Sept. 30, 1941. I. NEIMAN 2,257,426

BIFURCATED GARMENT

Filed Sept. 28, 1938

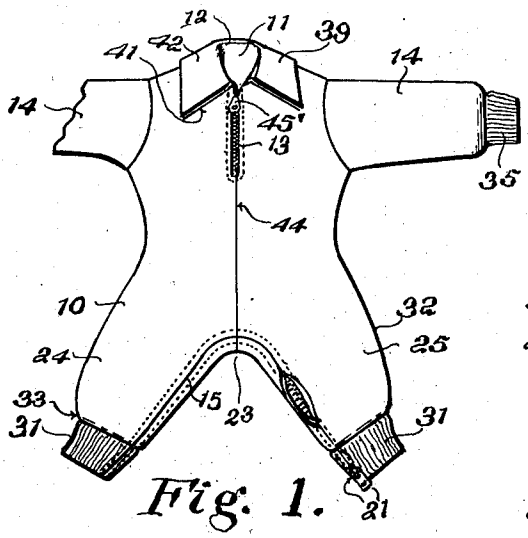


Fig. 1.

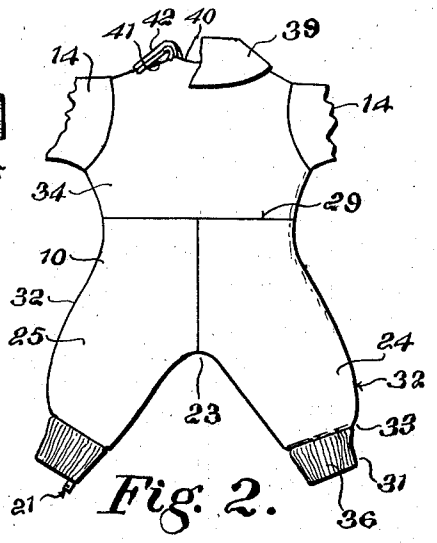


Fig. 2.

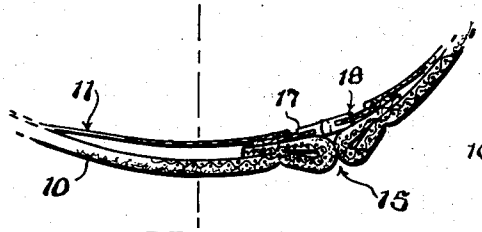


Fig. 3.



Fig. 10.

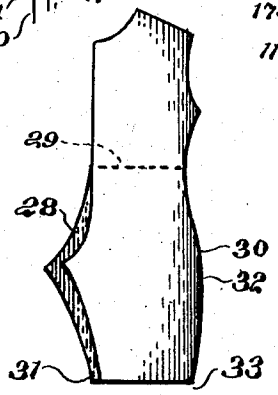


Fig. 5.

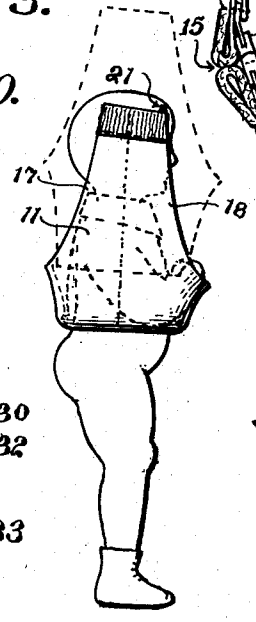


Fig. 8.

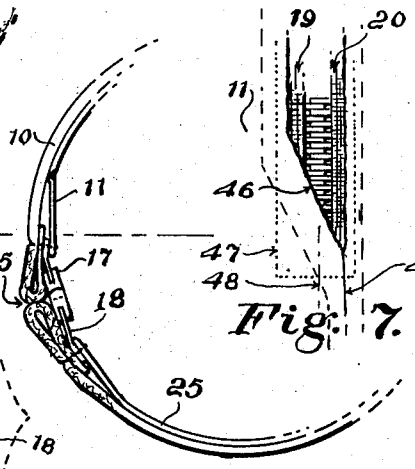
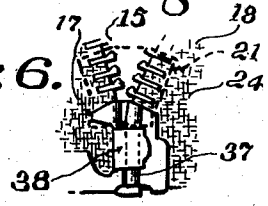


Fig. 7.

Fig. 4. Fig. 9.



Fig. 6.



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2,257,426

BIFURCATED GARMENT

Isadore Neiman, La Porte, Ind.

Application September 28, 1938, Serial No. 232,213

1 Claim. (Cl. 2—80)

The invention relates specially to garments, and particularly to bifurcated garments. It is specially valuable in union garments although capable of use in separable upper and nether garments. It is of particular utility in play suits and out of doors clothing for children where a garment is made in one piece including an upper jacket portion and lower pants portion.

The invention seeks to attain in a more simple way the provision of a garment which may be opened throughout the seams at the inner sides of the legs of the garment entirely across the crotch, and utilizing very simple patterns adapted to be sewed by workers with a maximum of good fit as well as an ideal trim and natty appearance.

Infants' garments heretofore made have tended to show a bulkiness at the front waist portion, and the leg portions have tended to assume awkward and unsymmetrical forms exceeding what might be attained with the use of my invention. My pattern, elements, combination and arrangement otherwise, avoid these objections. I am aware of the patent to Wallace, No. 1,973,421, and early buttoning garments having openings extending across the crotch and along the inner leg seams and these involve numerous cuts in forming the patterns and more stitching, without any compensating gains as compared to my invention. They can not be used as garments in the same way as my invention; involve different forms of openings resulting in more expense for manufacture as well as greater difficulty in putting on and taking off the garment, as well as being less attractive and neat in appearance, the latter being elements of great value in clothing of this character. The reduction in aggregate length of seams required to be stitched is a desideratum in such garments and is attained in a high degree in my garment.

It is a particular aim of the invention to enable a very rapid removal of the garment completely from the lower limbs and waist of a person, which would have utility in hazardous situations where injuries are frequent, but this quality is of special advantage in infants' garments where changes of underclothing of the nether parts is frequently required, and may be attained by use of my garment with a minimum liability of soiling the outer garment embodying my invention. In other words, it is possible to strip my garment upward around the wearer a sufficient distance, as in Figure 8, to enable the removal of lower under garments, without requiring removal of my garment entirely from the wearer, and after change of the undergarments or other attention, my garment may within a space of about ten seconds be restored to position and secured in closed condition again.

It is also an object to construct such a garment in a novel way, to accommodate the under clothing of infants and children including diapers and under pants with ample room, yet without making the garment ungainly in appearance as worn and allowing a comfortable fit to its wearer.

Additional objects, advantages and features of invention reside in the construction, form, arrangement and combination of parts involved in the embodiment of the invention as will appear from the following description and accompanying drawing, wherein

Figure 1 is a front elevation of a garment constructed in accordance with my invention, and indicating the pattern for the entire front of the combined garment, cut in two pieces, each including jacket front and integral front leg part, the hems over the fasteners being turned back at one part, to show the fasteners.

Figure 2 is a similar view of the back of the garment to the same scale indicating how a single pattern may include the jacket back and rear leg portions, but indicating line 29 a simple division of the garment where desired to utilize smaller pieces of goods.

Figure 3 is an enlarged vertical section through the crotch when closed, transverse to the leg-and-crotch seam, the medial major vertical plane of the body of the wearer being indicated by the dotted line.

Figure 4 is a horizontal section of a leg of the garment.

Figure 5 is a detail plan of the front and back leg patterns, in full lines, the top of the back leg pattern being indicated by dotted line therebehind.

Figure 6 is a detail section of the leg and anklet or cuff.

Figure 7 is an enlarged detail elevation of the manner of positioning the lining within the garment in respect to the chest placket at the lower part.

Figure 8 illustrates the garment in use on a child showing the uncovering of the nether limbs and body after operation of one fastening, the dotted lines indicating a further raising of the garment beyond the position shown in solid lines;

Figure 9 illustrates the structure of the parts 17 and 18 where the part 18 is made detachable from the slide 21;

Figure 10 is a fragmentary section at the attachment of the collar and body of the garment.

There is illustrated a garment consisting of an outer fabric or body 10, and an inner lining 11 made up separately as to certain permanent body seams, and then attached together at their edges along the base 12 of the collar, the sides of the neck placket 13, ends of the sleeves 14 and inner side seam 15 of the legs and crotch. At the neck placket, and at the leg-and-crotch seam or closure 15, there are secured between the exterior goods and the lining 11 at respective sides of each opening, slide fastener elements or fastener strips 17—18 in the leg parts and 19—20 on the neck placket. These fastenings are of the well known "Zipper" type in which two opposed series of interlocking fasteners may be connected together or separated by moving a slide 21 thereover, the latter constructed to separate and intermesh the opposed fasteners as it is moved along in one direction slidably over the opposed fastener strips which constitute the seam or edges of the seam, and to disengage and separate the opposed fasteners by reverse movement. The fasteners are of a special form in the leg-and-crotch seam 15, constructed so that when the slide is at one end of the seam the remainder of the seam being opened, one fastener strip 17 may be manually withdrawn from the slide 21, leaving the seam 15 open throughout its length from the end of one leg 24, upward across the crotch 23 and down the other leg 25 to its extremity, the opposed edges throughout the length of the seam 15 being thus detached and separable to any desired distance within the limits of length of the goods, and making it possible to withdraw the leg portions 24—25 of the garment laterally from the limbs of the wearer and swing them outwardly so as to draw the seat portion 26 and front abdominal part 27 of the garment upward around the body of the wearer a distance, as in Figure 8.

The garment is also so made that, with the wearer lying on his back, the seam 15 is nearer the front of the garment and more readily accessible for manipulation of the slide 21 of the fastener; also making it possible to see the seam 15 throughout its length readily from in front of the wearer, without requiring awkward positions on the part of the nurse, and also without requiring the nurse to peer under or move the infant or its limbs to awkward or painful positions in order to see and manipulate the fastener 21 and see that the fastener is unimpeded by threads or portions of garments. In order to produce these proportions and effects, the back leg patterns 23 are deeper from the waist 29 of the garment to the crotch, wider at the hip 30, and at the anklet 31 and slightly more conical (in that the angle of the mean inner and outer edges of the piece is greater), as well as wider from the crotch to the outer side seam 32. Their lower inner edges, for the leg-and-crotch seam or closure, however, are both of the same length, notwithstanding that they meet on a curve of considerable extent in the flat, as in Figure 1, one of which would ordinarily be of greater length. The patterns for the front and back leg sections are both formed with a liberal fullness or outward bowed edges at the outer sides 32 with a comparatively sharp inturn of the edge of one or both near the anklet or cuff, as at 33, so that an abrupt fullness is formed in the garment immediately above the anklet, this fullness continuing to increase, although less pronouncedly toward the hip portion, and there the edge is curved gradually in over the hip, from where it is recurved gradually outward to the arm pit, being parallel to the vertical symmetrical axis of the garment or center front seam, at the waist line 29 of the garment, which is formed considerably higher than the level of the actual waist line of the wearer when the garment is made up, and worn.

The back 34 of the jacket portion is made with a single pattern piece 34 customarily corresponding in size and shape to the combined upper parts of the front patterns. Sleeves 14 are made up in accordance with familiar practice and include wristlets 35 as shown, matching the anklets 31 of the legs of the garment. The anklets 31 as shown consist of a knitted fabric 36 with threads running lengthwise, highly elastic and contractile transversely so as to draw in around the ankles of the wearer. The pieces named are joined by seams of usual kinds, a lining 11 is made up with corresponding patterns to fit properly within the facings, the lining and facing being separately made up as complete articles and then the lining adjusted to the anklets and attached thereto, then adjusted within the body of the garment and attached, as will be described.

After one method of procedure, the anklets are formed of a piece of knitted goods twice as long as the finished anklet, the weave extending longitudinally thereof, one end of one ankle piece being attached to the face goods of the leg after the front and back leg pieces are joined at the outer side seams, while the other end of the same ankle piece is attached to the end edges of the leg of the lining after the latter is joined at the outer side seam. The garment and lining being completed separately except at the collar, the neck placket, and the leg-and-crotch seams, the facing is turned inside out, the lining engaged thereover right side out and attached to the facing and wristlets at the ends of the sleeves, and attached to the facing along the respective sides of the leg-and-crotch seams, and the sides of the neck placket, strips of the proper opposed complementary interlocking fasteners each of the same length being interposed between the facing and lining at respective sides of the leg-and-crotch seam 15 with the fastening members projected inward therebetween so as to be exposed outward in proper relation to the respective garment edges when the parts are turned right side out. One of the strips at one side of the seam is provided with a terminal bar piece 37 adapted to slide into or out of the fastener slide 21 when the latter is at one limit of its movement where a stop 38 is provided for the slide, the fastener elements being omitted thereadjacent and the bar 37 being adapted to slide partly into the stop when the slide 21 is against the stop, so that the fastener jaws of the two strips will be properly opposed for interlocking when the slide is moved over the two strips from the stop. It should be noted that, as shown in Figure 4, the thick goods of the facing is formed with a hem over each strip 17 and 18, with a bight portion projected a substantial distance beyond the line of stitching by which it is attached to the fastener strip, and these bights are adapted to project beyond the medial line at which the opposed fasteners interlock, so that the two bights are pressed against each other, assuring a flat closure over the fasteners, by the inherent resilience of the fabric, and concealing the fastenings com-

pletely and effectively. At the inside of the garment the lining edges are formed with quite narrow seam similarly stitched to the strips 17 and 18, respectively, but their bight portions stopping short of the fastener elements on the strips so that no objectionable thickness is formed over the fasteners.

At the neck placket respective strip members 19—20 of a similar fastener are interposed between the lining and facing, differing in the omission of means for separating the two strips, which are permanently connected at the bottom of the placket. The garment body and lining are now complete except that they are unconnected at the collar and the collar piece is not in place. The collar 39 having been made up for attachment consisting of an under and upper piece both of which may be of the same material, may now have its under side attached to the neck edge 40 of the back piece 34, or this may be delayed until the garment is brought right side out. The latter is done by pulling the garment through the opening at the rear side of the neck between the lining and body. The garment being right side out, after the rear edge 40 of the body and the under piece 41 of the collar are attached, the top piece 42 of the collar has its edges turned under against the lining within the collar of the garment, and the collar top, lining and back of the garment stitched together, as at 43. For a good finish a line of stitching may be run along the edge of the lining 11 over the fastener strips throughout. For good appearance and to avoid lumpiness the patterns for the lining may be slightly varied in proportions so that the front seam 44 of the body in the jacket part and the corresponding seam 45 in the lining will be laterally offset from each other as in Figure 7, the seam of the lining below the neck placket being to the right of the fastener 45' and at the beginning of the placket of the lining, one edge 46 of the lining with suitable hem is extended diagonally from its seam union with the opposite piece of the lining across the junction of the fastener strips 19—20 lying loosely thereover, so that the slide 45' may pass between the strips and this overlying part of the lining. The finish stitching 47 applied after the garment is right side out is extended well away from this diagonal free edge of the lining, so as to avoid blocking the slide, and is extended horizontally across a medial line 48 of the fastener a distance and then upward along the opposite edge of the lining, so that a sort of pocket is formed receiving the slide as mentioned.

In use, the garment is put on by inserting the head and arms upwardly through the open leg-and-crotch seam, after the arms have been properly adjusted in the sleeves, the legs 34—35 of the garment and anklets are adjusted, the bar 37 of one side of the fastening is inserted in the slide 21 while at the stop 38, and then the slide 21 drawn along the entire length of the seam, completely closing the garment on the wearer and obtaining a snug fit automatically at the ankles. The neck placket fastener may be closed all or part way, and various ornamental features may be incorporated in the garment as discretion dictates, as well as modification of pattern of the upper portion to accord with changes of fashion, and buckled belt, cap or other appurtenances incorporated.

When a small child requires rapid renewal of nether undergarments, after movement of the slide to opened and disengaged position the ankle portions of the garments may be grasped and pulled upward beside the child until the lower portion of the garment is turned inside out, and the seat and opposed front portion extend upward around the body of the wearer as shown in Figure 8. The garment will tend to remain in this position by its fit around the body and arms of the child and the under garments such as diapers or under pants may be removed easily and quickly with a minimum of impedance or discomfort for the child and the nurse. This manipulation of the garment is made possible by reason of the fact that the body portion (including the seat and opposite front portion and immediately adjacent leg portions has its major bulged part, and major circumferential measurement of continuous wall material on a horizontal line close to the level of the crotch 23 and uppermost part of the opening 15. This enlargement of the garment in this relation to the opening 15 enables it to readily slip over the upper part of the garment and the arms of the wearer as substantially shown in Figure 8. If the child is standing during such manipulation of the garment the end portions of the legs may be tucked within the upturned parts and so kept out of the way.

After the change of undergarments as last mentioned, my garment may be restored to closed engagement around the body and legs of the child by the attendant grasping the anklets and pulling them toward the feet of the child, then engaging the slide with the corresponding disengaged part of the fastening and moving the slide throughout the length of the opening 15.

I claim:

A garment including a bifurcated nether portion including an upper body-encircling nether part and leg portions extended integrally therefrom, the said body encircling part including two rear pieces cut and joined at a central vertical seam in the seat of the garment, the edges of the pieces at said seam being of a length and being curved outward at their lower parts to extend through the crotch and into the front portion of the garment when joined, the said rear pieces including rear leg parts for said leg portions having concavely curved rear leg edges at the inner sides thereof extending downward from the first named edges, and said body-encircling nether part including front leg parts for said leg portions having similarly curved front leg edges of the same length as said rear leg edges, the garment being made up with said rear and front leg edges extending continuously from the extremity of one leg to the extremity of the other, whereby the opposed edges may be joined on a line extending on a curve on the front of the garment, and complementary closure fastening on said leg edges.

ISADORE NEIMAN.