ABSTRACT: A multilayer diaper having a belt connected thereto which secures the main section of the diaper around an infant's bottom by means of mating "Velcro" plush pile fasteners that are sewn to the belt and main section of the diaper.
The present invention relates to diaper constructions.

During the present time, most diapers in use must be fastened by means of safety pins. These pins are difficult to insert, particularly with a moving infant, and at times the inserted pins open and cause a dangerous condition. It is generally desirable to place rubber pants over a diaper so that changing an infant's diapers several times a day with cloth diapers and covering pants becomes a time-consuming and inconvenient process.

The present invention is related to a diaper having a single construction multilayer main section with overlapping soft flannel pieces, the construction enclosing a water-impervious material such as a plastic sheet. Use of a moisture barrier obviates the necessity of using separate rubber pants.

The present invention utilizes “Velcro” plush pile fasteners for presenting a smooth unobstructing appearance that in no way irritates the infant. Use of the “Velcro” fasteners enables a mother to change an infant rapidly and in a convenient manner. An integrally sewn fabric belt is attached to the main section of the diaper and the “Velcro” fasteners are attached to both the belt and the main section so that the belt can secure the main section around the infant. An additional benefit derived from utilization of an embracing belt resides in the fact that the belt exerts slight abdominal pressure on the infant thereby inhibiting abdominal hernia.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals after to like parts throughout, and in which:

FIG. 1 is a perspective view illustrating the present diaper construction as finally folded.

FIG. 2 is a sectional view taken along a plane passing through section line 2—2 of FIG. 1.

FIG. 3 is a plan view illustrating the diaper construction in an open or unfolded condition.

Referring to the figures, the present diaper construction includes a main section 10 composed of two overlapping soft cloth layers, preferably flannel, as indicated by 12 and 14 in FIG. 2. An intermediate inserted plastic or other waterproof sheet 16 provides a moisture barrier. In a preferred embodiment of the invention, the layers are sewn together by a marginal seam 20.

Considering the main section 10, a generally torus-shaped section includes front and rear portions 24 and 22, respectively. The middle of the main section 10 is inwardly contoured as indicated by 26 and after folding the diaper along a foldline connecting the contours, the diaper material snugly engages the infant’s bottom. When in the folded position as seen in FIG. 1, the straight outer edges 28 and 30 of the main section are positioned in overlapping relation. Rectangular cloth strips 32 and 34, preferably made of flannel, extend laterally outwardly from the rear portion 22 of the diaper main section 10 at points adjacent edge 28. The belt strips 32 and 34 are each composed of two cloth layers sewn together by marginal seams 36.

A first plush pile strip 38, such as manufactured by the Velcro Corporation and marketed as “Velcro”, is sewn to the underside of the front diaper portion 24 as indicated in FIG. 3. A second fastener strip 40 is sewn to the outer end of belt band 32, the “Velcro” strips 40 and 38 being adapted for mutual securement. A third “Velcro” strip 42 is sewn to the underside of the belt band 32 at the inward end thereof and after being folded, the strip 42 faces outwardly to be engaged by a fourth “Velcro” strip 44 sewn on the upwardly facing side of the left belt band 34, as illustrated in FIG. 2. Wherein the aforementioned strips have been properly fastened, the diaper takes on the finished appearance shown in FIG. 1. As will be noted from FIG. 2, the “Velcro” fasteners do not touch the infant’s skin.

The belt bands 32 and 34 are designed to snugly engage an infant’s abdominal area and apply mild forces which inhibit abdominal hernia.

The construction of the present diaper is preferably washable and long lasting. If desired, additional padding may be added. Therefore, by utilizing the present invention, a convenient and sanitary diaper construction is offered to mothers.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A diaper construction comprising a main section which is generally rectangular in the unfolded condition and which may be folded into front and rear portions for covering an infant’s bottom, infant-embracing belt means extending transversely from said rear portion including a first belt portion extending from one corner of said rear portion and a second belt portion extending from the other corner of said rear portion in alignment with said first belt portion, first and second plush-pile-fastening means on the inner end surfaces of each of said first and second belt portions respectively, third plush-pile-fastening means on the outer surface of said second belt portion near said other corner of the rear portion and remote from the end of said second belt portion, a fourth plush-pile-fastening means on the outer surface of a corner of said front portion which is diagonally opposite said other corner when in said folded condition, said second belt portion extending around said front portion and overlapping said fourth plush-pile-fastening means whereby said second plush-pile-fastening means engages said fourth plush-pile-fastening means, and said first belt portion extending around said front portion and overlapping a substantial part of said second belt portion and completely overlapping said third plush pile fastening means whereby said first plush-pile-fastening means engages said second plush-pile-fastening means, all of said plush-pile-fastening means being covered by said first and second belt portions together, thereby providing smooth outer surfaces, a relatively firm belt being formed which exerts mild restraining forces on an infant’s abdominal area for inhibiting abdominal hernia.

2. The structure of claim 1 wherein said first, second, third and fourth plush-pile-fastening means include circumferentially elongated plush pile areas to enable adjustment of the circumferential extent of the diaper.

3. The structure as set forth in claim 1 wherein said main section is contoured inwardly at a folding line to effect snug contact between the diaper and an embraces infant.

4. The structure set forth in claim 1 wherein said main portion includes inner and outer cloth layers and a moisture barrier enclosed therebetween.
UNITED STATES PATENT OFFICE
CERTIFICATE OF CORRECTION

Patent No. 3,618,608 Dated November 9, 1971

Inventor(s) Mary E. Brink

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

In the heading, change inventor's address to --4607 W. Morten Ave.

Claim 1, line 21, change "second" (first occurrence) to --said--.

Claim 2, line 1, change "8" to --1--.

Signed and sealed this 18th day of April 1972.

(SEAL)
Attest:

EDWARD M. FLETCHER, JR.
Attesting Officer

ROBERT GOTTSCHALK
Commissioner of Patents