July 25, 1967 C. E. WHALEN 3,332,423

BABY WATERPROOF PANTS

Filed April 20, 1964

Fig. 1.

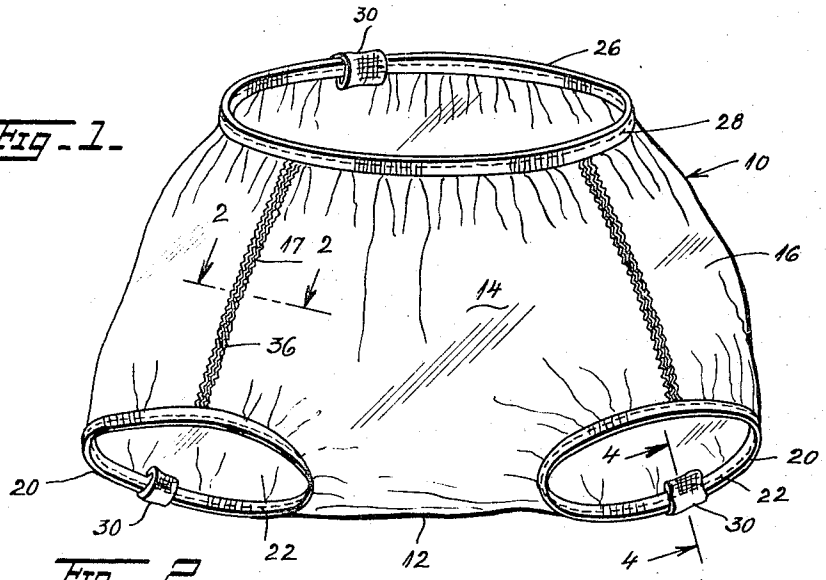


Fig. 2.

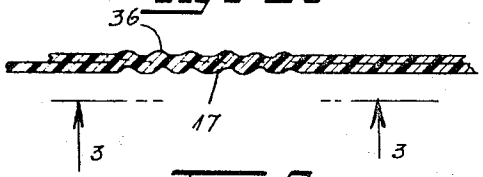


Fig. 3.

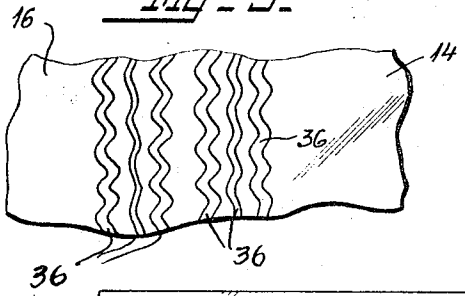


Fig. 4.

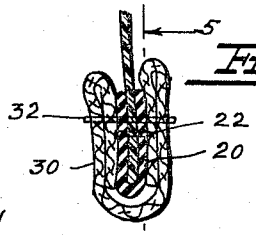


Fig. 5.

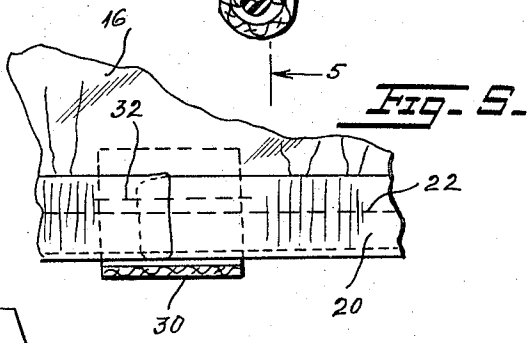
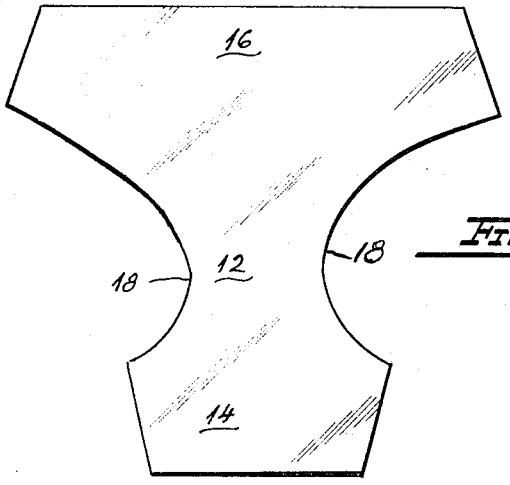


Fig. 6.



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3,332,423

BABY WATERPROOF PANTS

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1 Claim. (Cl. 128—288)

This invention relates generally to infants' wearing apparel and more particularly to new and useful improvements in a baby's waterproof pants.

With the usual type of trunks or pants, it has been customary to shape and form the body of the pants providing elastic bands around the waist and leg holes and providing seams with single seals along the sides from the waistband to the leg holes. This usually results in unnaturally shaped pants making the pants unsightly. Furthemore, the wear and tear on the elastic bands tend to fray the end edges of the elastic bands where the ends are joined and further, the outwardly shearing pressure at the sides of the body of the infant has a tendency to tear the seams apart.

With this in mind, it is the principal object of the present invention to provide a baby's waterproof pants that eliminates all of the foregoing deficiencies.

Another object of the invention is to provide a baby's pants wherein the fullness of the material of the body of the pants is located at the back and side thereby shaping the pants to fit the form of the body of the baby.

A further object of the invention is to provide a baby's pants wherein the seams joining the panels are positioned inwardly of the sides of the front of the garment and wherein the seams are constituted by triple flat seals.

Still another object of the invention is to provide a baby's pants wherein the waist encircling and leg encircling elastic bands are protected at their end joints from raveling by non-stretchable tabs to keep the band ends from being raveled and frayed.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claim in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure:

FIG. 1 is a front elevational view of a baby's pants embodying the present invention as it looks when worn.

FIG. 2 is an enlarged horizontal sectional view taken on the line 2—2 of FIG. 1.

FIG. 3 is a plan view as seen from the line 3—3 of FIG. 2.

FIG. 4 is an enlarged vertical sectional view taken on the line 4—4 of FIG. 1.

FIG. 5 is a fragmentary vertical sectional view taken on the line 5—5 of FIG. 4.

FIG. 6 is a plan view of the blank from which the body of the baby's pants of FIG. 1 is made.

Referring now to the various views of the drawings wherein similar reference numerals are used to indicate similar parts, in FIG. 1, a baby's pants made in accordance with the present invention is illustrated and designated generally at **10**. The pants is formed of suitable waterproof fabric or water-resistant or rubberized material, such material as flexible vinyl plastic film, and when expanded is generally frusto-conical shape in plan view.

The pants includes a narrow crotch portion **12** merging into a front panel portion **14** and into a rear panel portion **16**. It will be noted from FIG. 6 that the rear panel portion **16** is approximately twice as long transversely as the front panel portion **14**. The merging edges between the front panel portion and the rear panel portion are each curved inwardly, along the narrow crotch portion as at **18**, in order to engage snugly around the upper portions of the legs of the wearer without bagginess. Elastic fabric bands **20** are secured along these inwardly curved edges by folding the band **20** longitudinally over the curved edges and by a row of stitching **22**, passing through the edges and bands, FIGS. 1 and 5.

An elastic fabric tensioning fabric band **26** is secured along the free edge of the back portion **16** and the free edge of the front portion **14** in a manner similar to bands **20** by folding the band **26** lengthwise over the edges of the free edges of the back and front panel portions and by a row of stitching **28** passing through the edges and the band **26**.

As more clearly illustrated in FIGS. 1 and 2, when the blank for the body of the pants is folded, the meeting side edges between the front panel portion **14** and the rear panel portion **16** are lapped and the lapped areas heat-sealed together as indicated at **17** by placing the areas in a heat-sealing device, such as an electronic sealer, which supplies heat energy in the area to be sealed. The sealer should preferably seal along a zigzag or undulating line. The exact degree of heat will depend upon the composition and dimensions of the materials, comparable to that used for heat-sealing of two vinyl surfaces. When the heat-sealing operation is completed, the two overlapped edges of the material will have been joined tenaciously together at the interface of the two overlapped edges by a flat wide seal along a zig-zag or undulating line as indicated at **36** in FIGS. 1, 2 and 3.

An important feature of the present invention is means for preventing the joined end edges of the elastic bands **26** and **20** at the waist and leg openings, respectively, from becoming raveled and frayed. For this purpose, an elongated rectangular-shaped tab **30** of nonstretchable tape is folded upon itself and in folded condition extended across the waistband and across the leg opening over and spanning the joined ends of the elastic bands **26** and **20**, respectively. In this folded condition, the tab is secured in place by a row of stitching **32**. This affords complete protection against damage of any sort to the meeting and joined ends of the elastic bands.

While I have illustrated and described the preferred embodiment of my invention, it is to be understood that I do not limit myself to the precise construction herein disclosed and that various changes and modifications may be made within the scope of the invention as defined in the appended claim.

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

In a waterproof baby pants, a body having front and rear panels, said panels defining an open top constituting a waist opening and defining a pair of spaced openings at the bottom, at the sides and front, constituting leg openings, an elastic band around the waist opening, elastic bands around the leg openings, seams extending from the waistband to the bands around the leg openings inwardly of the sides of the body, said seams being heat and pres-

sure sealed, said seams being flat, wide and extending along zigzag lines, said body being formed of vinyl plastic film material, and elongated rectangular-shaped tabs folded and stitched across the joined ends of the elastic bands for protecting said ends from raveling and the like.

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