

Sept. 16, 1941.

G. M. KLOSTER

2,255,931

MAN'S UNDERWEAR

Filed Nov. 27, 1939

3 Sheets-Sheet 1

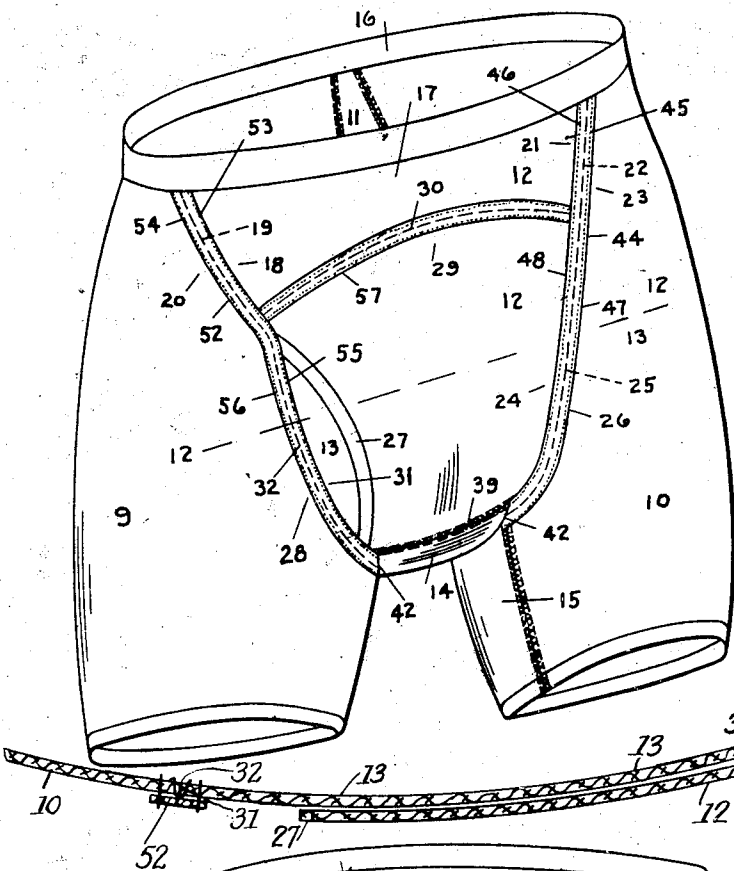


Fig. 1

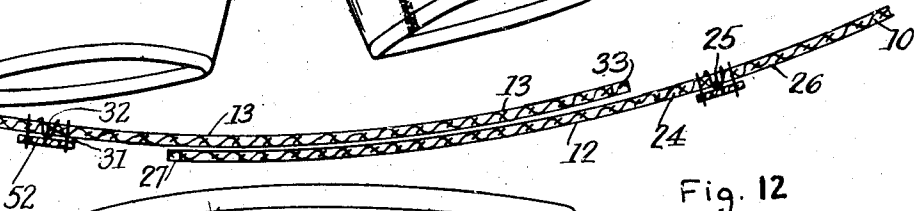


Fig. 12

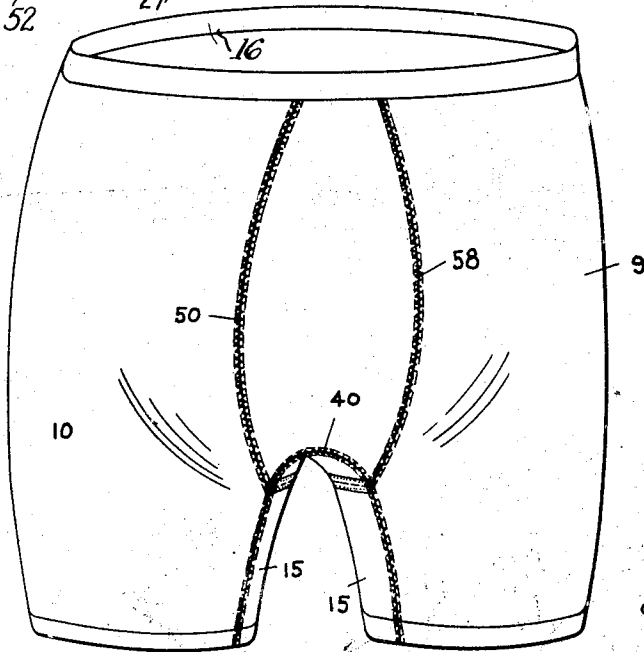


Fig. 2

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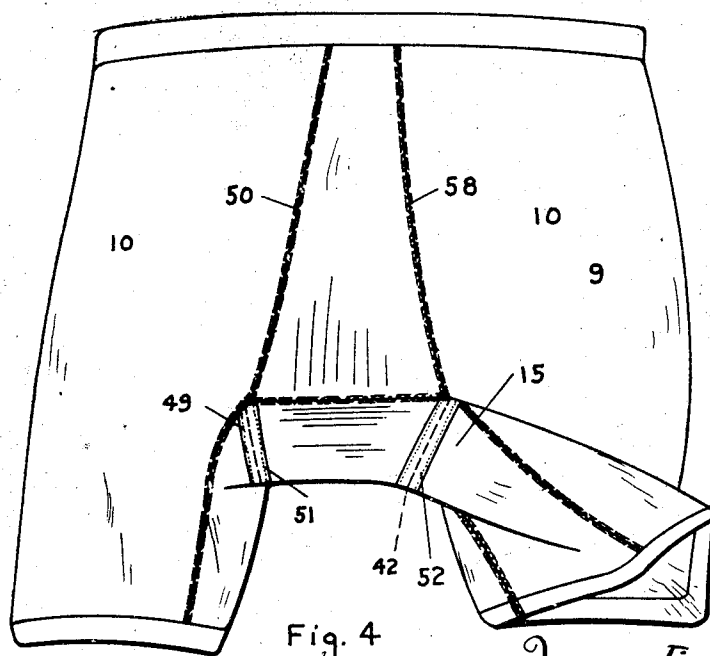
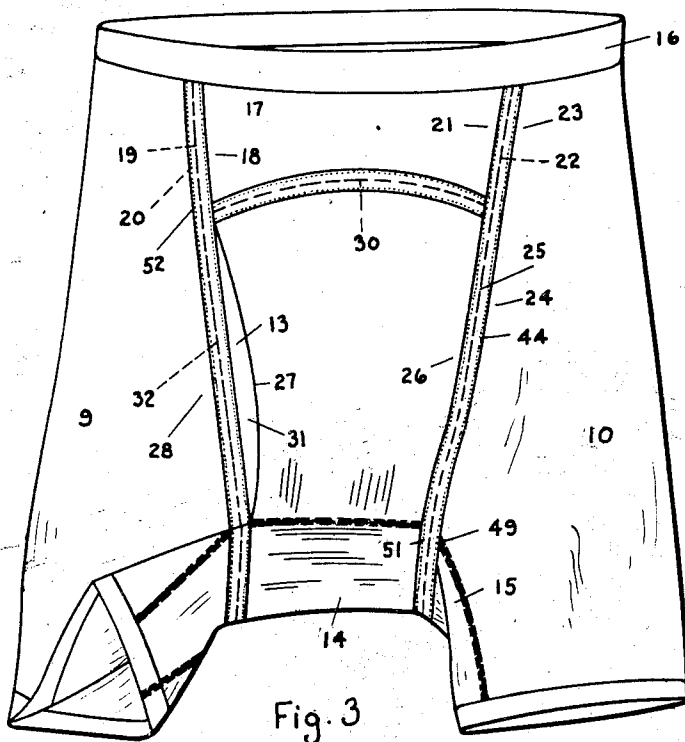
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3 Sheets-Sheet 3

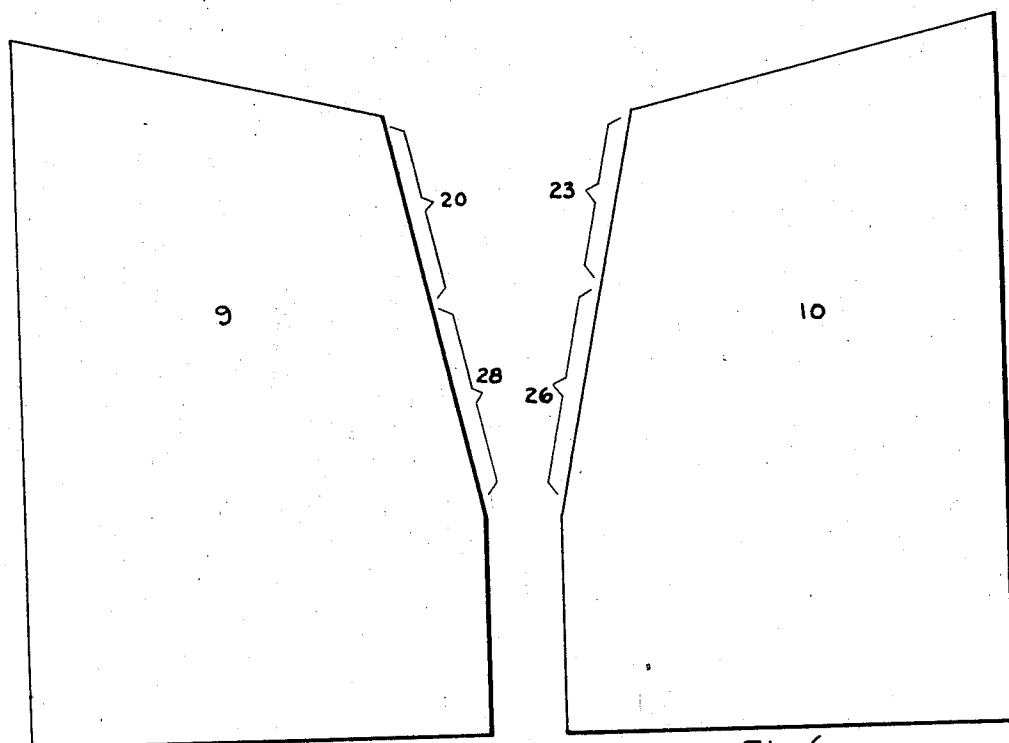


Fig. 5

Fig. 6

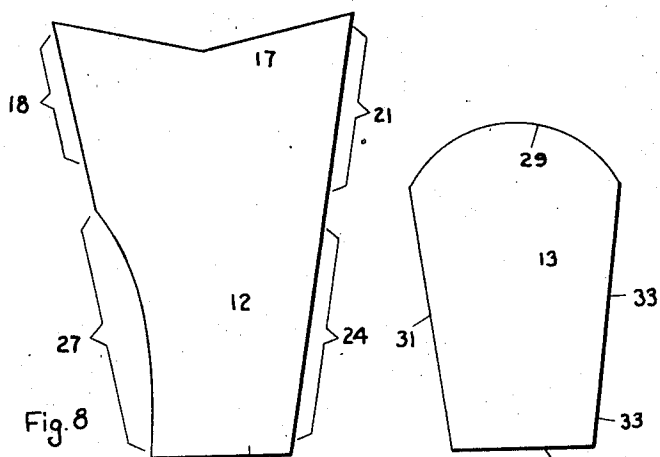


Fig. 8

Fig. 9

Fig. 7

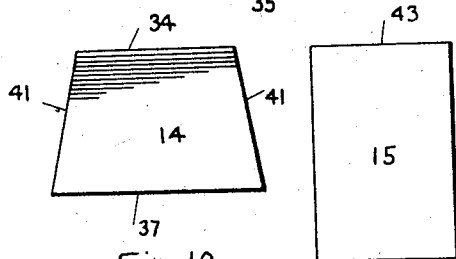


Fig. 10

Fig. 11

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2,255,931

MAN'S UNDERWEAR

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Application November 27, 1939, Serial No. 306,238

2 Claims. (Cl. 2—224)

This invention relates to men's undergarments and especially to such undergarments as are sometimes called drawers. The invention is not affected by the length of the leg portions of the garment nor even by the practical elimination of the leg portions as in garments called "briefs" and having only leg openings at the bottom of the garment.

The purpose of my present invention is to provide a new and improved garment of the class described and especially a garment which is readily and economically made, and convenient and comfortable in use.

A further purpose is to provide a garment of the class mentioned wherein a front panel is provided, the lower part of which consists of two separate layers forming a wide self-closing fly, with the panel portions so constructed and combined with each other and the adjacent parts of the garment as to fit snugly and be comfortable to the wearer, and yet adapted to conveniently serve the purposes of a fly and to have said fly of such construction that it normally stays closed without the use of buttons or other fastening members, and with said panel-formed fly portion so constructed as to be held snugly and smoothly up in place.

A further specific purpose is to provide a front fly-forming panel which is provided with a three-point suspension, namely a practically inelastic tape along both side edges of the panel with the upper ends of the tapes anchored to the waistband and with the central portion of the panel provided with a further support in the way of an upwardly curved tape overlapping the seam between the upper edge of the extra or second layer of the panel and the other or full length layer of the panel, so that the middle portion of the panel is supported from the waistband in a smooth position and with the whole panel and self-closing fly supported without sagging and without binding, and so that all stresses and strains from walking or other movements or even sitting down are divided evenly about the garment.

A further purpose is to provide a garment of the type mentioned with a crotch piece which is sufficiently large and accessible, and comfortably flat and buttonless, and which is well adapted to perform its function of supporting a man's organs and body without strain, distortion, pinching or irritation.

Further purposes and advantages of this invention will appear from the specification and claims hereinafter set forth.

Fig. 1 is a front perspective view of a man's undergarment embodying this invention, the garment being extended to substantially the position it would occupy when worn by a man leaning to the right from his hips.

Fig. 2 is a similar rear perspective view of said garment but with the person standing erect.

Fig. 3 is a plan view of the front of the garment when laid out flat but with the right leg folded in a special way to show the two vertical seams therein.

Fig. 4 is a similar plan view of the rear of the garment when laid out flat but with the right leg arranged to show the two vertical seams.

Figs. 5 and 6 are patterns or plan views on a small scale respectively of the right hand and left hand main garment members 9 and 10.

Fig. 7 is a similar pattern view of the back gore piece or gusset 11.

Fig. 8 is a similar plan view of the full length front panel piece 12 and Fig. 9 is a similar pattern view of the shorter front panel piece 13.

Fig. 10 is a similar pattern view of either of the two similar crotch pieces 14.

Fig. 11 is a similar plan view of either of the two similar leg gore pieces 15.

Fig. 12 is a cross-sectional view substantially on line 12—12 of Fig. 1 but on an enlarged scale, across the front of the garment and showing somewhat more separated than is natural the two pieces of the front panel and their attachment towards the opposite sides of the garment to the opposite main side members of the garment.

Referring to the drawings in a more particular description it will be seen that the garment herein described is constructed of two similar but reversely-shaped main garment members 9 and 10, each adapted to form a side of the garment and a part of the front of the garment and a part of the rear of the garment, a rear gusset or gore piece 11 of general triangular shape with its smaller end secured to the rear of the waistband 16, a full length front panel piece 12, a shorter second panel piece 13, a crotch piece 14 and usually and most conveniently a couple of leg gore pieces 15.

The upper end 17 of the longer front panel piece 12 is in the form of an obtuse angle or a much flattened V, in order to help get a proper shape to the garment and an upward lift to the said front panel pieces 12 and 13. As will be seen more particularly from Figs. 1 and 3, the front panel is composed of the full length panel piece 12 and the shorter panel piece 13. These pieces overlap each other from the bottom of the

panel upwardly for the length or extent of the shorter piece 13 so that the front panel is for its lower two-thirds or thereabouts composed of two layers. The upper right hand side edge 18 of the full length panel piece 12 is secured as by a suitable seam 19 to the upper portion of the front edge 20 of the right hand main member 9, and the upper portion 21 of the left hand edge of the long panel piece 12 is secured as by a proper seam 22 to the upper portion 23 of the front edge of the left hand garment member 10. For definiteness and convenience all references to the portions of the garment and to the several parts thereof are treated as right hand or left hand parts or edges according to the location of the part relative to the person wearing it, so that the right hand main garment member 9 is upon the right hand side of the person supposed to be wearing the garment of Fig. 1, and this part appears on the left hand side of Fig. 1 but appears upon the right hand side of Fig. 2, which is a rear view of the garment.

The lower portion 24 of the left hand side edge of the full length panel piece 12 is permanently secured as by a proper seam 25 to the lower slanting portion of the front edge 26 of the left hand main garment member 10, but the lower and preferably concavely curved portion 27 of the right hand edge of the long panel piece 12 is not attached to the adjacently located lower part 28 of the front edge of the right hand main garment member 9. In the garment shown in the drawings herein it is assumed for the purpose of definiteness in description that the second layer of the front panel, being the shorter panel piece 13, is disposed upon the inside of the garment and is located to the inner side of the full length panel piece 12.

The convexly curved upper edge 29 of this short panel piece 13 is secured by a correspondingly curved seam 30 to the fabric of the long panel piece 12 on a curved line spaced down from the waistband 16 about as best appears in Figs. 1 and 3. The right hand side edge 31 of the shorter panel piece 13 is permanently secured as by a suitable seam 32 to the lower slanting portion 28 of the front edge of the right hand main garment member 9 but the other or left hand edge 33 of this shorter panel piece 13 is not secured to but is purposely left free from the lower slanting portion 26 of the front edge of the left hand main garment piece 10.

In the garment illustrated in Figs. 1 to 4 there is shown and there will preferably be used leg gore pieces 15 to form the upper portion of the leg from the crotch downwardly to the bottom of the mid-length legs shown on the garment. It will be understood that these leg gore pieces are used partly for properly shaping the garment and partly for economy in construction in that it is more economical to add on these small leg gore pieces 15 between the opposite edges of each main garment member at the bottom thereof to help make the leg portion, rather than to have the material required for this leg gore part integral with either or both edges of the main side garment members.

The crotch is formed preferably of two separate pieces 14 as shown in Fig. 10, and of extremely elastic material such for instance as that produced by a spring needle knitting machine, the wales running from side to side of said pieces as shown in Fig. 10, and thus affording great elasticity from the front edge 34 to the rear edge 37. The front edges 34 of the crotch pieces 14

are secured as by a seam 39 to the lower edge 35 of the long panel piece 12 and to the lower edge 36 of the short panel piece 13. The rear edges 37 of the said crotch pieces 14 are fastened by a seam 40 to the lower edge 38 of the triangular rear gore piece 11. The two opposite slanting side edges 41 of the crotch pieces 14 are fastened as by seams 42 to the adjacent portions of the opposite legs of the garment. In this garment as shown and described the attachment of said edges 41 is to the upper edges 43 of the leg gore pieces 15.

On account of the garment so far described being in practice made of knitted fabric which has considerable elasticity and in view of the fact that the crotch piece is made of very elastic knitted fabric such as spring needle knitted fabric, I have found it desirable to reinforce the garment in order to maintain the said panel and particularly the double-layered lower two-thirds thereof in desired close-fitting and properly suspended position and without sagging or becoming too loose. Likewise it is desirable to reinforce the side edges of the crotch piece so as to make that piece really a cradle crotch, that is properly and rather snugly supported at all four of its edges. These means for supporting and suspending the different parts will now be described.

A substantially inelastic left hand tape 44 is attached to the garment, having its upper end securely connected to the waistband 16 at the top of the seam 22 and following down said seam 22 with the opposite sides of said tape strongly secured to the fabric of the garment on both sides of said seam as by a row of stitches 45 at the left side of said tape and extending through the main side member 10 near its edge portion 23, and by a row of stitches 46 on the right hand side of said tape, which stitches go through the fabric of the full length panel piece 12 slightly back from its left hand edge 21. This tape continues on down past the seam 30 that connects the shorter panel piece 13 to the long panel piece 12, said tape following down the full length of the seam 25 by the said left hand main member 10 and secured thereto by a seam 47 at the left side of said tape, with the stitches thereof going through the fabric of the said left hand main member 10 slightly back from the edge 26 of said main member 10. A similar row of stitches 48 attach the right hand side of this tape to the left hand side of the long or full length panel member 12 slightly back from its slanting edge 24. This left hand tape 44 extends beyond the seam 39 at the bottom of the two panel pieces and extends along the left hand edge of the crotch pieces 14 overlapping the seam 42 which unites said left hand edge of the crotch pieces 14 to the left hand leg gore piece 15. For the width of said crotch pieces 14 there is a row of stitches piercing the left hand edge of said tape and going to the left hand leg gore piece 15 and following the tape to its further end where said tape is secured to the seam 50 which, above this point, connects the left hand side of the gore piece to the left hand main garment member 10 as most plainly appears in Fig. 4. It will be understood of course that another row of stitches 51 connects the right hand edge of this left hand inelastic tape 44 to the two crotch pieces 14 slightly back from their extreme side edges. It will be noted in the above description that neither row of stitches from the left hand tape extends through the left hand edge 33 of the inwardly disposed shorter panel piece 13. That edge 33 as

already mentioned is free of the overlapping long panel piece 12 and also free of any attachment to the left hand main garment member 10 except at the extreme top and bottom of said short panel piece. It will be understood of course that the said edge 33 will have its own reinforcement by proper overcasting stitching or the like so as to prevent that edge of the inner panel piece from being unduly stretched or from unraveling.

A similar reinforcing and suspending tape 52 is provided on the right hand side of the panel with its upper end securely anchored to the waistband 16 and with its upper length overlapping the seam 19 between the right hand upper edge portion 18 of the long panel piece and the adjacent upper edge portion 20 of the right hand main garment member 9. A proper row of stitches 53 near the left hand edge of this portion of the tape connects the left hand edge of the tape to the said full length panel member 12 slightly in from its right hand edge 18 and a similar row of stitches 54 passes through the said tape near its right hand edge and into the fabric of the said right hand garment member 9 slightly back from its edge portion 20. This portion of the tape thus extends down to the seam 30 which secures the upper edge of the inner and shorter panel member 13 to the said full length panel member 12. From this point the tape 52 extends downwardly overlapping the seam 32 already mentioned as connecting the right hand edge 31 of the short panel piece 13 to the inner edge portion 28 of the right hand garment member 9. Here again of course the said tape 52 is securely fastened to the parts of the garment on each side of the said seam as by a row of stitches 55 going through the left hand edge of said portion of the tape and through the panel member 13 slightly back from its right hand edge 31. Similarly a row of stitches 56 passes through the right hand edge of this portion of the tape and into and through the adjacent portion of the garment member 9 slightly back from its front edge portion 28. This portion of this tape extends to the bottom of the panel pieces and the tape 52 is continued therebeyond past the seam 39 uniting the bottom edges of said panel pieces to the crotch pieces 14, and continues along overlapping the seam 42 that unites the right hand side of the crotch pieces 14 to the adjacent crotch side of the right hand leg portion of the garment. The edges of this portion of the right hand tape 52 are secured by suitable rows of stitches to the said crotch piece near its left hand edge and on the right hand side to the adjacent leg portion of the garment—actually as this garment is made to the leg gore piece 15 on the right hand leg. The rear and farther end of this tape is then secured to the seam 58 that connects the right hand side of the back gore piece to the rear edge of the main garment member 9.

It will now be seen that these two substantially inelastic tapes will secure the whole front panel adequately, smoothly and effectively in position and likewise will hold the sides of the crotch pieces well up in supporting position but not so tight as to pinch that portion of the man's body under any conditions of walking, moving or sitting.

Beside these two points of suspension at the opposite sides of the panel, the panel bodily is held up across the upper end of the inner or shorter panel piece 13 by reason of the shorter

panel piece being secured as by the seam 30 to the relatively short upper length of the full length panel piece, and also by reason of a tape 57 which overlaps said seam 30 and extends in curved position more or less as suggested in Figs. 1 and 3, with the ends of said tape anchored to the right and left hand side tapes 52 and 44. The material which is used for the two panel pieces is relatively elastic laterally of the garment but relatively inelastic lengthwise, that is up and down, of the garment. Therefore the two panel pieces are well supported on the line of the seam 30 by the short zone of the full length panel piece 12 that extends above the seam 30 and the tape 57 up to the waistband 16.

I claim:

1. In a man's undergarment of the type mentioned, the combination of two main side members, each forming one side and a leg portion and part of the front and part of the back of the garment, an elastic waistband, a rear gore inserted between the rear edges of the main garment members and having its upper end secured to the waistband, a front panel beginning at the waistband and having its lower end at the front of the crotch, a crotch piece of spring-needle material and having its wales extending crosswise of the garment so that said crotch piece is of extreme elasticity from front to back, said crotch piece having its front edge secured to the lower end of the said panel and its rear edge secured to the lower end of the rear gore and having its side edges secured to the leg portions of the garment, two inelastic tapes having their upper ends secured to the waistband and extending downwardly along the seams joining the panel to the main members of the garment and continuing along the opposite side seams of the crotch piece to the rear line of the crotch piece and there secured to the seams connecting the rear gore and the adjacent portion of the main members, so that the side edges of the crotch piece are held from distention and the whole crotch piece is securely supported from the body of the garment and from the waistband thereof and the said crotch piece forms a pouch.

2. In a man's undergarment of the type mentioned, the combination of two main side members, each forming one side and a leg portion and part of the front and part of the back of the garment, an elastic waistband, a rear gore inserted between the rear edges of the main garment members and having its upper end secured to the waistband, a front panel beginning at the waistband and having its lower end at the front of the crotch, a crotch piece of spring-needle material and having its wales extending crosswise of the garment so that said crotch piece is of extreme elasticity from front to back, said crotch piece having its front edge secured to the lower end of the said panel and its rear edge secured to the lower end of the rear gore and having its side edges secured to the leg portions of the garment, two inelastic tapes having their upper ends secured to the waistband and extending downwardly along the seams joining the panel to the main members of the garment and continuing along the opposite side seams of the crotch piece to the rear line of the crotch piece and there secured to the seams connecting the rear gore and the adjacent portion of the main members, so that the side edges of the crotch piece are held from distention and the whole crotch piece is securely supported from the body

of the garment and from the waistband thereof and the said crotch piece forms a pouch, a second and separate layer for substantially the lower two-thirds of the front panel, having its upper edge secured to the full length piece of the panel on a line spaced down from the waistband and having its lower end brought into the seam connecting the lower end of the panel to the crotch

piece, each of the overlapping parts of said two panel pieces having one side edge secured to only one of said tapes and free at its other edge of the other tape, the attached side edge of each panel piece being adjacent the unattached side edge of the other panel piece, whereby the two panel pieces form a wide self-closing fly.

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