June 13, 1950 C. BAXMEYER ET AL 2,511,036

DIAPER

Filed May 2, 1946

FIG.2.

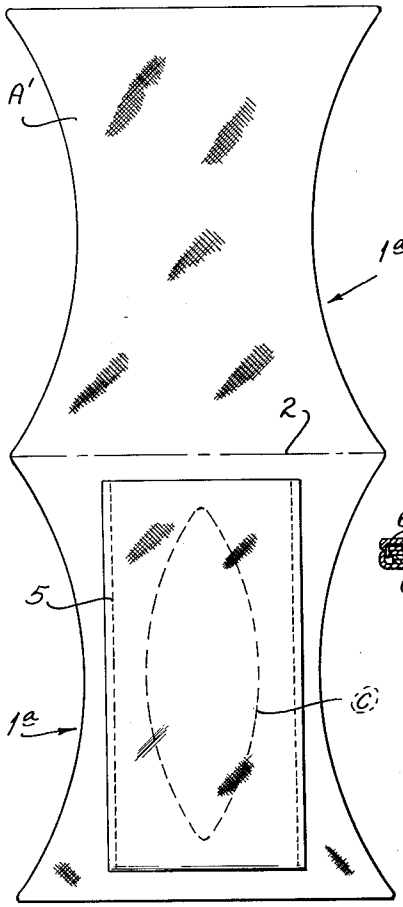


FIG.1.

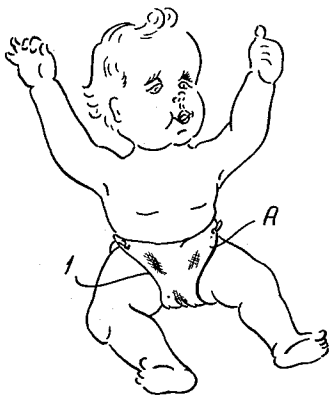


FIG.6.

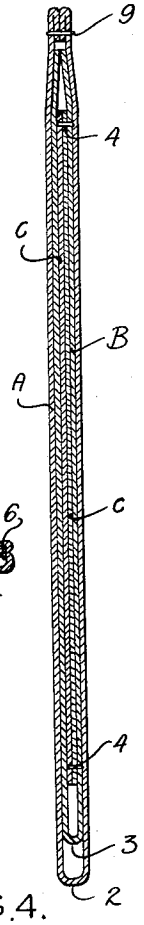


FIG.7.

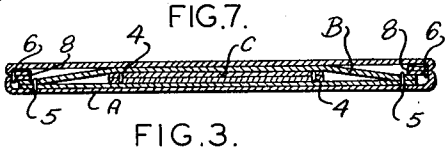


FIG.3.

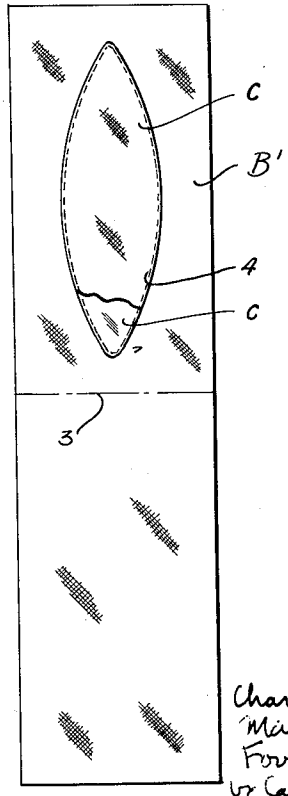


FIG.4.

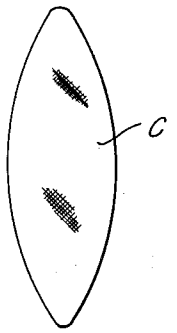
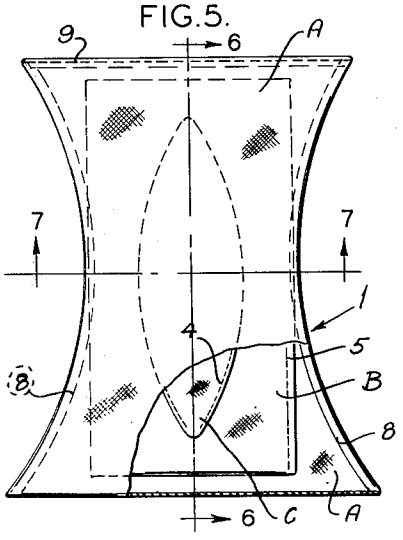


FIG.5.



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2,511,036

DIAPER

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2 Claims. (Cl. 128—284)

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This invention relates to diapers. The invention has for its principal object to devise a comfortable and durable form-fitting, multi-ply diaper which is highly absorbent and is easily applied and removed and which will accommodate uneven shrinkage of the parts without bunching or wadding. Other objects are to provide a neat and attractive diaper and to provide for quickly and easily assembling the parts thereof. The invention consists in the diaper and in the construction, combinations and arrangements of parts hereinafter described.

In the accompanying drawing, which forms part of this specification and wherein like symbols refer to like parts wherever they occur.

Fig. 1 is a front perspective view, showing an infant wearing a diaper embodying our invention,

Fig. 2 is a plan view of the blank from which the cover or envelope of the diaper is formed, showing the oval members attached to one fold of the folded liner member and said folded liner piece secured to one half of said blank.

Fig. 3 is a plan view of the liner member before folding and with the oval members secured to one half thereof,

Fig. 4 is a plan view of one of the oval members,

Fig. 5 is a plan view of the finished diaper,

Fig. 6 is an enlarged central longitudinal sectional view on the line 6—6 in Fig. 5; and

Fig. 7 is an enlarged vertical transverse sectional view on the line 7—7 in Fig. 5.

Our diaper or infant's breechcloth comprises a permanently closed cover or envelope A, a two-ply liner B located within said envelope and two inserts C interposed between the two plies of said liner, all of thin outing flannel or other suitable textile fabric. The cover A has straight ends and longitudinally concave side edges 1, the two-ply liner B is of rectangular shape and terminates short of the sides and ends of said cover, and the two inserts C are substantially oval or elliptical in shape and are disposed centrally of said liner and terminate short of the ends and sides thereof.

The bi-concave cover A is made from an elongated blank A^1 that is divided by a transverse medial fold line 2 into duplicate halves, each half having straight outer ends and concave side edges 1^a and being of slightly larger size than the finished diaper. The two-ply liner B is made from an elongated rectangular blank B^1 which is folded along a transverse medial line 3 to form the two plies of said liner.

The two bi-convex inserts C are centered on

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one half of the liner blank B^1 with their major axes disposed lengthwise thereof and are sewed or otherwise secured, as at 4, together and to said half, after which the liner blank is folded along the transverse medial fold line 3 thereof to locate said inserts between the two plies of the folded liner B. The folded rectangular liner B with the oval inserts C interposed between the two folds or plies thereof is then positioned centrally on one half of the cover blank A^1 and secured thereto along the longitudinal side margins only of said liner by means of rows of stitching 5 which secure the two plies or folds together and to said half of said cover blank. The two halves of the cover blank A^1 are then folded one upon another with the folded insert containing liner B preferably on the outside of the folded cover blank and are then secured together along both concave edges by rows of stitching 6. The cover is then turned inside out to bring the liner B and the side stitching on the inside of said cover, after which the edges of the cover at the open end thereof are turned in, as at 8, and secured together by a row of stitching 9 to form the finished diaper.

The hereinbefore diaper construction has numerous important advantages. The inwardly bowed longitudinal side edges of the diaper form a relatively narrow crotch engaging intermediate portion and flaring end portions which provide a snug fit at the crotch and around the thighs without restricting leg movement and enable the diaper to be quickly and easily secured in place merely by pinning the triangular corners of the diaper together on opposite sides of the waistline. The diaper is of pleasing appearance and of durable and compact construction and is rendered highly absorbent in the region of the crotch by the six plies formed by the folded cover and liner and the two oval-shaped inserts. The oval inserts are secured to one fold only of the folded liner and the two folds of the liner are secured to one fold only of the cover along their longitudinal side edges only, thus preventing bunching or wadding of the plies from uneven shrinkage due to washing.

The seams are all located inside the diaper and thus provide smooth edges which prevent chafing and irritation. The diaper may be applied without folding; and pressing or ironing is unnecessary, as all of the parts are firmly held in place. The diaper provides maximum strength and absorption at the necessary places; and it is of gradually reduced thickness from its middle to its sides and ends, thereby providing thin, comfort-

able form-fitting portions around the waist and legs of the wearer.

The hereinbefore diaper admits of considerable modification without departing from the invention. Therefore, we do not wish to be limited to the precise construction shown and described.

What we claim is:

1. A multi-ply diaper comprising a permanently closed one-piece elongated envelope having straight ends, concave side edges and pointed corners, a one-piece strip folded upon itself to form an elongated two-ply rectangular liner permanently enclosed with said envelope, a substantially oval-shaped insert located between the two plies of said liner and permanently secured to one ply only of said liner, said plies of said liner being permanently secured along its longitudinal side edges only together and to one wall only of said envelope, said liner terminating short of the side and end edges of said cover and said oval-shaped inserts terminating short of the sides and ends of said liner.

2. A multi-ply diaper comprising an elongated blank whose side edges are longitudinally concave from the ends of said blank to points midway of said ends and the blank is folded upon itself midway of its length and the folded portion permanently secured together along said ends and said concave side edges to form a permanently closed elongated envelope with concave longitudinal side edges and pointed corners, an elongated rectangular blank folded upon itself midway of its ends to form an elongated rectangular two-ply liner, and two superimposed substantially oval-shaped inserts extending longitudinally of said liner between the two plies thereof and permanently secured together and to one only of said plies, said liner and inserts being enclosed within said envelope and the two plies of said liner being permanently secured together and to one wall only of said envelope along the longitudinal side edges only of said liner, said liner terminating short of the sides and ends of said envelope and said oval-shaped inserts terminating short of the sides and ends of said liner.

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