

Aug. 18, 1942.

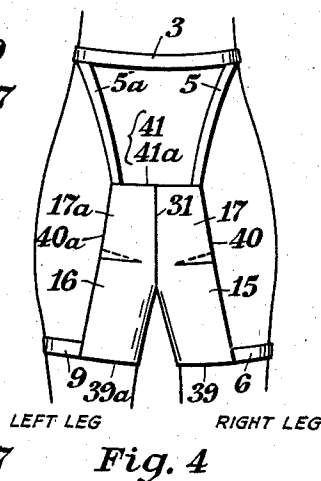
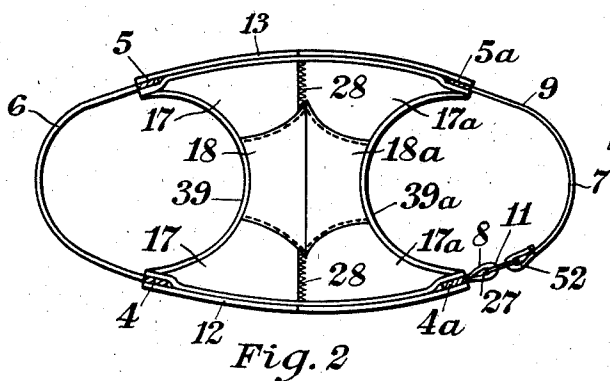
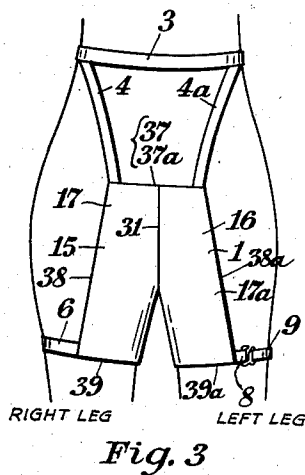
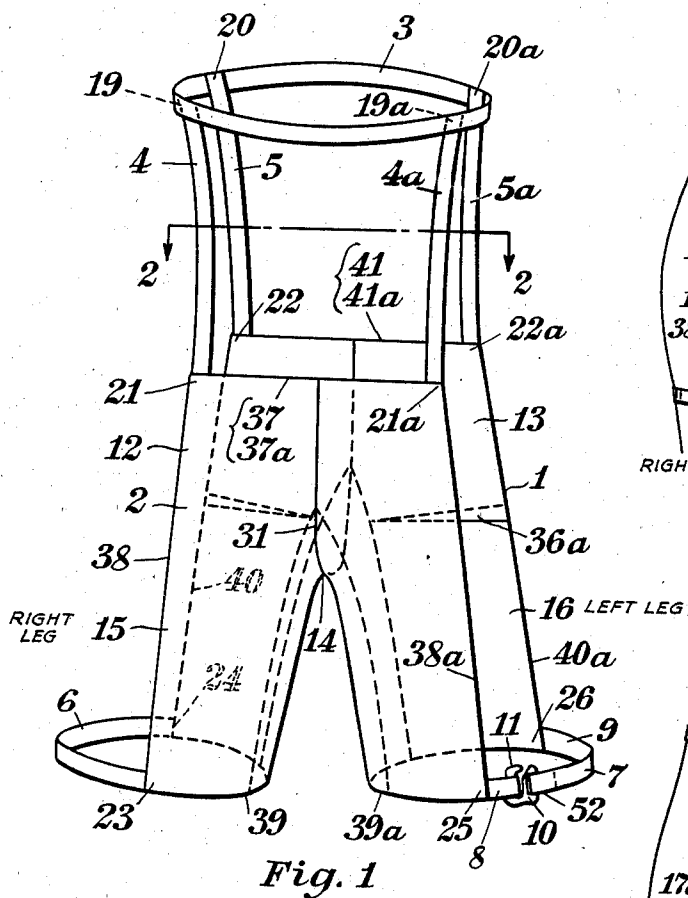
B. LASKIN

2,293,346

LADY'S UNDERGARMENT

Filed Oct. 3, 1939

3 Sheets-Sheet 1



INVENTOR.
Benjamin Laskin
BY
Caesar and Rivise
ATTORNEYS

Aug. 18, 1942.

B. LASKIN
LADY'S UNDERGARMENT

2,293,346

Filed Oct. 3, 1939

3 Sheets-Sheet 2

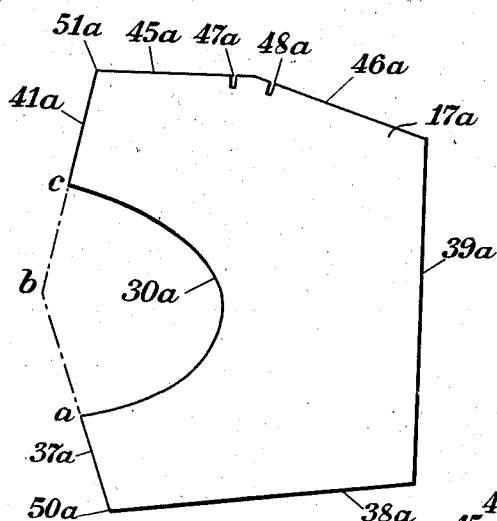


Fig. 5

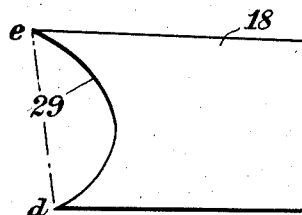


Fig. 6

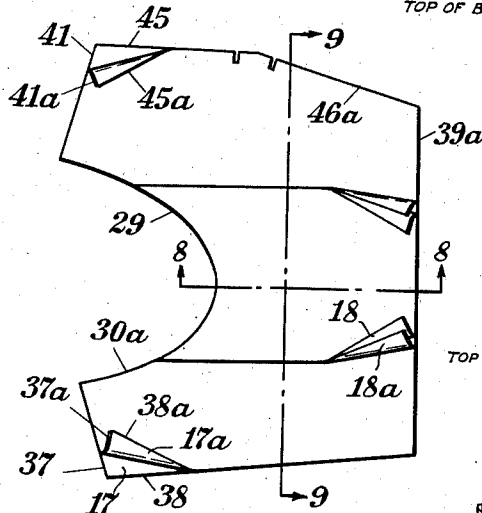


Fig. 7

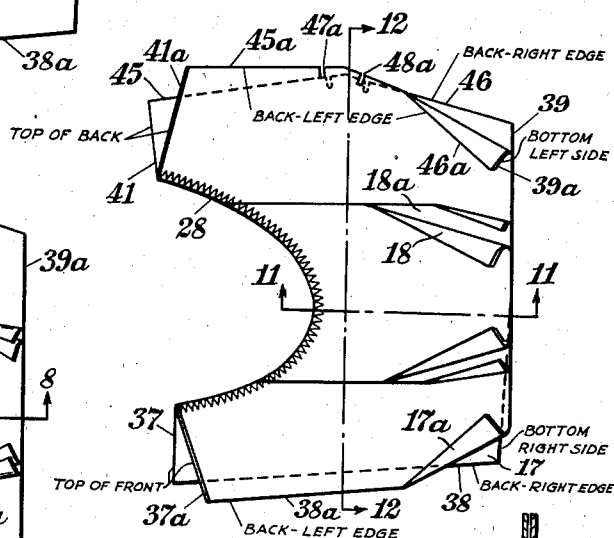


Fig. 10

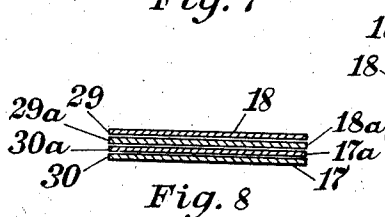


Fig. 8

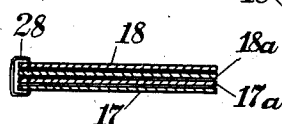


Fig. 11

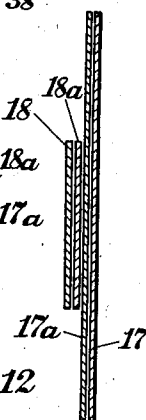


Fig. 12

Fig. 9



INVENTOR.
Benjamin Laskin
BY
Caesar and Rivise
ATTORNEYS

Aug. 18, 1942.

B. LASKIN

2,293,346

LADY'S UNDERGARMENT

Filed Oct. 3, 1939

3 Sheets-Sheet 3

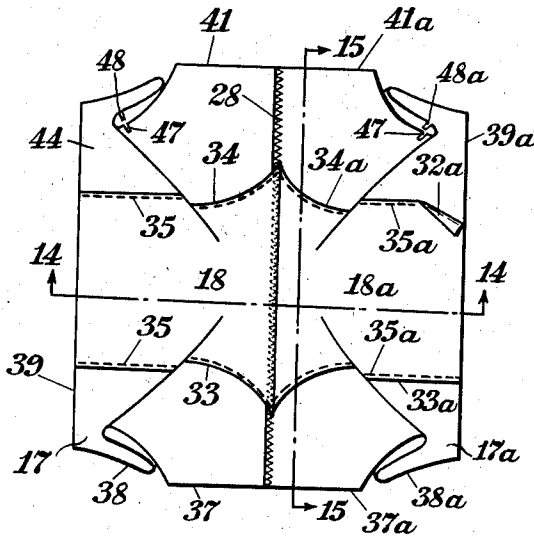


Fig. 13

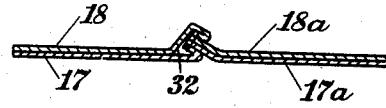


Fig. 14

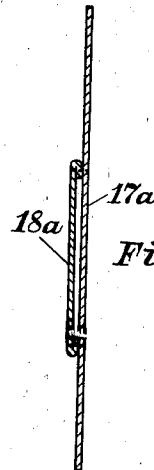


Fig. 15

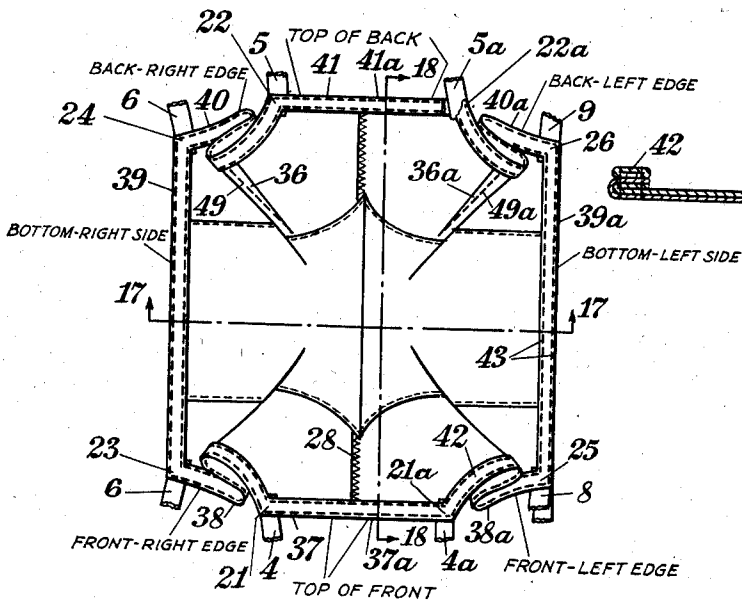


Fig. 16



Fig. 17

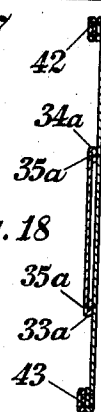


Fig. 18

INVENTOR.
Benjamin Laskin
BY
Caesar and Rivise
ATTORNEYS

UNITED STATES PATENT OFFICE

2,293,346

LADY'S UNDERGARMENT

Benjamin Laskin, Philadelphia, Pa.

Application October 3, 1939, Serial No. 297,730

5 Claims. (Cl. 2-224)

This invention relates to women's undergarments intended to function as panties. Undergarments for this purpose now in general use are of two types. In the first of these types the undergarment consists of a tubular body portion which terminates in two tubular legs. In the second of these types the undergarment is in the form of a loin cloth.

Both types are objectionable because they cannot conveniently be worn with a corset or girdle. This is primarily because the panty must be worn under the corset or girdle in order to obtain a smooth fit in the dress. With the panty in this position the girdle or corset must be removed when the wearer finds it necessary to go to the lavatory.

The loin cloth type of panty is further objectionable because it does not prevent chafing.

Certain modifications of the tubular body portion and leg type are further objectionable because the seams run along the inside of the legs and irritate the legs of the wearer at that point, particularly if the wearer is inclined to chafe between the legs.

It is one of the objects of this invention to produce an undergarment intended to function as a panty which will be free from the objectionable features hereinabove set forth.

Another object of this invention is to use only two pieces of cloth in producing an undergarment which will function as a panty, which can be worn with a girdle, and which will prevent chafing.

Another object of this invention is to reduce the number of sewing operations necessary to join together the cloth components of an undergarment which will function as a panty, which can be worn with a girdle, and which will prevent chafing.

Another object of this invention is to provide a new method for producing an undergarment intended to function as a panty.

For the purpose of illustrating my invention, I have shown in the drawings which form a part hereof, and will now describe the novel garment and the steps of the novel method followed in producing the same.

Figure 1 is a perspective view of the novel garment. (Note: The "right" and "left" elements specified in the drawings and specification are to be understood as being taken from the viewpoint of the wearer of the garment, and not from the viewpoint of the observer.)

Figure 2 is a section taken on the line 2-2 of Figure 1.

Figure 3 is a front view of a torso clad in the novel garment. (The garment is shown on a smaller scale than in Figures 1 and 2.)

Figure 4 is a rear view of said torso clad in said garment. (The scale in Figure 4 is the same as that shown in Figure 3.)

Figure 5 is a plan view, drawn to a smaller scale than that used in making Figures 1 and 2, of one of the two identical pieces which together form the body portion of the novel garment.

Figure 6 is a plan view, drawn to the same scale as Figure 5, of one of the two identical pieces which serve as reinforcing members in the crotch and a portion of the legs of the novel garment. These pieces may be omitted, if desired.

Figure 7 is a plan view drawn to the same scale as Figure 5, showing the two body pieces and the two reinforcing pieces in position for the first stitching operation in sewing together the garment pieces when reinforcing members are used. The ends of some of the pieces have been curled back.

Figure 8 is a section on the line 8-8 of Figure 7.

Figure 9 is a section on the line 9-9 of Figure 7.

Figure 10 is a plan view drawn to the same scale as Figure 5, showing the two body pieces and the two reinforcing pieces after the first stitching operation. The pieces have been separated at certain points and curled back at others.

Figure 11 is a section taken along the line 11-11 of Figure 10.

Figure 12 is a section taken along the line 12-12 of Figure 10.

Figure 13 is a plan view, drawn to the same scale as Figure 5, showing the garment almost at the end of the operation of stitching down the reinforcing pieces. A corner of one of the reinforcing pieces has not as yet been stitched down and is curled back.

Figure 14 is a section on the line 14-14 of Figure 13.

Figure 15 is a section on the line 15-15 of Figure 13.

Figure 16 is a plan view, drawn to the same scale as Figure 5, of the completed garment with the belt and the major portion of the belt attaching straps entirely broken away and with the leg straps broken away intermediate their ends. The tape has been broken away at one point to show otherwise hidden parts.

Figure 17 is a section taken on the line 17-17 of Figure 16.

Figure 18 is a section taken on the line 18—18 of Figure 16.

Referring more particularly to the drawings, wherein similar reference numerals denote similar parts, reference numeral 1 designates the novel garment as a unit. The garment 1 consists of a bifurcated body member 2 open at the sides for the entire length thereof, a waist encircling belt 3, straps 4 and 4a which connect the corners 21 and 21a respectively of the front wall 12 of the body member 2 with the waist encircling belt 3, straps 5 and 5a which connect the corners 22 and 22a respectively of the rear wall 13 of the body member 2 with the waist encircling belt 3, and the leg attaching straps 6 and 7.

The bifurcated body member 2 comprises the spaced apart walls 12 and 13 which merge into the crotch 14 and combine to form the right leg member 15 and the left leg member 16 below said crotch 14. The wall 12 is the front wall of the body member 2 and the wall 13 constitutes the rear wall of the body member 2. The right edge 38 of the front wall 12 defines the right edge of the front of the garment body member 2. The right edge 40 of the rear wall 12 is substantially parallel to and spaced from the edge 38 and defines the right edge of the rear of the garment body member 2. The left edge 38a of the front wall 12 defines the left edge of the front of the garment body member 2. And the left edge 40a of the rear wall 13 is substantially parallel to and spaced from the edge 38a and defines the left edge of the rear of the garment element 2. The leg members 15 and 16 each consists of a single piece of material. There are no between the leg vertical seams in either of the leg members 15 or 16. The crotch portion 14 and a portion of the inner wall of the leg members 15 and 16 are reinforced by the reinforcing pieces 13 and 13a. These reinforcing pieces, although desirable, are not necessary. They may therefore be omitted if desired. The body member 2 may be made of any suitable material. In the present commercial embodiment of my invention the body member 2 is made of knit cloth.

The body member 2 does not completely encircle the body of the wearer. Instead, it merely covers a portion of the wearer's front and back immediately above the crotch and about half of the surface of the wearer's legs for a short distance below the crotch. I have found that this coverage is enough to give the wearer the necessary protection and comfort in all activities demanding freedom of movement and that it will prevent between the leg chafing.

The belt 3, the straps 4, 4a, 5, 5a, 6 and 7 are made of elastic material. (In the present commercial embodiment of my garment, the elastic material used is "Lastex.") The strap 4 is fixedly attached at its upper end to the belt 3 at the point 19 and at its lower end to the right hand corner 21 of the front wall 12. (Note: Unless otherwise specified, the attaching means is stitching.) The strap 4a is attached at its upper end to the belt 3 at the point 19a and at its lower end to the left hand corner 21a of the front wall 12. The strap 5 is attached at its upper end to the belt 3 at the point 20 and at its lower end to the right hand corner 22 of the rear wall 13. The strap 5a is fixedly attached at its upper end to the belt 3 at the point 20a and at its lower end to the left hand corner 22a of the rear wall 13. The leg attaching strap 6 is fixedly attached at one of its ends to the corner 23 of the right

leg 15 and at its other end to the corner 24 of said leg 15. The leg attaching strap 7 is split into the two pieces 8 and 9. The piece 8 is bent upon itself to form a loop the free ends of which are fixedly attached to the corner 25 of the left leg 16. The piece 9 is attached at one of its ends to the corner 26 of the leg 16 and has attached thereto at the free end 52 thereof the male fastener element 10. The prong 11 of the fastener element 10 is received within the bight 27 of the looped piece 8. (The split leg attaching strap 7 in combination with the open side construction of the garment enables the wearer of the garment to go to the lavatory without removing either the garment or the corset or girdle.)

I make the novel garment by the following novel method:

I first cut two identical body pieces 17 and 17a, each in the shape shown in Figure 5. In the event that reinforcing pieces are used, I also cut two identical reinforcing pieces 13 and 13a, each in the shape shown in Figure 6.

Assuming that the garment is to be made with reinforcing pieces, I now place the pieces upon each other in the position shown in Figure 7 where the body piece 17a rests upon the body piece 17, the reinforcing piece 13a rests upon the body piece 17a, and the reinforcing piece 13 rests upon the reinforcing piece 13a. I now attach together the pieces 17, 17a, 13a and 13 by a line of stitching 23 which, as shown in Figure 6, runs along the substantially semicircular edge 30 of the body piece 17, 30a of the body piece 17a, 29a of the reinforcing piece 13a, and 29 of the reinforcing piece 13. (This line of stitching 23 defines the median line of the completed garment. As is clear from Figures 2, 13 and 16, the line of stitching 23 is seen on the inner face of the completed garment with the exception of the distance where it is covered by the reinforcing piece 13. On the outer face of the completed garment, the line of stitching 23 defines the median line 31.)

I now turn the garment pieces 17, 17a and the reinforcing pieces 13 and 13a about the line of stitching 23 as an axis and cause them to assume their respective positions shown in Figure 13. (It is to be noted that in this position the face 32 of the piece 13 contacts the face 44 of the body piece 17. It is further to be noted that the edge 37 of the body piece 17 and the edge 37a of the body piece 17a now form a continuous substantially straight line which becomes the upper edge of the front wall of the garment. Similarly, the edge 41 of the body piece 17 and the edge 41a of the body piece 17a form a substantially straight line which becomes the upper edge of the rear wall of the garment.)

The edges 33 and 34 of the reinforcing piece 13 are then attached to the body piece 17 by the lines of stitching 35. Similarly, the edges 33a and 34a of the reinforcing piece 13a are attached to the body piece 17a by the lines of stitching 35a. (The appearance of the garment towards the end of this operation is shown in Figure 13. The stitching operation is not shown as completed in order to permit a corner of the reinforcing pieces to be curled back.)

Thereafter, the dart 36 is formed by bringing the point 43 up to the point 47 and stitching the line of stitches 49 along the fold line which is formed in the manner well known in the art. The dart 36a is similarly formed by bringing the point 47a up to the point 43 and stitching the line of stitches 49a along the fold line which is

formed in the manner well known in the art. (It is to be noted that before the dart 36 is formed that edge of the piece 17 in which the notches 47 and 48 are formed is not a straight line. Instead, it is a bent line formed by the edges 45 and 46. After the dart 36 is formed, the edges 45 and 46 merge to form the substantially straight edge 40 in the finished garment. The edge 40a is a substantially straight line formed by the merger of the edges 45a and 46a after the dart 36a is formed. The darts 36 and 36a merely cause the garment to fit more snugly. They may be omitted, particularly if a somewhat looser fit is desired. In the event that the darts are omitted, then a straight edge exactly the same as the edge 38 is substituted for the edges 45 and 46, and a straight edge exactly the same as the edge 38a is substituted for the edges 45a and 46a).

Thereafter, the edges 37a, 37, 38, 39, 40, 41, 41a, 40a, 39a and 38a are reinforced and finished off by attaching thereto the tape 42 by the lines of stitching 43. In the act of attaching the tape 42, the operator also attaches the lower end of the strap 4 to the corner 21, one of the ends of the strap 6 to the corner 23, the other of the ends of the strap 6 to the corner 24, the lower end of the strap 5 to the corner 22, the lower end of the strap 5a to the corner 22a, the fixed end of the strap 9 to the corner 26, the fixed end of the strap 8 to the corner 25, and the lower end of the strap 4a to the corner 21a. The upper end of the strap 4 is then attached to the bolt 3 at the point 19, that of the strap 4a is attached to the bolt 3 at the point 19a, that of the strap 5a is attached to the bolt 3 at the point 23a, and that of the strap 5 is attached to the bolt 3 at the point 20, thus completing the garment. (If desired, the aforesaid upper ends of the straps 4, 4a, 5a and 5 may be attached to the belt 3 before the respective lower ends of these straps are attached to the corners 21, 21a, 22a, and 22.)

As is evident from an examination of Figure 16, the finished garment when spread flat is in the form of an octagon having straps attached to each of the corners thereof. The edges 37 and 37a combine to form one of the eight sides of said octagon, the edge 38 forms a second of the eight sides of said octagon, the edge 39 forms a third of said sides, the edge 40 forms the fourth of said sides, the edges 41 and 41a combine to form the fifth of said sides, the edge 40a forms the sixth of said sides, the edge 39a forms the seventh of said sides, and the edge 38a forms the eighth of said sides. When the belt 3 is lifted and held in the wearing position shown in Figures 1, 2, and 4 the elements shown in Figure 16 will assume the positions and shape shown in Figures 1 to 4 where the edges 37 and 37a of the body pieces 17 and 17a have become the upper edge of the front of the garment body member 2, where the edges 41 and 41a of the body pieces 17 and 17a have become the upper edge of the rear of the garment body member 2, where the edge 38 of the body piece 17 has become the right edge of the front of the garment body member 2, where the edge 39 of said body piece 17 has become the lower edge of the right leg 15 of the body member 2, where the edge 40 of said body piece 17 has become the right edge of the rear of the garment body member 2, where the edge 40a of the body piece 17a has become the left edge of the rear of the garment body member 2, where the edge 39a of the body piece 17a has become the lower edge of the left leg 16 of

the body member 2, where the edge 38a of the body piece 17a has become the left edge of the front of the body member 2, where the middle portion of the line of stitching 28 has become the center of the crotch 14, where the right leg member has been formed by that portion of the body piece 17 which is below the crotch line 14, and where the left leg member has been formed by that portion of the body piece 17a which is below said crotch line 14.

As is shown by the dot and dash lines *ab* and *bc* in Figure 5, each of the two identical garment body pieces 17 and 17a may be considered as being substantially in the form of a pentagon which has a substantially semicircular cut-out formed therein in the upper part thereof for a distance intermediate the outer ends of the two upper sides. (For the purpose of this assumption, the edge 39a is considered as the base of the pentagon formed by the garment piece 17a, the edge 38a as one of the sides of said pentagon, the edges 45a and 46a as forming a bent line which constitutes the other of the sides of the pentagon, and the edges 37a and 41a as the two top sides of the pentagon intermediate the ends 50a and 51a of which has been formed the semicircular cutout represented by the edge 30a. Similarly, the edge 39 is considered as the base of the pentagon formed by the garment piece 17, the edge 38 as one of the sides of said pentagon, the edges 45 and 46 as forming a bent line which constitutes the other of the sides of the pentagon, and the edges 37 and 41 as the two top sides of said pentagon intermediate the ends 50 and 51 of which has been formed the semicircular cutout bounded by the edge 30.)

Definition.—The term "substantially semicircular cutout," as used in the specification and claims, is to be understood as referring to the cutout in the body pieces 17 and 17a defined by the lines 30 and 30a or the equivalent of such a cutout.

As is evident by considering Figure 6 as modified by the dot and dash line *de*, each of the two identical reinforcing pieces 18 and 18a may be considered as being substantially in the form of a trapezoid having a concave upper edge instead of a straight upper edge.

The foregoing description is to be understood as being for the purpose of illustration only and not limitation since many changes may be made in the structure herein shown without departing from the spirit of my invention. It is therefore my desire that the claims which are hereunto appended for the purpose of describing my invention be limited only by the prior art.

Having described my invention, what I claim as new and useful is:

1. The method of forming an undergarment which consists of the steps of cutting two blanks each substantially pentagonal in shape and each having a semicircular cutout formed therein intermediate the outer ends of two successive sides; positioning one of said blanks upon the other so that the substantially semicircular edge of one of said blanks coincides with the substantially semicircular edge of the other of said blanks; joining said blanks together along said substantially semicircular bounding edges; reversely turning said attached blanks along said line of jointure to form an octagonal element; and attaching a waist encircling belt and leg attaching straps to said octagonal element.

2. The method of forming an undergarment which consists in cutting two substantially pen-

tagonal blanks each having a substantially semicircular cutout formed therein intermediate the outer ends of two successive sides; then positioning one of said blanks upon the other so that the substantially semicircular edge of one of said blanks coincides with the substantially semicircular edge of the other of said blanks; then joining said blanks together along said substantially semicircular edges; then reversely turning said attached blanks about said line of jointure as an axis to form an octagonal element wherein said line of jointure is substantially at right angles to and substantially bisects one pair of the four pairs of parallel sides of said octagonal element and wherein said line of jointure is between and parallel to that pair of parallel sides of said octagonal element which is at right angles to the first of said pairs; then attaching belt attaching straps to the corners of said octagon at the ends of said sides which are perpendicular to said line of jointure and leg attaching straps to the corners of said octagon at the ends of said sides which are parallel to said line of jointure.

3. The method of forming an undergarment which consists of the steps of cutting two substantially pentagonal blanks each having a substantially semicircular cutout formed therein intermediate the outer ends of two successive sides; positioning one of said blanks upon the other so that the substantially semicircular edge of one of said blanks coincides with the substantially semicircular edge of the other of said blanks; cutting two substantially trapezoidal blanks each with a concave upper edge; positioning each of said trapezoidal blanks upon said pentagonal blanks so that said concave edge of each of said trapezoidal blanks fall along said registering semicircular edges of said pentagonal blanks and the base of each of said trapezoidal blanks falls along the registering bases of said pentagonal blanks; joining said pentagonal and trapezoidal blanks together along said registering semicircular and concave edges; reversely turning said attached blanks about said line of jointure as an axis to form an octagonal element wherein said line of jointure is substantially at right angles to and substantially bisects one pair of the four pairs of parallel sides of said octagonal element and wherein said line of jointure is between and parallel to that pair of parallel sides of said octagonal element which is at right angles to the first of said pairs and wherein each of said trapezoidal blanks overlies a portion of said pentagonal blanks from said line of jointure to

that side of said octagon which is parallel to said line of jointure; and attaching belt attaching straps to the corners of said octagon at the ends of said sides which are perpendicular to said line of jointure and leg attaching straps to the corners of said octagon at the ends of said sides which are parallel to said line of jointure.

4. In an undergarment having a waist encircling belt, a body member open at each of its sides for the entire length thereof and comprising two spaced apart walls merging into a crotch and combining to form two open sided leg members below said crotch, said body member comprising two pieces of cloth each of which is substantially pentagonal in shape and each of which has a substantially semicircular cutout formed therein intermediate the outer ends of two successive sides, joined together along the bounding edge of said semicircular cutout; four belt attaching straps each attached at its upper end to said waist encircling belt and at its lower end to an upper edge of one of said bounding walls; a leg attaching strap attached to the corners of each of said leg members; and cooperating means carried by at least one of said leg attaching straps for detachably attaching said leg attaching strap.

5. In an undergarment having a waist encircling belt, a body member open at each of its sides for the entire length thereof and comprising two spaced apart walls merging into a crotch and combining to form two open sided leg members below said crotch, said body member being formed from two pieces of cloth each of which is substantially pentagonal in shape and each of which has a substantially semicircular cutout formed therein intermediate the outer ends of two successive sides, joined together along the bounding edge of said semicircular cutout; reinforcing pieces positioned in said body member and extending from said crotch downwardly into each of said leg members; four belt attaching straps each attached at its upper end to said waist encircling belt and at its lower end to one of the upper corners of said bounding walls; a continuous leg attaching strap fixedly attached at each of its ends to the corners of one of said leg members; a leg attaching strap formed of two elements fixedly attached to the corners of the second of said leg members at one of the ends of each of said elements; and cooperating attaching means carried by the free end of each of said two elements for detachably attaching said two elements.

BENJAMIN LASKIN.