

July 29, 1958

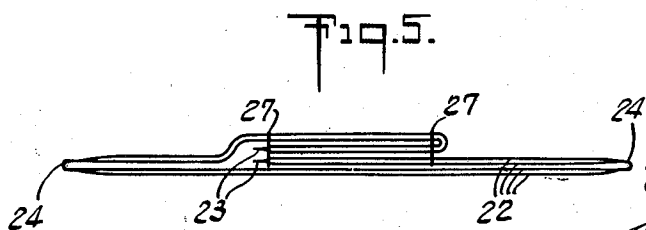
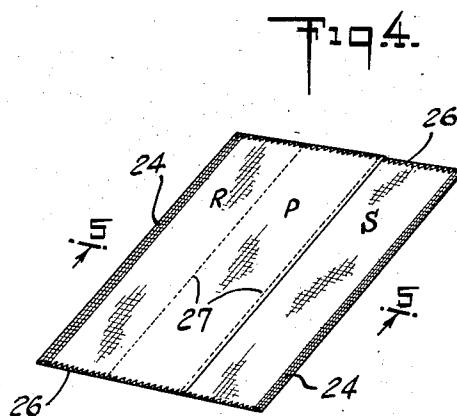
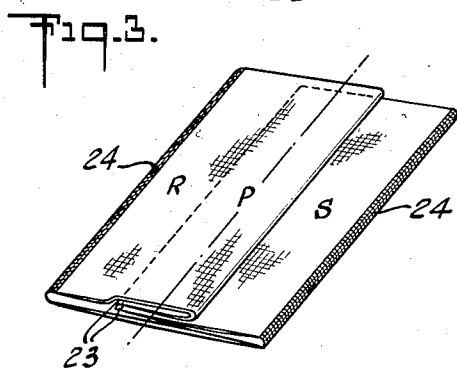
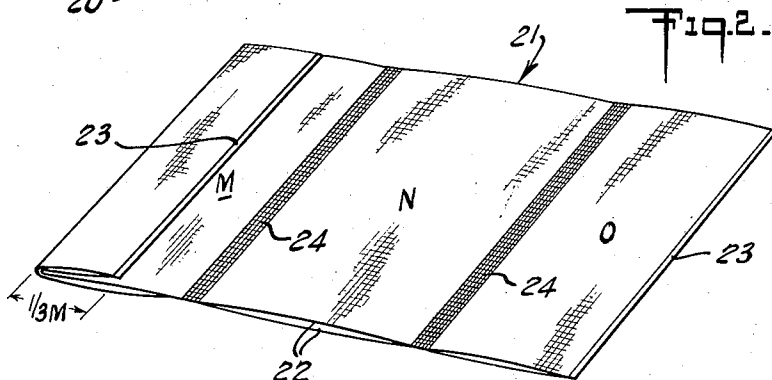
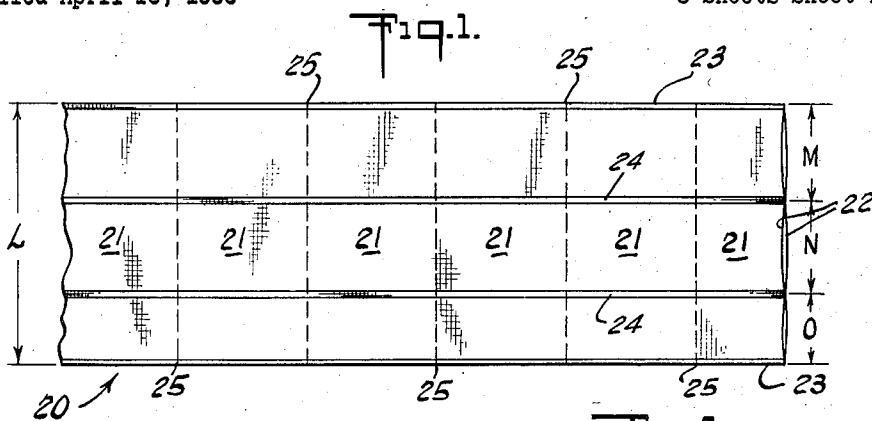
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2,845,069

DIAPER

Filed April 16, 1956

3 Sheets-Sheet 1



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3 Sheets-Sheet 2

Fig. 6.

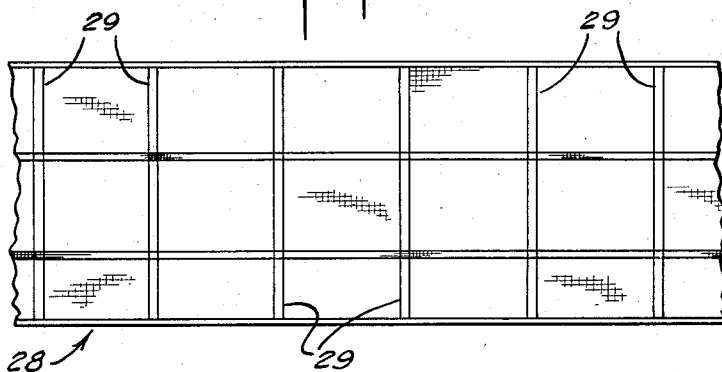


Fig. 7.

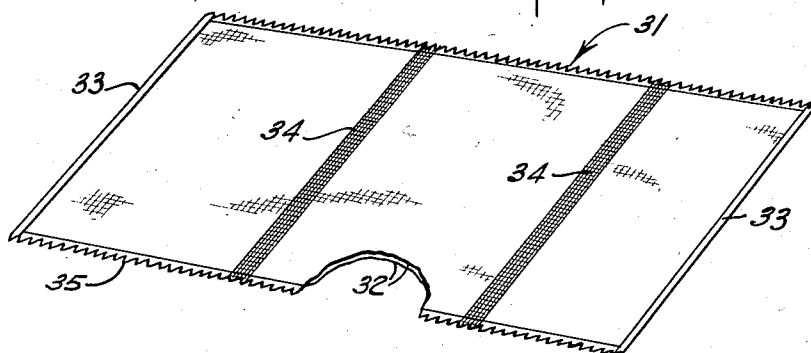


Fig. 8.

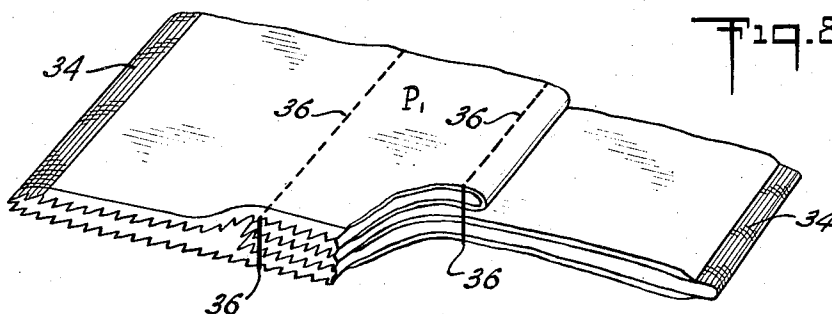


Fig. 9.



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Fig. 10.

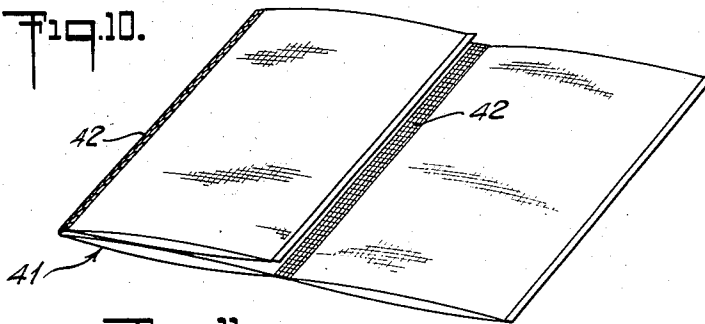


Fig. 11.

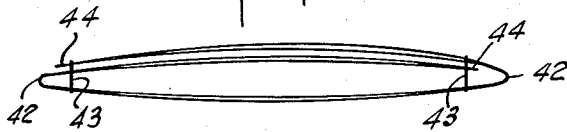


Fig. 12.

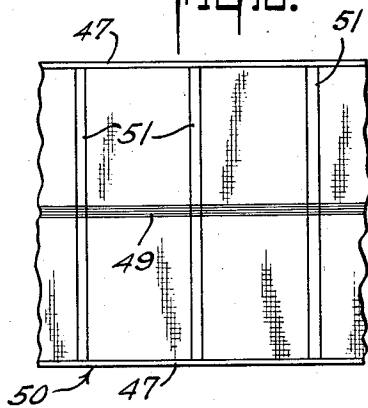


Fig. 13.

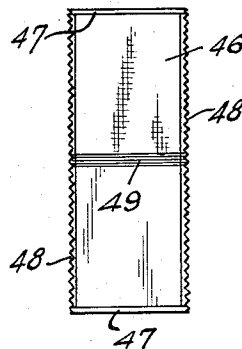


Fig. 15.

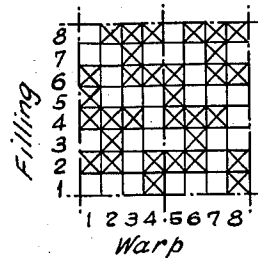


Fig. 14.

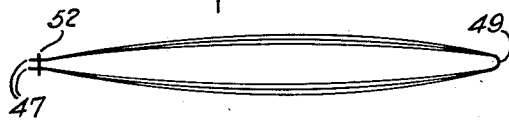


Fig. 17.

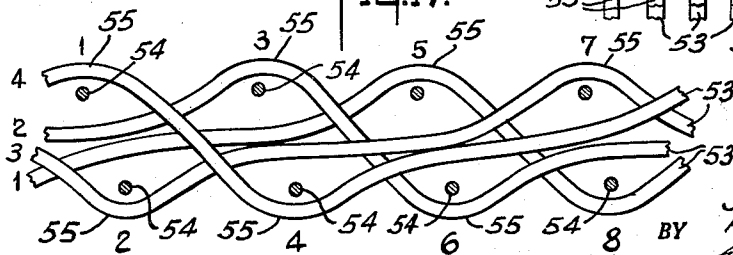
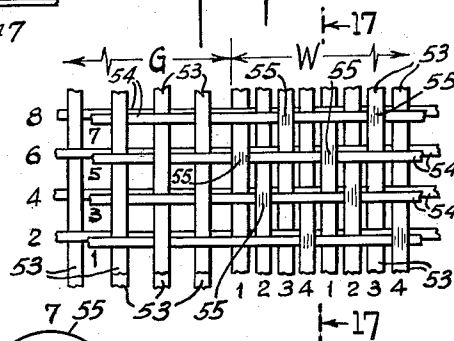


Fig. 16.



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DIAPER

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Application April 16, 1956, Serial No. 578,339

14 Claims. (Cl. 128—284)

The present invention relates to prefolded woven diapers, more particularly to such diapers which comprise several layers of gauze diaper cloth.

Conventionally, diapers have been woven in the form of a plurality of layers of a relatively light and open gauze-like fabric which often is called gauze diaper cloth or gauze diaper fabric. These diapers normally are applied to babies and young children in the form of a rectangular pad which is folded from a longer rectangular diaper. Typically, the diaper is folded transversely to superimpose thirds of its area to form a diaper pad having a length corresponding to the width of the diaper prior to folding. Depending upon the size of the child, the diaper is folded more or less than three times to increase or decrease the number of plies and vary the size of the diaper pad.

When a two layer gauze diaper of this type is folded in thirds, as described above, a six layer diaper pad is formed which possesses excellent softness and hand, high absorbency, superior drying characteristics, and the like. These advantages may be due to the greater porosity openness, and fiber exposure of the gauze diaper fabric, as compared with heavier more closely woven absorbent fabrics, as well as the improved fluffiness, bulk and capillary storage capacity it provides when folded in the form of a multiple layer pad.

In order to facilitate diapering, as well as handling and washing by diaper services and consumers, gauze diapers have been folded by diaper manufacturers and sewn or otherwise secured in the folded position to provide a prefolded diaper or diaper pad which is ready for use. Such a diaper is the subject of Gannon Patent 2,600,634, granted June 17, 1952. While prefolded diapers as hitherto made have received wide acceptance both by consumers and diaper services, they have been subject wearing out first along their exposed folded edges. Apparently, the exposed outermost layer or layers of the relatively thin gauze diaper cloth wear out and fray along the folds. Since the layers are fixed in position due to prefolding, certain yarns remain exposed to concentrated wear along the folds during use and during washing and drying. Normally, it is the yarns bending around the folds which are subject to most of the wear.

We have invented a prefolded gauze diaper, of the type described, which does not wear out along the folded edge or edges as described above. This diaper retains all of the advantages of the prior art prefolded gauze diapers, possessing excellent softness and hand, even along its folded edges, as well as high absorbency, better drying characteristics, and the like.

More specifically, this invention contemplates a prefolded gauze diaper which has a relatively high count wearing strip positioned at each of the exposed folds of the diaper. Preferably, the prefolded diaper is formed from a diaper blank woven in the form of a rectangle comprising a plurality of layers of gauze diaper fabric and a single-layer wearing strip or a plurality of such

strips woven integral with the layers and extending substantially parallel to the transverse edges of the diaper blank. Normally, the end count in the wearing strip or strips are at least as great as the total end counts of the layers or, if the layers are of equal weight, the end count of one layer times the number of layers. Preferably, the warp count in the wearing strip is even greater than this, as will be explained hereinafter. Each wearing strip is so located that, when the diaper is folded, it is positioned at an exposed folded edge of the resulting diaper pad. The pad is then sewn or otherwise secured together as folded to retain each strip in this position during the life of the diaper.

Preferably, the folded wearing strips are designed to provide softness and flexibility along the edge of the diaper as well as to minimize wear. A certain amount of looseness and flexibility is desirable to dissipate stresses which tend to concentrate at the edges of the strip where the strip joins the layers of gauze diaper fabric. For instance, if a relatively stiff, tightly woven, wearing strip is employed, it may tend to fail where stresses concentrate at the edges of the strip.

In our preferred form of diaper, the wearing strip is relatively soft, flexible, and wear-resistant. Both warp and filling floats are employed to provide a relatively high count fabric which is soft and sufficiently flexible to prevent concentration of stresses and fatigue when the strip is folded. Since it is the filling yarns which are bent around the fold and therefore subject to most of the wear, the warp yarns are exposed beyond the filling yarns or arranged to cover the filling yarns at the outer face of the fabric, thereby providing a wear-resistant fold. In general, warp yarns considerably heavier than the filling yarns are employed in weaving the strip, and the heavier warp yarns preferably cover the filling yarns to provide a wear-resistant surface. It is also preferred that additional warp yarns be included in excess of the total warp count of the diaper to enhance coverage of the filling by the warp and thereby further improve wear-resistance.

Other features and advantages of the invention will be apparent to one skilled in the art from the following description and claims taken together with the drawings, wherein:

Fig. 1 is a fragmental schematic plan view of a strip of diaper blanks according to one embodiment of the invention.

Fig. 2 is a schematic view in perspective of a diaper blank according to the embodiment of Fig. 1, with one end folded over.

Fig. 3 is a schematic view in perspective of a prefolded diaper according to the embodiment of Fig. 1 prior to sewing.

Fig. 4 is a similar view showing the diaper of Fig. 3 after it is sewn in prefolded form.

Fig. 5 is a schematic sectional view along the line 5—5 of Fig. 4.

Fig. 6 is a fragmental schematic plan view, similar to Fig. 1, of a strip of diaper blanks according to a somewhat different embodiment of the invention.

Fig. 7 is a schematic view in perspective of a diaper blank according to the embodiment of Fig. 6.

Fig. 8 is a schematic view in perspective of a portion of a prefolded diaper according to the embodiment of Fig. 6, partly broken away to show the multiple layers of gauze diaper fabric.

Fig. 9 is a schematic sectional view taken transversely of the diaper pad showing the diaper blank of the embodiment of Fig. 6 folded somewhat differently.

Fig. 10 is a schematic view in perspective of a partially folded diaper blank according to another embodiment of the invention.

Fig. 11 is a schematic sectional view of a prefolded

diaper according to the embodiment of Fig. 10 taken along a line extending transversely of the diaper.

Fig. 12 is a fragmental schematic plan view of a strip of diaper blanks according to a still different embodiment of the invention.

Fig. 13 is a plan view of a single diaper blank according to the embodiment of Fig. 12.

Fig. 14 is a schematic sectional view of a prefolded diaper according to the embodiment of Fig. 12 taken along a line extending longitudinally of the diaper.

Fig. 15 is a weave diagram for the wearing strip portion of a diaper according to one embodiment of the invention, showing two repeats of the weave pattern in the warp direction.

Fig. 16 is an enlarged schematic plan view of a portion of a diaper according to the invention showing the wearing strip weave according to the embodiment of Fig. 15 compared with that of the adjacent layers of gauze diaper cloth.

Fig. 17 is an even more greatly enlarged schematic view partly in section and partly in elevation taken along the line 17—17 of Fig. 16.

Referring to Figs. 1-5 of the drawings, there are shown a blank and a prefolded diaper, folded in a manner similar to that described and shown in Gannon Patent 2,600,634, but embodying the present invention. The diaper of Figs. 1-5 consists of an elongated diaper blank 21 comprising two layers of gauze diaper fabric 22 connected along its transverse edges by selvages 23 and intermediate these edges by a pair of transversely extending single layer wearing strips 24 woven integral with the two layers. The wearing strips are spaced from one another in such a way that when the blank is folded to form a prefolded diaper pad, as in Figs. 3-5, they are positioned along the folded edges of the resulting pad.

As mentioned hereinbefore, gauze diaper fabric is relatively light, open, and gauze-like. Normally, it is either plain woven, or woven in a birdseye pattern. In diapers according to this invention, it is preferred that the end count of the individual layers of gauze diaper fabric be between about 32 warp x 28 filling ends per inch and 48 warp x 44 filling ends per inch, and that yarn numbers be between about 22s and 28s in the warp and 32s and 38s in the filling. In general, the twist multiplier of both the warp and the filling yarns is less than about 4.75. For example, gauze diaper fabric having an end count of 40 warp x 38 filling ends per inch and 25s yarns in the warp and 35s in the filling, both warp and filling yarns having twist multipliers below 4.75, is considered particularly suitable for use in the individual layers of diapers according to this invention.

In Fig. 1 there are shown diaper blanks 21 woven together in the form of a continuous strip 20 having a width L which corresponds to the length of a blank when it is cut from the strip. At the edges of the strip 20 are the selvages 23 which may be woven continuously by conventional techniques, and extending parallel to the selvages, in the warp direction of the fabric, and spaced inwardly therefrom are the single layer wearing strips 24 integrally woven into the blanks in accordance with the present invention, these wearing strips also being woven continuously.

The two layers of gauze diaper fabric 22 join at the selvages 23 and at each of the wearing strips 24 to form three continuous flat tubular absorbent panels M, N, and O which also extend in the longitudinal or warp direction of the strip. The panels are woven integral with the wearing strips 24 and all of the filling yarns of both the layers of gauze pass through the wearing strips with the result that the filling count in the wearing strip equals the total filling count of the two layers. Normally, the warp end count in the wearing strips 24 is at least as great as the total warp count of the two gauze layers 22. Preferably, as described more fully

hereinafter, it is substantially greater than the total warp count of the two layers. Thus, relatively high count wearing strips are provided.

Diaper blanks 21 are formed from the continuous strip 20 by cutting along the dotted lines 25 extending transversely of the strip in the filling direction. The selvage edges of the strip thus become the transverse edges of the diaper blanks. As shown in Figs. 2-5, a prefolded diaper may be made by folding such a blank 21 to superimpose the panels M, N, and O after first folding over a portion of panel M, and thus form a rectangular diaper pad having a longitudinally extending centrally disposed eight ply panel P and four ply panels R and S on each side of the centrally disposed eight ply panel extending to each folded edge of the diaper. The wearing strips 24 are so arranged in the diaper blank that when it is folded they are positioned at the exposed folded edges of the diaper pad, preferably with the folds bisecting the strips.

The formation of this type of prefolded structure is described in the aforementioned Gannon patent. Proceeding from the top selvage in Fig. 1 downwardly, a prefolded diaper having a centrally disposed eight ply panel $\frac{1}{3}$ the width of the diaper pad may be formed by spacing the wearing strips 24 from the top selvage and from one another by amounts approximately equal to $\frac{3}{8}L$, $\frac{3}{8}L$, and $\frac{1}{4}L$, corresponding to the panels M, N, and O, respectively, where L is the width of the continuous strip 20 and the length of the diaper blank.

Where the resulting diaper pad is about twenty-one inches long and fifteen inches wide, it is preferred that the wearing strips be between about $\frac{3}{4}$ and $1\frac{1}{2}$ inches, advantageously about one inch in width. The strips should be sufficiently wide to assure that the exposed folds of the diaper may be located or positioned well within their area during manufacture. However, if they are too large, they might begin to detract from the absorbent areas wherein the presence of several layers of gauze diaper fabric provides many advantages. When the diaper blanks are cut from the strips as shown in Fig. 1 and the diaper pads are formed by folding as described, the diaper may be secured in the folded position by overedge or overlock stitching 26 along the transverse edges of the diaper and lock stitching 27 along the longitudinal edge of the central panel, as illustrated in Figs. 4 and 5.

In Figs. 6-9 there is shown a diaper similar to that of Figs. 1-5 except that single layer pinking bars 29 are integrally woven into the continuous strip 20. The pinking bars extend transversely of the strip, or longitudinally of the diaper blanks to be cut therefrom, and are spaced from one another in the warp direction of the strip so as to define diaper width. The pinking bars 29 can be plain woven, or special weaves, similar to that shown in British Patent 28,027 of 1904; Fig. 3 of Milnes 2,157,082; Figs. 4 and 6 of Snow 2,423,910; Fig. 17 of Walters 2,672,168; Figs. 11, 12, 21, and 22 of Walters 2,672,169 and Dangel et al. 2,713,359, may be employed. The weave used should be designed to allow all of the warp yarns, i. e., those from both layers of gauze diaper fabric, to be interwoven in the bar. Diaper blanks may be severed from the strip by cutting with pinking shears or the like through the pinking bars 29. The resulting diaper blank 31, which is illustrated in Fig. 7, comprises two layers of gauze diaper fabric 32 connected by selvages 33 along its transverse edges, single layer wearing strips 34 woven integral with the layers 32, parallel to these edges and spaced inwardly therefrom as in Figs. 1 and 2, and single layer pinked strips 35 at the longitudinal edges of the blank.

Fig. 8 illustrates this diaper in prefolded form with an eight ply central panel P₁ formed by folding the two layer blank as in Figs. 3 and 4 to position the wearing strips 34 at the exposed folded edges of the pad. Since the pinked strips 35 of the diaper blank 31 are present at the ends of the prefolded pad, stitching is not necessary to prevent the

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ends from unraveling, and the longitudinal edges of the central panel are secured by stitching 36 passing all the way through the diaper to hold the eight ply panel P₁ in place in the pad.

Fig. 9 illustrates the diaper blank 31 of Fig. 7 folded somewhat differently with one selvaged end of the blank folded outwardly of the surface of the diaper, as at 38 to provided an eight ply central panel and position the wearing strips 34 at the edges of the diaper pad, as described in connection with Fig. 8. This method of folding the eight ply panel facilitates folding in production. As described in connection with Fig. 8, the pad may be secured in prefolded form by stitching 39 extending therethrough.

In Figs. 10 and 11 there is shown a similar form of prefolded diaper wherein a diaper blank 41 is made as described in connection with Fig. 1 with the exception that each of the three two layer tubular panels it contains occupies approximately one third the length of the blank. The diaper blank 41 is folded to superimposed these thirds and position wearing strips 42 at the exposed edges of the diaper in such a way that the folds occur close to the longitudinal centerlines of the strips. The diaper may be sewn longitudinally, as shown at 43 in Fig. 11, close to the edges 44 of the diaper. If the diaper is cut from a continuous strip without pinking bars, as described in connection with Fig. 1, it is preferred that the ends of the pad be sewn together by over-edging or the like. However, if pinking bars are employed as described in connection with Fig. 6, the ends of the diaper can remain unsecured.

Referring to Figs. 12-14 of the drawings, a somewhat different embodiment of a diaper according to this invention is shown. This diaper, prior to folding, is in the form of a rectangular three layer blank 46 having selvages 47 along its transverse edges and pinked strips 48 along its longitudinal edges. Parallel to the selvages and half way between them is an integrally woven single layer wearing strip 49 extending across the blank. As shown in Fig. 12, the three layer diaper is woven as a continuous three ply strip 50 with the selvages 47 joining the plies along its longitudinal edges and transversely extending single layer pinking strips 51 longitudinally spaced from one another at regular intervals. The wearing strip 49 is woven as a relatively narrow continuous single layer extending longitudinally or warpwise in the center of the strip. The diaper blanks may be separated from the strip by cutting along the pinking strips with pinking shears or the like.

As shown in Fig. 14, a six ply prefolded gauze diaper pad is formed by folding the diaper blank of Fig. 13 about the wearing strip to superimposed the selvages 47, and then securing the folded portions together in this position. The diaper may be secured by stitching 52 through the superimposed selvages to form a prefolded tube-like structure or through its superimposed pinked edges to form a bag-like structure, or along each of its edges all the way around the diaper.

In each of the diapers described in connection with Figs. 1-14 the exposed folded edges of the diaper pads and the wearing strip or strips extend in the warp direction of the diaper cloth. Thus, the warp yarns extend longitudinally of the wearing strip in the direction of the fold while the filling yarns bend around the fold. As mentioned hereinbefore, it is the filling yarns which are bent or folded and subjected to most of the wear in prefolded diapers of the type described. Since in gauze diaper fabric the filling yarns generally are considerably lighter than the warp yarns, prefolded gauze diapers are particularly vulnerable to wear along their folded edges.

In Figs. 15-17 there is shown a wearing strip weave structure which is considered to be particularly advantageous in prefolded diapers according to this invention. In this structure warp yarns 53 and filling yarns 54 are woven in accordance with the weave diagram of Fig. 15. The numbers from 1 to 8, where used in Figs. 16 and 17,

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refer to warp and filling yarns corresponding to these numbers in the weave diagram of Fig. 15. In Fig. 16, the wearing strip weave W is shown where it adjoins two layers of gauze diaper fabric G woven integral with the strip.

In the wearing strip both the warp yarns 53 and filling yarns 54 are floated over one another in such a way as to provide a relatively soft and flexible structure. Alternate filling yarns are pushed towards opposite faces of the fabric by the warp yarns 53 which mainly are floated centrally of the fabric with respect to its top and bottom surfaces. This results in a fabric wherein the filling yarns 54 lie almost flat and in two layers, one above the other. This structure minimizes crowding of the warp and filling yarns.

As shown best in Figs. 16 and 17, the warp yarns 53 cover the filling yarns 54 or are exposed beyond the filling yarns, on both faces of the wearing strip fabric. Since the filling yarns 54 lie almost flat, the knees 55 formed by the protruding warp yarns extend outwardly beyond the filling yarns to provide a multiplicity of wearing points which tend to prevent contact with the filling yarns. Thus, the warp yarns 53 cover the filling yarns 54 in the sense that they extend outwardly beyond the filling yarns at both faces of the fabric to protect the filling yarns against wear. Warp coverage of the filling yarns may be increased by increasing the number of warp yarns with respect to the filling yarns. Where the diaper blank comprises two layers of gauze diaper fabric, a warp end count in the wearing strip of about three times the warp count of a single layer of diaper fabric has proved advantageous. In general, a relatively high warp count is preferred to maintain the shape of the weave structure described, i. e., to hold the filling yarns approximately flat and to provide a large number of relatively closely spaced protruding warp knees 55 to cover them.

The wearing strip weave of Figures 15-17 is symmetrical with respect to the major plane of the fabric and, as mentioned above, the warp yarns 53 cover the filling yarns 54 on both sides of the fabric. This is an advantage in the diaper of this invention since it does not matter which side of the wearing strip is exposed at the fold. This symmetry or reversibility facilitates folding in production. However, while reversibility of the wearing strip weave is an advantage, it is not a necessity, and certain other warp faced fabrics, such as a warp faced three and one twill, may be employed in the wearing strip.

The following is an example of a prefolded diaper according to this invention which is offered only by way of illustration and is not intended to define the breadth of the invention or limit the scope of the claims.

It will be understood that in this example, the counts and yarn sizes set forth are subject to the usual minor variations customary in the weaving art.

Example

A diaper blank comprising two layers of gauze diaper cloth or fabric is woven roughly as shown and described in connection with Fig. 1. The fabric is woven of 25s cotton warp yarns and 35s cotton filling yarns, both of which possess a twist multiplier less than 4.75. The counts in the individual layers of gauze diaper fabric are 39 warp ends x 38 filling ends per inch. The same size cotton yarns are employed in the wearing strip, but 39 additional warp threads are included per inch so that the count in the wearing strip is 117 warp ends x 76 filling ends. The wearing strip is woven as shown in Figs. 15-17 to provide a relatively soft and flexible wear-resistant structure with the warp yarns covering the filling yarns. The length of the blank L is approximately 40 inches, while its width, which corresponds to the length of the diaper pad after folding, is approximately twenty-one inches. The wearing strips are about one inch wide,

with the result that the panels M, N, and O are approximately $14\frac{1}{2}$, 14, and $9\frac{1}{2}$ inches wide, respectively, including the selvages which are approximately $\frac{1}{8}$ inch wide. The diaper blank is folded as shown and described in connection with Figs. 2 and 3 and then sewn as illustrated in Figs. 4 and 5 to form a prefolded diaper approximately 20 inches long and 15 inches wide having a centrally disposed eight ply panel about five inches wide. The wearing strips are positioned along the exposed longitudinal folded edges of the diaper with the folds occurring approximately along the longitudinal center lines of the wearing strips. Thus, a soft, absorbent prefolded diaper is formed having its maximum absorbent capacity centrally located and wear-resistant folded edges which also are relatively soft and flexible for maximum comfort during use. This diaper is capable of resisting repeated washings and dryings over an extended period of time without failure due to wear along the folded edges where the wearing strips are positioned. In fact, it has been demonstrated that other areas of the diaper will begin to fail before the wearing strips show appreciable damage.

Having now described the invention in specific detail and exemplified the manner in which it may be carried into practice, it will be readily apparent to those skilled in the art that innumerable variations, applications, modification, and extensions of the basic principles involved may be made without departing from its spirit and scope. We therefore intend to be limited only in accordance with the appended patent claims.

We claim:

1. A prefolded woven diaper comprising at least one folded, wear-resistant, single layer edge formed from a single layer strip of woven fabric, said strip being folded about a line within the strip and extending longitudinally thereof, an absorbent panel joined to one longitudinal edge of the folded strip, and another absorbent panel joined to the other longitudinal edge of the folded strip, each of said absorbent panels comprising a plurality of layers of gauze diaper fabric woven integral with said single layer strip, and said panels being permanently secured together in folded position, whereby a prefolded gauze diaper with a wear-resistant edge is provided.

2. A prefolded woven diaper comprising a pair of folded, wear-resistant, single layer opposite edges each formed from a single layer strip of woven fabric, each of said strips being folded about a line within the strip and extending longitudinally thereof, and absorbent panels joined to each of the longitudinal edges of the folded strips, each of the absorbent panels comprising a plurality of layers of gauze diaper fabric woven integral with one of the single layer strips, and said panels being permanently secured together in folded position, whereby a prefolded gauze diaper with wear-resistant opposite edges is provided.

3. A prefolded woven diaper comprising at least one folded, wear-resistant, edge formed from a woven wearing strip extending in the warp direction of the diaper, said strip being folded about a line within the strip and extending longitudinally thereof and comprising warp yarns extending longitudinally of the strip and filling yarns extending transversely of the strip, an absorbent panel joined to one longitudinal edge of the folded strip, and another absorbent panel joined to the other longitudinal edge of the folded strip, each of said absorbent panels comprising a plurality of layers of gauze diaper fabric woven integral with said strip, and said panels being permanently secured together in folded position, whereby a prefolded gauze diaper with a wear-resistant edge is provided.

4. A prefolded woven diaper according to claim 3, wherein a multiplicity of warp yarn portions extend outwardly beyond the filling yarns in the area of the exposed folded edge of the strip to protect the filling yarns against wear.

5. A prefolded woven diaper according to claim 3, wherein substantially all of the filling yarns of the gauze layers woven integrally with the wearing strip pass through the strip and the strip is woven as a single layer with its filling yarns floated with respect to its warp yarns so as to provide a relatively high count woven structure which is soft and flexible.

6. A prefolded woven diaper according to claim 3, wherein substantially all the filling yarns of the gauze layers woven integrally with the wearing strip pass through the strip and the strip is woven as a single layer, wherein the warp end count is at least as great as the total warp end count of the layers integral with the strip.

7. A prefolded woven diaper according to claim 6, wherein the end count in the gauze diaper fabric is between about 32 warp x 28 filling and 48 warp x 44 filling ends per inch, and the warp yarns are between about 22s and 28s and the filling yarns are between about 32s and 38s in size both in the diaper cloth and the wearing strip.

8. A prefolded woven diaper according to claim 7, wherein two layers of gauze diaper fabric are woven integral with the wearing strip and the warp end count in the strip is about three times that of the diaper fabric.

9. A prefolded woven diaper comprising a pair of folded, wear-resistant, single layer opposite edges each formed from a single layer woven strip extending in the warp direction of the diaper, said strip being folded about a line within the strip and extending longitudinally thereof and comprising warp yarns extending longitudinally of the strip and filling yarns extending transversely of the strip, and absorbent panels joined to each of the longitudinal edges of the folded strips, each of the absorbent panels comprising a plurality of layers of gauze diaper fabric woven integral with one of the single layer strips, and said panels being permanently secured together in folded position, whereby a prefolded gauze diaper with wear-resistant opposite edges is provided.

10. A prefolded woven diaper according to claim 9, wherein the absorbent panels form a central panel comprising eight layers of gauze diaper fabric and side panels comprising four layers of gauze diaper fabric between the central panel and each of the wear-resistant edges.

11. A prefolded woven diaper comprising at least one folded, wear-resistant, single layer edge formed from a single layer woven wearing strip extending in the warp direction of the diaper, said strip being folded about a line within the strip and extending longitudinally thereof and comprising warp yarns extending longitudinally of the strip and filling yarns extending transversely of the strip, an absorbent panel joined to one longitudinal edge of the folded strip, and another absorbent panel joined to the other longitudinal edge of the folded strip, each of said absorbent panels comprising three layers of gauze diaper fabric woven integral with said single layer strip, and said panels being permanently secured together in folded position, whereby a prefolded gauze diaper with a wear-resistant edge is provided.

12. A prefolded woven diaper according to claim 5 wherein the filling yarns in the wearing strip are arranged in two planes, intermediate portions of the warp yarns are floated in a layer between said two planes, the individual intermediate portions of the warp yarns passing between said planes for at least four successive filling yarns, and the warp yarns dart to the top or bottom surface of the wearing strip to form protruding warp yarn portions connecting said intermediate portions.

13. A prefolded woven diaper according to claim 12 wherein the end count in the gauze diaper fabric is 39 warp x 38 filling ends per inch, the end count in the wearing strip is 117 warp ends x 76 filling ends per inch, and the warp yarns are 25s and the filling yarns are 35s in size both in the diaper fabric and the wearing strip.

14. A prefolded woven diaper according to claim 5, wherein the filling yarns in the wearing strip are arranged in two planes and a multiplicity of warp yarn portions

extend outwardly beyond the filling yarns in the area of the exposed folded edge of the strip to protect the filling yarns against wear.

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