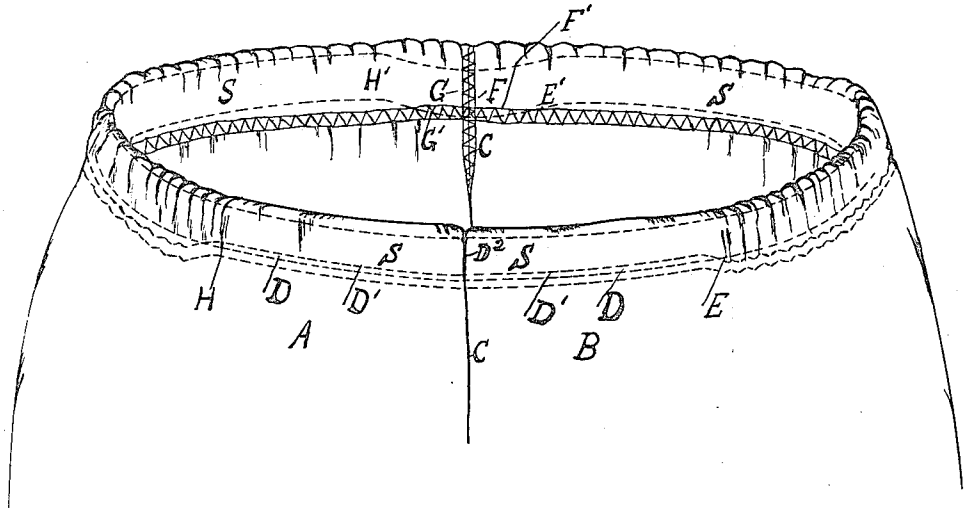
J. P. WEIS.

WEARING APPAREL.

APPLICATION FILED NOV. 9, 1917.

1,277,006. Patented Aug. 27, 1918.




WITNESSES:
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# UNITED STATES PATENT OFFICE.

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## WEARING-APPAREL.

1,277,006. Specification of Letters Patent. Patented Aug. 27, 1918.

Original application filed July 12, 1915, Serial No. 39,222. Divided and this application filed November 9, 1917. Serial No. 201,007.

*To all whom it may concern:*

Be it known that I, JOHN P. WEIS, a citizen of the United States, residing at Nyack, in the county of Rockland and State of New York, have invented certain new and useful Improvements in Wearing-Apparel, of which the following is a specification.

This invention relates to wearing apparel, the object of the invention being to provide an improved article of wearing apparel having a hem or pocket with an elastic strip inserted or inclosed thereby in such manner that the action of the elastic strip will be effective to cause a portion of the garment to be ruffled or gathered while another portion thereof will be left plain, that is, free from gathers or ruffles, the garment illustrated herein being similar to that shown and described in my contemporaneously pending application, Serial No. 39,222 filed July 12, 1915, covering the machine for making this and other garments where an elastic strip is used, such as bloomers, skirts, dust caps, bathing caps, shirt waists, etc., and of which application this case is a division, and also similar to the garment shown in my Patent No. 1,231,542 dated June 26, 1917, which is also a division of said application filed July 12, 1915, Serial No. 39,222, and which patent covers the method of making such garments.

In the drawing accompanying and forming a part of this specification, the figure illustrates the hemmed portion of a garment, such for instance as a pair of bloomers.

As stated in my original application, in the hemming of knickerbocker bloomers for instance, the usual method has been to seam up the garment, then cover the edge of the top or the waist band and the bottom or the ends of the legs with an overstitch to form a selvage, then the work was passed on to a hemming machine where said tops and bottoms were turned over to form a hem and at the same time the operators would insert a loop of elastic, guiding it in by hand into the folded hem while the stitching proceeded. These elastic bands were made endless by a separate operation to facilitate the handling by the operator who did the hemming. Another method was to prepare the work as above, and after the garments were finished the elastic band was inserted by a bodkin or other instrument by hand and the ends joined. These methods proved to be very slow and expensive because it was difficult to predetermine the lengths of the rubber band with respect to the size of the garments before and after finishing, that is to say, the elastic strip as used was far from being uniform in width, thickness and elasticity and therefore when it was cut in predetermined lengths and made endless in loop form, one loop would have a greater amount of elasticity than another and therefore great difficulty was experienced in obtaining a uniform finish for the work. All these disadvantages were done away with by my improved method and machine, in which the hemming, overstitching, inserting and guiding of the elastic strip was automatically performed and yet manually controlled so that the amount of the elastic strip inserted was practically determined by the size of the garment being stitched, while the amount of gathering of the goods at the hem was determined and controlled by the mechanism for guiding the elastic strip, thus greatly simplifying the operation and enabling a large production of uniform work with a neatly covered edge and with the elastic strip securely fastened at the beginning and ending of the stitching operations.

As also stated in my original application, a very important feature of the invention resided in the fact that it is desirable to have the front portion of the garment, especially the waist bands of bloomers and skirts, free from gathers so that it will lie flat and also to hold and control the gathered portions at the sides and rear thereof, so that no bulky appearance will appear at the front. This was not possible with the old methods, because to accomplish this, the elastic band must be in a normal condition at the front where there are to be no gathers, and be stitched at this portion to maintain this condition, otherwise the gathers would creep or shift along the elastic band from place to place. This was one of the serious objections to the work as produced by the old methods. In other words, by the old methods it was not practicable to have a portion of the hem gathered and retain another portion thereof flat or ungathered, for as stated, the gathers would creep or shift along the elastic band from place to place.

As a two-needle machine adapted for making the present improved article of manufacture is completely shown and described

in my said contemporaneously pending application, and as the method of making this improved article is shown and described in my said patent, it is deemed unnecessary to again describe the machine and method, and it will therefore be sufficient to say that in the manufacture of the article the elastic strip is inserted simultaneously with the hemming or forming of the pocket in the article for the strip and is secured at certain portions thereof, during which time it is not stretched or placed under tension, and then it is placed under tension or stretched and during which time it is not stitched to the garment, with the result that when the garment is completed that portion of the elastic strip which was tensioned or stretched will return to its normal condition and so gather the garment while that portion of the elastic strip which was unstretched will cause that portion of the garment inclosing the strip to be free from gathers or remain plain.

Referring to the drawing, A represents one portion or half of a bloomer top or other garment; B represents another portion or the other half thereof; C, C represents the front and rear seams joining these two portions or halves together after the hemming is done; D represents the plain portion of the hem at the front, a part of which extends at each side of the front seam C, in other words that portion thereof where the elastic strip S' is not stretched during the formation of the garment and which portion of the elastic strip is shown stitched to the garment by a line of stitching as D'; E represents the point at which tension was applied to the elastic strip S; E' the point where the tension is released on the strip; and F the finish of that portion of the hem where the elastic strip is fastened by a short line of stitching such as F', and during which tacking of the strip the elastic strip is, as stated, released from its tension and is therefore not stretched; G represents the commencement of the hem of the other portion or half of the garment where the end of the elastic strip is fastened by a line of stitching G', and at which time likewise the elastic strip is not tensioned or stretched; H' the part where the strip is again placed under tension; and H the point at which the tension is released from the elastic strip and therefore represents the ending of the gathered portion on the side A of the article. When the two halves of the garment are formed in the manner stated, they are then seamed up at the front and back as at C, C, and of course these seams are somewhat wider than the lines C, C, indicate in the drawing and the seam for instance, referring to the back seam, would probably extend from about F to G. The seaming of the front A at C in a garment of this kind also connects the two elastic strip ends to the garment by a vertical line of stitches as $D^2$ and so also the seaming of the back connects the two adjacent ends of the elastic strips by a vertical line of stitches provided of course the operator has terminated the ends of the elastic strips sufficiently close to the seams to permit this. This is not essential however. Thus it will be seen that in the garment shown the elastic strip is inserted into the hem of the garment and the raw edge of the hem is covered by a row or rows of stitches, and that the elastic strips are fastened at the rear seam in the midst of the gathers for a short distance to each side of such rear seam, and also fastened at the front seam in the center of the plain portion as well as for a few inches to each side of such front seam. That is to say, at this plain portion in front the elastic is stitched along its edge as at D' by the inside needle of the two-needle machine for a distance of three or four inches each side of the center seam, so that this leaves the plain portion of the hem without gathers at the front of the garment while confining all the gathers at the sides and rear thereof. The leg portions (that is, around the bottom of the leg portions) are hemmed in a similar manner with a short plain portion at the joining seam where the ends of the elastic are stitched for about half an inch each side of the seam. In manufacturing this garment, the two halves or portions of the garment come to the machine operator as they are cut and before any seaming up is done. The hems are made around the bottom of the legs and at the top or waist band by shifting the elastic guide when a shiftable guide is used or by freeing the elastic from any tension so as to leave it unstretched, so that the elastic will be in the path of a needle and thus be stitched at the beginning of the operation, whereupon the elastic guide is either shifted and tensioned or retarded, or the elastic stretched, so as to carry it free of the stitching needles and maintained in this stretched condition as the goods are fed on to the elastic and until that portion of the garment where there are to be no gathers is reached, whereupon the elastic guide is shifted back and released or simply released when it has not been shifted, so that the needle will stitch the elastic to the garment, whereupon the other half of the garment is made in a similar manner and the two portions of the garment connected by a seam up each leg portion and by seaming up the front and rear of the body portion as shown at C, C, thus completing the garment.

Thus when the article is finished that portion of the garment in juxtaposition to the stretched elastic will be gathered as the elastic returns to its normal condition while

that portion of the garment in juxtaposition to that part of the elastic that was not tensioned or stretched will remain plain, and in the drawing this portion is shown at the front of the garment although obviously the plain portion may be located at any desired point as circumstances might require. In a waist, for instance, the garment would be gathered practically throughout its entire circumference and the plain portions only of the waist would be but short ones, where the buttons and button holes or other fastening means is used.

In other words, when the work is removed from the machine the elastic strip resumes its normal condition and so gathers the hem as illustrated at E to E′ and H to H′, while those portions of the elastic strip which are stitched to the garment (and this includes the ends at F and G) are fastened and do not become displaced while in the hem.

It will be understood of course that the gathering of the hem takes place as the stretched elastic resumes its normal or unstretched condition, so that the garment is gathered as it leaves the feeding and presser-foot mechanism of the machine in just the place and in the manner desired by the operator at any time according to the class of article being made, and therefore it will be seen that the location of the gathered and plain portions may vary in different garments or even in different portions of the same garment. For instance in the garment illustrated the plain portion is shown at the front, while the gathered portions are at the sides and rear, because only a small portion of the ends of the elastic strip already at the rear seam are tacked and therefore when the rear seam is formed the garment will be gathered practically up to such seam. In a shirt waist however, as stated, the gathers would be all the way around except at the meeting edges where the buttons or other fastening means is placed, at which points the garment will have short plain portions, to facilitate the placing of the buttons and the overlapping of such meeting edges of the garment. Around the bottom of the bloomers also the gathers usually extend all the way around except at the leg seam, on the opposite sides of which seam the elastic is tacked and therefore is not stitched during the tacking operation.

I claim as my invention:

1. An article of wearing apparel having a finished edge or portion, an elastic strip having spaced parts stitched to the article while the strip is in its normal condition and free of tension, and having a part intermediate such spaced and stitched parts unstitched to the article while such intermediate part is in a stretched or tensioned condition so that when such stretched portions of the elastic strip resume their normal condition the garment will have a series of gathers between those spaced points where the strip is stitched to the article.

2. An article of wearing apparel having a hem or pocket and an elastic strip therein, said garment having a plain portion and a gathered portion, with a strip stitched to the article at the plain portion and unstitched thereto at the gathered portion, the hem being formed by a line of stitching and the elastic strip where stitched to the garment being stitched by another parallel line of stitching.

3. An article of wearing apparel having a hem or pocket and an elastic strip therein, said garment having a plain portion and a gathered portion, formed of a series of gathers with separated ends of the elastic strip stitched to the article at the plain portion and unstitched thereto at the gathered portion.

4. An article of wearing apparel having a hem or pocket and an elastic strip therein, said garment having a plain portion and a gathered portion, with separated ends of the elastic strip stitched to the article at the plain portion and unstitched thereto at the gathered portion, the hem being formed by a line of stitching, and the elastic strip where stitched to the garment being stitched by another parallel line of stitching.

5. An article of wearing apparel having a hem or pocket, and an elastic strip inclosed therein, a portion of the elastic strip being stitched to the article while such strip is free of tension, and another portion thereof being unstitched to the article while the strip is under tension.

6. An article of wearing apparel having a hem or pocket, and an elastic strip inclosed therein, separated portions of the elastic strip being stitched to the article while such strip is in its normal condition and free of tension with an intermediate portion of such strip unstitched to the article while the strip is under tension.

7. An article of wearing apparel having a hem or pocket, and an elastic strip inclosed therein, the ends of the strip being stitched to the article while the strip is in its normal condition and free of tension with an intermediate portion of the strip unstitched to the article while such intermediate portion is in a stretched condition, so that when such stretched portions of the elastic strip resume their normal condition the garment will be gathered between those points where the strip is stitched to the article.

8. An article of wearing apparel comprising two similar connected half portions, each having a hem or pocket, and an elastic strip inclosed therein and extending substantially around such article and stitched at its opposite ends to the article while said strip is in its normal condition and free of tension and

unstitched between its ends to said article while such strip is stretched or under tension, the article being joined or seamed at its front and back transversely to the elastic strip whereby the article will have a plain portion at its front and gathered portions at its sides and rear.

9. An article of wearing apparel having a hem or pocket, and an elastic strip inclosed therein, separated portions of the elastic strip being stitched to the article while such strip is in its normal condition and free of tension with an intermediate portion of such strip unstitched to the article while the strip is under tension, the hem being stitched by two lines of stitches and the elastic strip where stitched by a single line of stitches.

Signed at Nyack, N. Y. this 5th day of November, 1917.

JOHN P. WEIS.