomfort. The entire garment may be laundered without preconditioning in any way and boiled for sanitation purposes without damage thereto. The garment is inexpensive to produce and is of a form conducive to long wear when fabricated from appropriate material.

Although the garment has been described for use as a diaper it is to be understood that the invention contemplates its utilization for any comparable purpose.

Although the invention has been herein shown and described in what is conceived to be the most practical and preferred embodiment, it is recognized that departures may be made therefrom within the scope of the invention, which is not to be limited to the details disclosed herein but is to be accorded the full scope of the claims so as to embrace any and all equivalent devices and apparatus.

Having described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a diaper the combination of an elongated member of flexible absorbent sheet material having substantially parallel end edges, one of which is hemmed to provide a drawstring receiving tube, and concave side edges defining an appreciably transversely narrowed central portion intermediate the end edges; a pair of spaced drawstring receiving loops mounted at a side of the sheet

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member in substantially right angular relation to the end edge thereof opposite to the drawstring receiving tube transversely centrally of the sheet member; a rectangular panel of absorbent sheet material of a width approximating but less than the width of the sheet member at its central portion and of a length substantially less than the length of the sheet member, said panel being positioned centrally of the sheet member at the side thereof opposite to the loops, having opposite ends stitched to the sheet member in substantially equally spaced relation to the end edges of the sheet member, and being loosely extended therebetween; the panel having opposite side edges free of the sheet member; elastic mounted in the opposite side edges of the panel and affixed to the sheet member at each end of the panel; and a drawstring threaded through the tube and receivable through the loops.

2. An infant's diaper comprising an elongated longitudinally U-shaped member of absorbent sheet material having an upwardly extended forward end edge, an upwardly extended rearward end edge and a central crotch portion of reduced width intermediate the end edges, the forward end edge having opposite side edges arcuately rearwardly extended and the rearward end edge having opposite side edges arcuately forwardly extended in overlying relation to the rearwardly extended side edges of the forward edge, a tube formed along the rearward end edge, a pair of spaced substantially erect straps mounted centrally on the forward edge of the member, a drawstring threaded through the tube having opposite ends each extended through the loop, said opposite ends being releasably tied intermediate the loops, a rectangular panel of absorbent sheet material of a transverse dimension approximating but less than the transverse dimension of the crotch portion of the sheet member and a length substantially less than the length of the sheet member positioned longitudinally of the sheet member inwardly disposed in the crotch portion and having opposite ends stitched to the sheet member in substantially equally spaced relation to the end edges of the sheet member, elastic strips mounted in the opposite side edges of the panel having opposite ends stitched to the sheet member at opposite ends of the panel, and a disposable pad of absorbent material fitted between the panel and the sheet member.

3. An infant's diaper comprising an elongated longitudinally U-shaped member of absorbent sheet material having an upwardly extended forward end edge, an upwardly extended rearward end edge and a central crotch portion of reduced width intermediate the end edges, the forward end edge having opposite side edges arcuately rearwardly extended and the rearward end edge having opposite side edges arcuately forwardly extended in overlying relation to the rearwardly

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extended side edges of the forward edge, a tube formed along the rearward end edge, a pair of spaced substantially erect straps mounted centrally on the forward edge of the member, a drawstring threaded through the tube having opposite ends each extended through the loop, said opposite ends being releasably tied intermediate the loops, a rectangular panel of absorbent sheet material of a transverse dimension approximating but less than the transverse dimension of the crotch portion of the sheet member and a length substantially less than the length of the sheet member positioned longitudinally of the sheet member inwardly disposed in the crotch portion and having opposite ends stitched to the sheet member in substantially equally spaced relation to the end edges of the sheet member, and elastic strips mounted in the opposite side edges of the panel having opposite ends stitched to the sheet member at opposite ends of the panel.

4. An infant's diaper comprising an elongated longitudinally U-shaped member of absorbent sheet material having an upwardly extended forward end edge, an upwardly extended rearward end edge and a central crotch portion of reduced width intermediate the end edges, the forward end edge having opposite side edges arcuately rearwardly extended and the rearward end edge having opposite side edges arcuately forwardly extended in overlying relation to the rearwardly extended side edges of the forward edge, means for releasably securing the side edges of the rearward end edge in said overlying relation to the side edges of the forward edge, a rectangular panel of absorbent sheet material of a transverse dimension of the crotch portion of the sheet member and a length substantially less than the length of the sheet member positioned longitudinally of the sheet member inwardly disposed in the crotch portion and having opposite ends secured to the sheet member in substantially parallel spaced relation to the end edges of the sheet member, elastic strips mounted in the opposite side edges of the panel having opposite ends secured to the sheet member at opposite ends of the panel, and a disposable pad of absorbent material fitted between the panel and the sheet member.

ALICE AMBARIAN.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
1,977,604	Alsop	Oct. 23, 1934
2,571,577	Howard	Oct. 16, 1951

FOREIGN PATENTS

Number	Country	Date
26,255	France	May 8, 1923 (1st addition to 514,933)