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H. R. RYAN
INFANT'S GARMENT
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2,511,809

Fig. 1

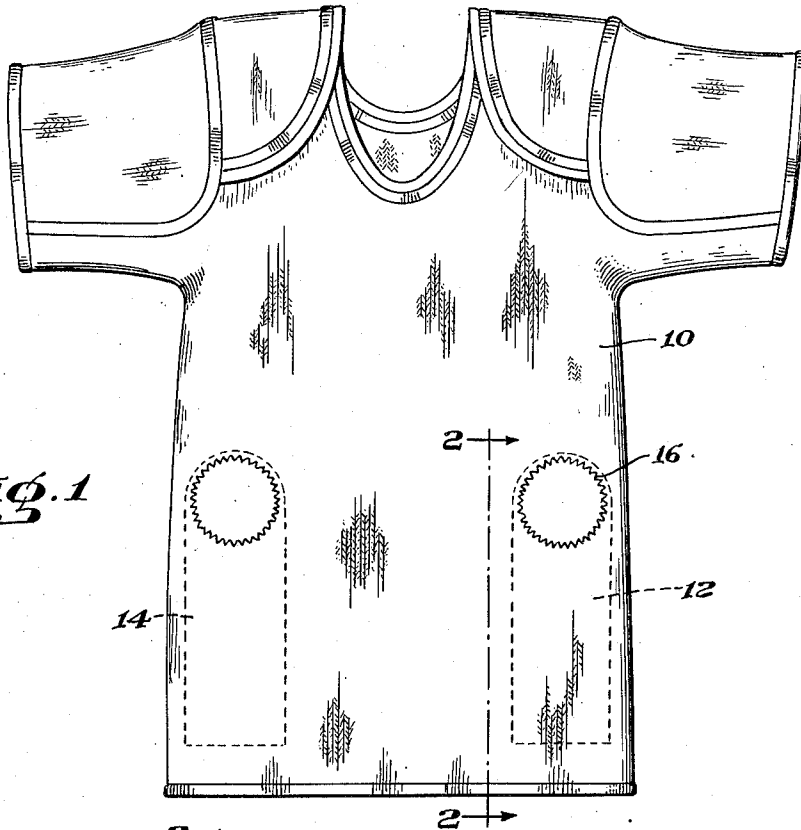


Fig. 2

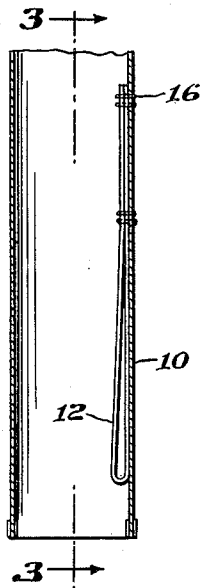
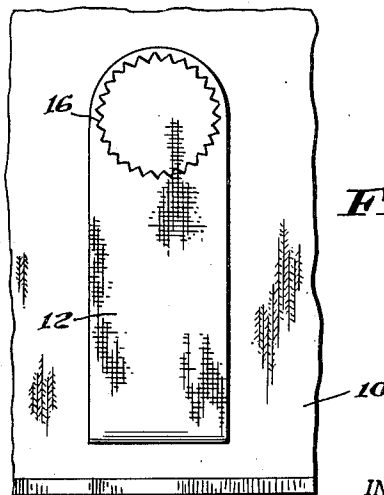


Fig. 3



INVENTOR.

BY *Harriet R. Ryan*
Randall V. Patnick
ATTORNEY

UNITED STATES PATENT OFFICE

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Harriet R. Ryan, Durham, N. H., assignor to The William Carter Company, Needham Heights, Mass., a corporation of Massachusetts

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3 Claims. (Cl. 2—112)

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This invention relates to infants' garments adapted for wear by diaper-age children.

The invention has for a principal object the provision in an infant's shirt-type garment formed of knit material of construction permitting a diaper to be attached to the shirt by conventional safety-pins without passing the pins through the knit material, thus avoiding damage to the knit body fabric of the shirt through repeated piercing of the knit material by safety pins. A further object is to provide a garment wherein such attachment of the diaper to the shirt by safety-pins will not interfere with the orderly fit of the shirt extending downwardly of the child's body and over the underlying diaper. A further main object of the invention is to provide a garment wherein the knit fabric of the body portion of the garment is relieved not only from the destructive action of safety pins which are anchored in the knit material itself, but also from destructive hole-producing effects of stresses set up by tensions produced by the child's activity and transmitted to the knit shirt fabric through the points of attachment of the diaper to the shirt.

These and other objects of the invention and the advantages thereof will in part be more fully related and in part be apparent from the following description of one embodiment of the invention which is shown in the accompanying drawings wherein

Fig. 1 is a front view of a garment of the invention;

Fig. 2 is a detail cross-sectional view taken along the line 2—2 of Fig. 1; and

Fig. 3 is an interior detail view of the front section of the garment shown in Fig. 1 and taken along the line 3—3 of Fig. 2.

Fig. 1 includes a representation of a commercially available type of infant's shirt having added thereto the structure of the present invention. The shoulder and arm construction shown is similar to that described in U. S. Patent No. 2,035,377, and reference is made to said patent for a complete description of the illustrated shoulder and arm construction which forms no part of this invention but is used merely as illustrative of one type of shirt wherein the present invention may be used to advantage.

For the purposes of a description of this invention it will suffice to point out that the body portion 10 of the shirt of Fig. 1, is formed wholly of small gauge tubular knit fabric, for example, of cotton or of a mixture of cotton with wool, rayon or other yarn. Because of the inherent

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nature of knit fabric, the large, sharp safety-pins that are recommended for diaper use tend to rupture the yarn and weaken it if passed repeatedly directly through the fabric. In addition, the stresses set up by activity of the child and transmitted directly from the diaper to the shirt through the safety-pin, cause eventual tearing of the yarn with the development of holes in the fabric, which rapidly enlarge due to the "running" characteristic of knit materials. All mothers have encountered this drawback, and their complaints have led to the addition of knit fabric reinforcing patches by some manufacturers. However, these patches are not a cure and merely extend to some degree the life of the underlying fabric.

In accordance with this invention, I provide on either side of the center line of the front panel 10 of the garment two internal tabs 12 and 14. Each of these tabs is preferably formed of a strip of woven fabric looped over on itself with the free ends extending upwardly into the waistline zone and the looped portion extending downwardly as shown in Fig. 2 to a point short of the bottom of the garment. The upper free ends of the tabs 12 and 14 are brought into face-to-face relation and stitched by through-and-through stitching to the inside of the knit body fabric along substantial circular lines of stitching 16 having a diameter substantially equivalent to the width of the woven fabric strips 12 and 14. To improve the finish the upper edges of the woven strips 12 and 14 are rounded as shown to follow generally the contour of the lines of stitching 16.

Among the advantages of this construction it will be seen that the looped portions of the tabs 12 and 14 provide adequate areas of cloth to receive and retain the safety-pins at either side of the diaper. Because the tabs are on the inside of the shirt the marginal lower portion of the shirt below the stitching 16 may be pulled downwardly and smoothly over the underlying diaper and yet the safety-pins are readily accessible by pulling up the marginal portion of the shirt; the safety-pins need never be placed through the knit fabric of the body portion 10. Lastly, because of the non-rectilinear contour of the stitching 16 any stresses which are transmitted from the diaper through the safety-pins to the tabs 12 or 14 and thence to the shirt, are distributed by the stitching 16 in a non-rectilinear manner so that the pull will not be concentrated on any one loop or strand section of the knit fabric yarn. In extensive wear tests, it has been demonstrated that the non-rectilinear circular

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stitching definitely retards the development of holes and destruction of the knit fabric.

A highly improved infant's shirt adapted for use where doctors recommend safety-pin attachment between shirt and diaper is thus provided. 5

I claim:

1. An infant's garment adapted for the attachment of diapers thereto comprising, in combination with a finished body portion of knit fabric having the wales thereof extending vertically of 10 said garment, a pair of diaper-attaching tabs, one on either side of the front center line of the garment, each formed of a narrow strip of fabric extending upwardly inside the garment to the waistline zone only, the lower ends of said tabs 15 being unattached to said body portion, the upper ends of said tabs being anchored inside the body portion in the waistline zone by substantially completely non-rectilinear lines of stitching extending through-and-through said body fabric 20 and upper tab ends and adapted to distribute stresses transmitted to said knit fabric from said tabs through said stitching over a substantial number of said wales to minimize hole-forming concentration of tension at localized wales of said body portion knit fabric. 25

2. An infant's garment adapted for the attachment of diapers thereto comprising, in combination with a finished body portion of knit fabric having the wales thereof extending vertically of 30 said garment, a pair of diaper-attaching tabs, one on either side of the front center line of the

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garment, each formed of a narrow strip of fabric extending upwardly inside the garment to the waistline zone only, the lower ends of said tabs being unattached to said body portion, the upper ends of said tabs being anchored inside the body portion in the waistline zone by substantially circular lines of stitching extending through-and-through said body fabric and upper tab ends and adapted to distribute stresses transmitted to said knit fabric from said tabs through said stitching over a substantial number of said wales to minimize hole-forming concentration of tension at localized wales of said body portion knit fabric.

3. An infant's garment as claimed in claim 2, wherein each circular line of stitching has a diameter substantially equivalent to the width of the tab which it anchors.

HARRIET R. RYAN.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
277,726	Higgins	May 15, 1883
1,110,459	Royce	Sept. 15, 1914
1,347,400	Overshire	July 20, 1920
1,488,407	Redmond	Mar. 25, 1924
1,495,134	Redmond	May 20, 1924
1,998,040	Austin	Apr. 16, 1935
2,035,052	Darling	Mar. 24, 1936