

March 11, 1941.

O. H. BASCH

2,234,546

COVERALL GARMENT

Filed May 19, 1938

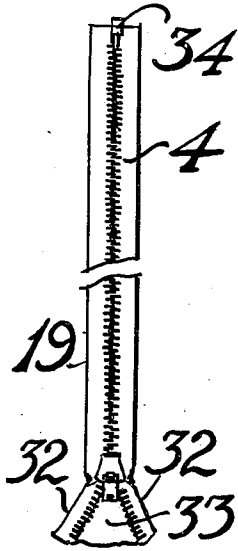


Fig.-5

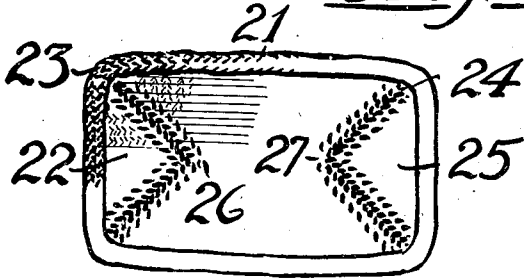


Fig.-2

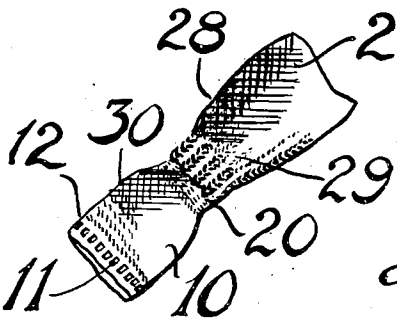


Fig.-3

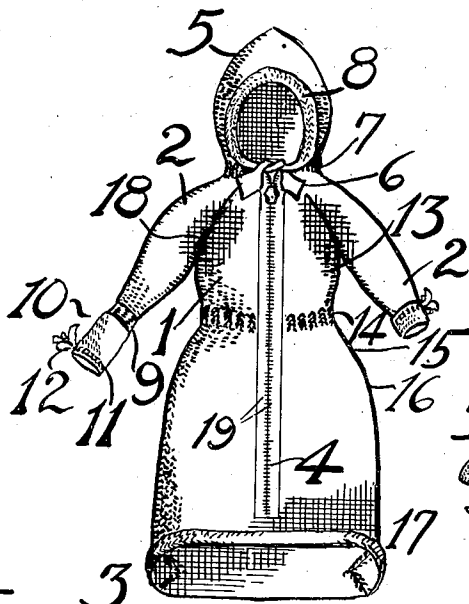


Fig.-1

Fig.-4

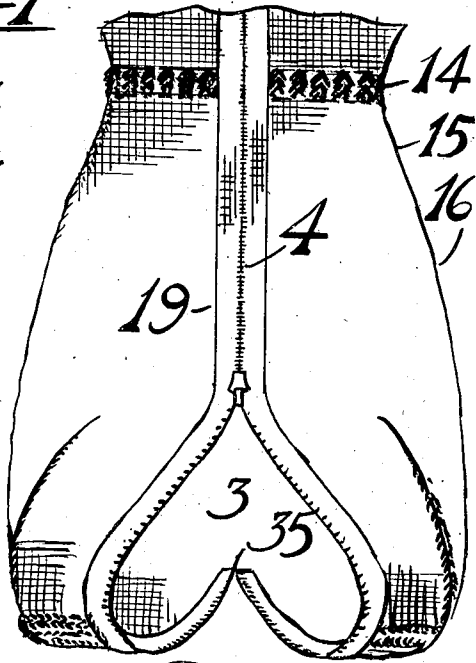
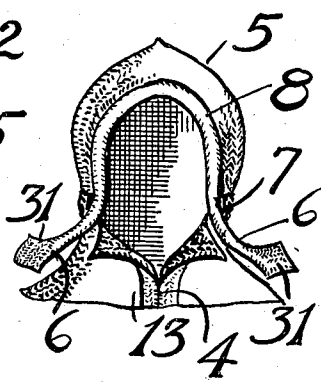


Fig.-6

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2,234,546

COVERALL GARMENT

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Application May 19, 1938, Serial No. 208,833

1 Claim. (Cl. 2—114)

This invention relates to an improved coverall garment and method of manufacturing same, and more particularly to a coverall garment for babies.

5 Broadly the invention comprises a coverall garment having sleeves, and a body and skirt portion completely closed by a bottom, the garment being openable from the neck at least to near the bottom along a vertical line only. The opening is preferably effected by a single slide fastener in the front from the neck to the bottom or the reverse.

10 According to the preferred embodiment of the invention, the entire garment is knitted with yarn, and provided with a slide fastener, such as the one marketed under the name "Talon", the upper part of the garment being provided with a cap or hood having a head band adapted to fit snugly around the face, and having tie-strings knitted out directly from the neck portion of the garment. The garment is provided with sleeves having a partially restricted cuff and an enlarged sleeve extension made of lighter weight yarn than the main portion of the garment and adapted to be either turned back over the outer part of the sleeve when not in use, or extended and tied with a draw-string at the end in order to keep the hand warm thus serving the function of mittens; the body portion of the garment being preferably relatively snug fitting around the waist, and enlarged in the lower skirt portion to provide plenty of room for moving the feet, and the bottom portion preferably being so knitted that when in use it normally tends to lie relatively flat at right angles to the body portion, and yet is easily pushed outward by the feet, and when not in use normally tends to fold inward, thereby obtaining the four-fold advantage of utility, comfort, neatness and compactness. These various features will be described more fully hereinbelow.

40 One of the primary objects of the invention is to simultaneously provide a completely closed bag for the feet and legs to prevent the baby or other person using same from becoming cold or kicking off the covers, and yet at the same time providing sleeves to allow the occupant more freedom of action than sleeveless sleeping bags, for instance, and to keep the occupant from becoming twisted around in the bag, which might otherwise be dangerous for infants, for example, and yet provide a simple, quick and efficient means for opening the garment from head to foot along a single vertical line. As the coverall is primarily adapted for small infants, and especially babies, it has a distinct advantage in being able to be opened up

quickly and easily in order to change the baby's diapers. Another object is to provide complete coverage for the baby or other occupant with a single garment, so that there are no detachable parts which can become mislaid or lost. At the same time this unity of construction when made by knitting provides comfort by avoiding the presence of protruding seams, joints, edges, corners and the like, as are usually present when either the garment is composed of several pieces sewed together, or when it is composed of several separate pieces. Other objects and advantages of the invention will be apparent to those skilled in the art, from the following more detailed description.

15 Referring to the drawing, Figure 1 is a perspective view of the complete garment. Figure 2 is an enlarged view of the bottom. Figure 3 is an enlarged longitudinal section of the sleeve extremity. Figure 4 is an enlarged perspective view of the head and neck portion of the garment with the neck tie-strings unfastened. Figure 5 is a partial view of the front of the garment, showing an alternative arrangement of the slide fastener in which the latter is opened from the bottom upwards instead of from the top downward, as in Figure 1. Figure 6 shows a still further alternative arrangement of the slide fastener, which in this case is extended all down the front from the neck to the bottom, under the bottom and part way up the back.

In all of these figures like numerals are used to represent like parts.

25 Referring to Figure 1, the coverall garment 1 is provided with sleeves 2, bottom 3, slide fastener 4, hood 5, tie-strings 6, at the neck 7, head band 8, restricted cuffs 9, sleeve extensions 10, provided with holes 11, for sleeve tie-string 12. The body portion 13, is preferably restricted around the waist 14, and the skirt portion 15 is preferably gradually enlarged downward to a suitable point 16, below which the skirt portion may descend vertically without any further enlargement.

45 The distance between the point 16 and the point 17 where the skirt portion is joined to the bottom 3, is preferably made sufficiently long to provide for any growth which the baby or other person using the garment is expected to develop. The sleeves 2 are preferably joined to the waist portion 13 by closed raglan seams 18 so as to permit freedom of movement of the arms at the shoulders, and make it easy, for instance, for the mother to put the garment on the baby. The slide fastener 4 preferably is, for the sake of ap-

pearance, attached to the body portion of the garment by center front bands 19, which may be knitted with some different stitch than the body portion of the garment or may be made out of woven goods, though, if desired, these bands may be omitted.

As mentioned above, the garment is preferably knitted, because knitting provides greater flexibility and comfort, as well as being easy to put on and take off, and furthermore, the knitting makes possible the manufacture of the entire garment in a single piece without rough edges to cause irritation of the skin. It is of course obvious, that the main portion of the garment may be made with various weights of yarns, according to the season and climate in which it is to be worn, for instance, a light weight yarn for summer use, and a heavy yarn for winter or cold weather. The yarn may be made of wool, cotton, linen, silk, rayon or other composition fiber, or other material suitable for making yarn or mixtures of any of these.

A relatively lighter weight yarn is preferably used in making the enlarged sleeve extension intended to cover the hands, and in making the tie-strings for fastening around the neck. This lighter yarn should be preferably not more than $\frac{1}{4}$ to $\frac{1}{2}$ the weight of the heavier yarn. As one illustration of suitable weights of yarn to be used, the waist 13, skirt 18, sleeves 2, bottom 3, and hood 5, may be knitted of wool yarn having a weight of 82½ yds. per oz., and the sleeve extension 10, the head band 8, the tie-strings 6, may suitably be made of soft angora yarn having a weight corresponding to 225 yds. per oz.

The yarn may be of any desired color or combination of colors, or different parts of the garment may be made of different colors; the nature of the entire garment lends itself particularly well to various designs.

When the garment is knitted, a stockinette stitch is used for all the main portions, such as waist, skirt, sleeves, hood and bottom, and a combination of knitting and purling, (for instance, such as knit one, purl one; knit two, purl two, etc.), is used for the ribbing at the waist 14, wrists 9 and neck 7, to make the garment fit snugly at those points.

Garter or seed stitch is preferably used for the trimming on the cap band 8 and tie-strings 6, as well as for the center front bands 19 and sleeve extension 10. Garter stitch tends to make the goods lie flat rather than curl.

As a still further improvement and an especially novel feature, a few elastic threads 20, such as those marketed under the name "Lastex," are sewed or woven into the garment at the places where it is desired to have an especially snug fit, for instance, at the waist 14, neck 7, headband 8, and wrist 9, as shown in Figure 3. "Lastex" has a center fiber of rubber or elastic rubber-like composition and two outer textile fibers wound around the center fiber in opposite directions with a slightly diagonal winding. The reason for this use of elastic threads is that although the knit and purl ribbing tends to provide a snug fit while the garment is relatively new, yet after continued use and repeated stretching it eventually loses this tendency to snug fitting, and the elastic thread will not only serve to produce a snug fit by itself, but will also tend to prolong the snug fitting tendency of the knit and purl ribbing. The exact number of elastic threads to be used will of course depend upon the weight and strength or elasticity of the

thread used and the weight of the garment as well as the amount of tension desired; the number and kind of threads may also vary according to the part of the garment where it is to be used. For instance, whereas it may be desirable to use 4 or 5 elastic threads at the waist 14, probably 2 would be sufficient at the wrist 9, and 1 at the neck 7. A suitable elastic thread is one which would correspond in size to button thread, although finer or heavier grades could also be used, or some of several sizes.

Referring to Figure 2, the special construction of the bottom will be described, this being particularly novel when made by knitting. After the skirt portion 15 of the coverall garment has been knitted by using a stockinette stitch, a purl band 21 preferably about 1" wide is knitted around the bottom to provide a flexible and comfortable joint between the skirt portion and the bottom and to give a rolled effect. Then at a suitable point 22 which is half way along one end of the bottom, a stockinette stitch is used in knitting to the corner 23, decreasing 2 stitches at 23, and the knitting is continued across the side of the bottom to the next corner 24, decreasing 2 more stitches at 24, and the knitting continued to a point 25, which is half way along the other end of the bottom. Then purl back continuously from 25 thru 24 and 23, to 22 and repeat the knitting with stockinette stitch from 22 to 25 decreasing 2 stitches at both 23 and 24 as previously, and purl back to 22. Repeat this procedure until there are no stitches left in the triangular sections 22-23-26 and 24-25-27. Half of the bottom will then have been completed. Do the same for the other half of the bottom and then the edges 22-26 and 25-27 are sewed together, while the stitches 26-27 may be bound off and sewn but preferably are woven together.

The advantages of this knitted construction of the bottom are that it is quicker than any other way of knitting the bottom and produces a neater appearance and besides it causes the bottom to remain substantially flat while in use, and yet when not in use it naturally tends to fold inward, which is an advantage for storing or putting away in a dresser drawer or the like, and yet is sufficiently flexible that when in use it is easily pushed out by the feet.

Figure 3 shows an enlarged longitudinal section of the extremity of sleeve 2, showing the sleeve extension 10 which may serve the function of a mitten when tied with tie-strings 12 thru holes 11. This figure also shows how the sleeve extension 10 may when not in use be folded back over the wrist in the position of 28. The coarse shading 29 is used to indicate a relatively heavier weight of yarn in the main part of the sleeve than is used in the sleeve extension 10 as shown by the fine shading 30. Figure 3 also shows how 2 elastic threads 20 are located in the wrist portion 9.

Figure 4 shows how the hood 5 may be made with heavy yarn and the head band or cap band 8 may be made of lighter yarn, the same as tie-strings 6, which preferably are provided with an enlarged tip 31, which gives the appearance of a fancy bow-tie. It is of course understood that instead of using these integrally knitted tie-strings the neck may be fastened by an entirely separate tie-string or two tie-strings which are fastened to the sides of the neck 7, or by a conventional chin strap which may be fastened by

a snap. If desired, both a chin strap and a neck strap may be used.

In Figure 5 the fastener 4 is shown in an inverted position, in order to permit opening the lower or skirt portion 15 of the coverall garment, for instance, for changing the baby's diaper, while still keeping the upper or waist portion 13 closed. In order to prevent the possibility of the slide fastener pinching part of the skin or inner garment, a placket 33 (which may extend the full length of the fastener), may be used as shown beneath the tips 32. When this arrangement of the slide fastener is used, a separable locking device 34 is used at the upper end of the slide fastener 4, in this case being called a separable slide fastener, so that the garment may be opened at the neck as well as throughout the entire length down to the bottom.

Figure 6 shows a slide fastener opening from the bottom the same as in Figure 5, except that instead of starting opening at the bottom the fastener is extended around the bottom and part way up the back to a point 35, which is not too high to prevent the insertion and removal of rubber pads in the garment, where they may be immediately adjacent to a baby's diaper. The coverall garment may if desired be provided with either snaps or buttons for attaching such rubber pads.

It is obvious from the above description of the preferred modifications of the invention that the coverall garment has numerous advantages over various garments or sleeping bags proposed heretofore.

It should be noted that this garment, particularly when knitted, permits freedom of movement for the baby's head, even when the cap or hood is used, and it is obvious that when desired the hood may be allowed to hang down the back. In any case no other cap is necessary, and the unitary construction of having the hood attached directly to the garment prevents mislaying it, and due to its smooth, seamless, knitted construction, there is no chance of annoyance due to rough edges or corners at the neck. Also when the tie-strings 6 at the neck are knitted directly to the lower ends of the head band 8, a very snug fit is obtained when the strings are tied, and there is no chance of exposing the head or neck to the cold.

It is obvious that the preferred slide fastener is the quickest and easiest type of fastener for this coverall garment, and it is especially well adapted for the purpose due to construction of the garment with a completely closed bottom and with sleeves, because with these features combined it is difficult for an infant wearing same to use any other type of fastener. However, part of the advantages of the invention can still be obtained if a single vertical row of buttons or snaps or equivalent fastening means is used instead of the slide fastener.

Although the coverall garment of this invention is particularly applicable for babies and other small infants during sleeping and even while awake, for babies up to the walking age, it is also possible and practicable to manufacture this garment in larger sizes even up to full adult sizes for use as a sleeping garment, particularly for sleeping outdoors, for instance when camping, etc.

It is also understood that if desired this coverall garment may be manufactured out of woven goods of various types, such as blanket cloth, woven woollens and fleece-lined goods, and if desired either the outer surface or the entire goods may be water-proofed, so as to be particularly suitable for out-door camping.

It is not intended that the invention be limited specifically by the examples given and modifications shown which were merely for illustration, but only by the appended claim in which it is intended to claim all novelty inherent in the invention as broadly as the prior art permits.

I claim:

A garment comprising sleeves, a body portion adapted to fit snugly around the waist line, a skirt portion gradually enlarged downward from the waistline to a width about the same as the shoulders, and a bottom having a size and shape corresponding substantially to that of a cross-section of the uppermost widened part of the skirt portion during use, said bottom normally tending to lie relatively flat at right angles to the body portion during use, said body and skirt portions being openable in the front from the neck substantially to the bottom along a single vertical line.

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