# Nov. 8, 1966

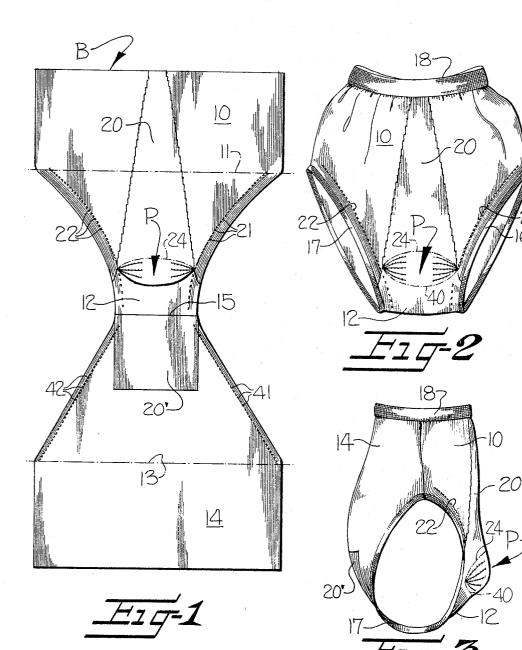
## E. SIMON

# 3,283,545

Filed Sept. 21, 1964

MEN'S BRIEF-TYPE UNDERGARMENT

2 Sheets-Sheet 1



INVENTOR: EDOUARD SIMON

BY Parent, Bell, Selter, Park + Heard

**ATTORNEYS** 

## Nov. 8, 1966

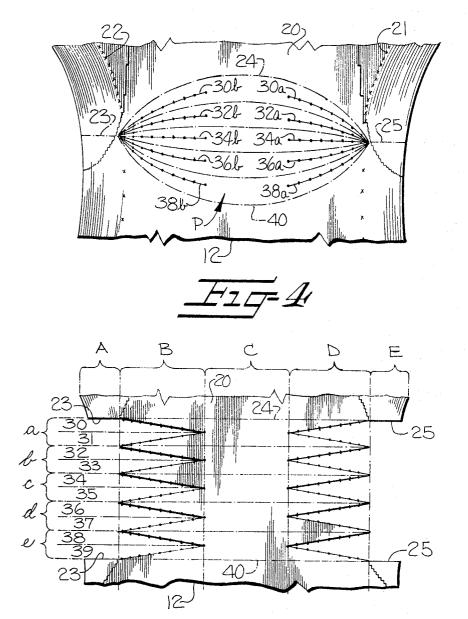
## E. SIMON

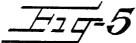
3,283,545

MEN'S BRIEF-TYPE UNDERGARMENT

Filed Sept. 21, 1964

2 Sheets-Sheet 2





INVENTOR EDOUARD SIMON

By Parret, Bell, Selfin, Park + france

ATTORNEYS

# **United States Patent Office**

5

10

# 3,283,545

## Patented Nov. 8, 1966

1

3,283,545 MEN'S BRIEF-TYPE UNDERGARMENT Edouard Simon, Troyes, Aube, France, assignor to Etablissements Simon S.A., Troyes, Aube, France, a French company

Filed Sept. 21, 1964, Ser. No. 397,773

Claims priority, application France, July 22, 1961, 863,878; July 5, 1962, 903,035; Feb. 6, 1964, 962,904

### 5 Claims. (Cl. 66-177)

This invention relates generally to a brief-type undergarment for men and boys which may be economically knit on a straight-bar or full-fashioned knitting machine and wherein the lower front portion of the garment is 15 provided with a body bulge receiving pocket or cup adapted to receive and comfortably support the male organs. This application is a continuation-in-part of my copending application Serial Number 211,335, filed July 20, 1962.

times referred to as jockey-type shorts) for men and boys are usually formed of several cut panels of textile material that are sewed together to produce a garment corresponding in shape to the lower portion of the body and  $_{25}$ provided with an outwardly bulging pocket to accommodate the male organs. However, this type of undergarment is expensive to produce and the seams in and surrounding the pocket can be extremely uncomfortable, particularly when the wearer must sit for long periods of 30 time in one position.

With the foregoing in mind, it is a primary object of the present invention to provide a brief-type undergarment for men and boys including front and rear fashioned body panels interconnected by a crotch portion that 35is provided with a fashioned body bulge receiving pocket adapted to receive and comfortably support the male organs.

It is a further object of the present invention to provide a brief-type full-fashioned undergarment of the type de-40 scribed wherein the fashioned body bulge receiving pocket includes a plurality of fashioned sections that include partial courses of gradually decreasing and gradually increasing lengths, the partial courses of each section being joined together at opposite sides of the pocket.

It is a more specific object of the present invention to provide a full-fashioned undergarment of the type described wherein an elastic tape is sewed to the selvage edges of the crotch portion defining the leg openings in the undergarment and an elastic band is sewed to the 50 to form a front panel of the desired length. free ends of the front and rear panels to form an elastic waistband.

It is a further specific object of the present invention to provide a full-fashioned undergarment of the type described wherein the blank is knit of synthetic stretchable 55 body yarn and the central portion of the front panel and a major portion of the crotch portion, including the body bulge receiving pocket, is reinforced with an additional yarn knit in plated relationship with the body yarn or otherwise.

Some of the objects of the invention having been stated, other objects will appear as the description proceeds, when taken in connection with the acompanying drawings, in which:

FIGURE 1 is a somewhat schematic plan view of the full-fashioned undergarment blank formed in accordance with the present invention;

FIGURE 2 is a front elevation of the completed undergarment made from the blank shown in FIGURE 1;

FIGURE 3 is a side elevation of the undergarment and illustrating its general appearance when worn;

2

FIGURE 4 is a greatly enlarged fragmentary elevation of the portion of the garment blank in which the body bulge receiving pocket is disposed; and

FIGURE 5 is a schematic view of that portion of the garment blank shown in FIGURE 4 and diagrammatically illustrating the manner in which the sections of the pocket are knit by forming successive partial courses of varying lengths.

The garment blank, broadly indicated at B in FIGURE 1, is knit on a full-fashioned, straight bar or "cotton" knitting machine equipped with the usual fashioning points which operate to control the width of the blank between the opposite selvage edges. The blank B includes a front panel 10 which extends from the top of the blank down to the dash-dot line 11. A crotch portion 12 which extends from the dash-dot line 11 to the dash-dot line 13, and a rear panel 14 which extends from the dash-dot line 13 to the bottom of the elongate blank B.

Although the fashioned blank shown in FIGURE 1 As is well known, brief-type undergarments (some-20 has been formed in two separate pieces that are con-near reformed to restrict to a the second to be the nected together along the line 15, it is to be understood that the elongate blank B could be knit in one single piece from the top to the bottom by using the usual transfer points to first gradually narrow and then gradually widen the crotch portion 12. A fashioned body bulge receiving pocket, broadly indicated at P, is formed in a medial portion of the crotch portion 12, in a manner to be presently described.

The blank B is formed into the garment shown in FIGURES 2 and 3 by sewing the selvage edges of the front panel 10 to the corresponding selvage edges of the rear panel 14. Elastic tapes 16 and 17 are sewed to the edges of the crotch portion to surround the leg openings defined thereby and an elastic tape is attached to

the upper edges of the front and rear panels 10 and 14 to provide an elastic waistband 18. Upon completion of the brief-type undergarment, the body bulge receiving pocket P is positioned in the lower front portion of the garment.

The garment blank is preferably knit of thermoplastic stretchable body yarn which has been crimped and heatset and the front panel portion is knit from top to bottom in FIGURE 1 with the first course extending from one selvage edge to the other and an additional yarn carrier 45 being brought into action in a medial portion of this course to form a reinforced panel, indicated at 20 in FIGURE 1. Knitting of complete courses is continued down to the dash-dot line 11 to complete the front panel 10 and the number of courses may be varied as desired

As the knitting of the crotch portion 12 downwardly from the dash-dot line 11 begins, the transfer points are brought into action to transfer groups of the outermost stitch loops inwardly at each selvage edge and gradually narrow the crotch portion 12. The points of narrowing are schematically indicated by the X's 21 and 22 at each side of the blank. As shown in FIGURE 1, the path of travel of the reinforcing yarn carrier may be periodically increased to widen the reinforced panel 20 down to the 60 fashioned pocket P.

The pocket P is preferably formed by the selective pressing of the needles of the full-fashioned knitting machine in what is usually termed "partial pressing" to form successive fashioned sections with partial courses of vary-65 ing length in each section. The partial pressing method may be carried out by the type of apparatus disclosed in my above-noted copending application in which three needle presser blades are utilized to deflect the active needles so that their beards will be closed by the usual presser bar while the inactive needles are not deflected 70and their beards are not closed by the presser bar. In

my copending application the two outermost blades are

gradually moved between a first position on opposite sides of the center blade and a second position where they overlie the center blade. Thus, by progressively increasing and decreasing the effective width of the presser blades, varying numbers of needles may be made active in successive courses.

The manner in which the pocket P is knit is best illustrated in FIGURES 4 and 5. The last full course of the crotch portion 12 (before beginning the knitting of the pocket P) is knit with the body yarn carrier moving from  $_{10}$ one selvage edge to the other and all needles active to form a full course along the dash-dot lines 23, 24 and 25 in FIGURE 4. The first partial course of the pocket P is formed along the dash-dot line 24 and the needles hold the stitch loops along the dash-dot lines 23 and 25 15 until the pocket P is completed.

As shown in FIGURE 5, the knit fabric has been divided into walewise sections A through E and the needles which form the outermost sections A and E do not again knit until after all of the fashioned coursewise sections a 20 through e are completed. The first partial course of the pocket P is formed by feeding yarn to and pressing only the active needles in the walewise sections B, C and D. The number of active needles in succeeding partial courses 25is gradually reduced until only the needles in the walewise section C are knitting in the last partial course of the narrowed gusset 30 (FIGURE 5). A widened gusset 31 is then knit in section a by gradually increasing the number of active needles in succeeding partial courses. The 30 last partial course of the widened gusset 31 includes all of the needles in the walewise sections B, C and D.

As the partial courses are widened in the gusset 31, opposite ends are successively joined to the ends of the narrowed partial courses of the gusset 30 at corresponding sides of the pocket P. This joining together of the narrowed and widened partial courses is schematically indicated by the spaced dots on the lines 30a and 30b at opposite sides of the pocket P shown in FIGURE 4. This same procedure is repeated for instance four more times 40 in knitting the fashioned sections b through e and while forming the corresponding narrowed and widened gussets 32-39. The partial courses of the successively narrowed and widened gussets are joined together at opposite sides of the pocket P, as indicated by the dots on the lines 32a, 34a, 36a, 38a and 32b, 34b, 36b, 38b (FIGURE 4).

Upon completion of the pocket P with the knitting of the last partial course of the widened gusset 39 of section e, indicated by the dash-dot line 40 in FIGURE 4, the yarn carrier feeds yarn to all of the needles in sections A through E and the needles from one selvage to the other are pressed to form a full course along the dashdot lines 23, 40 and 25 of FIGURE 4. As this full course is knit, the stitch loops in the walewise sections A and E are drawn through the corresponding stitch loops in these sections a through e of the pocket P. The knitting of the crotch portion 12 is continued with further narrowing below the pocket P and down to the juncture line 15 of FIGURE 1. 60

In the blank B shown in FIGURE 1, the rear panel 14 and the lower end of the crotch portion 12 are knit separate from the front panel 10 and the upper end of the crotch portion 12. The rear panel 14 is knit from the free end to dash-dot line 13 with courses of equal length and then the transfer points gradually narrow the fabric adjacent opposite selvages, as schematically indicated by the narrowing marks, while an additional yarn carrier is introduced to form the reinforced area 20'. The corresponding ends of the two portions of the blank B are joined together along the line 15 by a looping or seaming operation to complete the blank B. As has been stated, the blank B may be knit in a single piece from top to bottom by widening the lower end of the crotch portion 12. 75

5

While the pocket P has been described as being knit by the use of needle presser blades which deflect the needles and are movable longitudinally of the needle bed, it is to be understood that other known types of selective needle pressing devices may be used. For example, the pressing bar may be made in sections to progressively engage and close the beards of selected groups of needles or the pressing bar may have movable teeth which engage and close the beards of selected groups of needles to form partial courses of varying length. Also, the size and shape of the pocket P may be varied by increasing or decreasing the number and manner of knitting the fashioned sections.

While the body bulge receiving pocket is shown in a brief-type undergarment, particularly adapted for men and boys, this type of fashioned pocket could also be knit during the formation of other fashioned garments. For example, they could be formed as breasts pockets for bathing suits, and the like.

In the drawings and specification there has been set forth a preferred embodiment of the invention and, although specific terms are employed, they are used in a generic and descriptive sense only, and not for purposes of limitation, the scope of the invention being defined in the claims.

I claim:

1. A brief-type undergarment for men and boys formed of an elongate full-fashioned knit blank having opposite selvage edges and comprising

(a) a front body panel,

- (b) a rear body panel having opposite selvage edges connected to the corresponding selvage edges of said front body panel, said front and rear body panels being devoid of seams except at said selvage edges,
- (c) a fashioned crotch portion joined at one end to said front panel and at the other end to said rear panel, at least the medial portion of said crotch portion being of less width than said front and rear panels, and the selvages of said crotch portion defining leg openings in the undergarment, and
- (d) a fashioned body bulge receiving pocket formed integrally with and during the knitting of said crotch portion, said pocket being positioned inwardly equal distances from opposite selvage edges of said crotch portion and somewhat closer to said front panel than to said rear panel, said pocket being adapted to receive and comfortably support the male organs of the wearer.

2. A brief-type undergarment according to claim 1 wherein said body bulge receiving pocket comprises a plurality of fashioned sections each including a group of partial courses of gradually decreasing length and a group of partial courses of gradually increasing length.

3. A brief-type undergarment according to claim 1 wherein said full-fashioned knit blank is knit of a body yarn and a second yarn is knit in plated relationship with said body yarn and forms a reinforced area in said pocket and in at least adjacent portions of said crotch portion.

4. A brief-type undergarment according to claim 1 wherein an elastic tape is connected to the ends of said front and rear panels to provide an elastic waistband, and elastic tapes are connected to the selvage edges of said crotch portion and surround the leg openings defined thereby.

5. A brief-type undergarment for men and boys formed of an elongate full-fashioned blank knit of a body yarn and having opposite selvage edges, said undergarment comprising

(a) a front body panel,

(b) a rear body panel having opposite selvage edges connected to the corresponding selvage edges of said front body panel, said front and rear body panels being devoid of seams except at said selvage edges,

- (c) a fashioned crotch portion joined at one end to said front panel and at the other end to said rear panel, at least the medial portion of said crotch portion being of less width than said front and rear panels, and the selvages of said crotch portion defining leg 5 openings in the undergarment,
- (d) a fashioned body bulge receiving pocket formed integrally with and during the knitting of said crotch portion, said pocket being positioned inwardly equal distances from opposite selvage edges of said crotch 10 portion and somewhat closer to said front panel than to said rear panel, said pocket being adapted to receive and comfortably support the male organs of the wearer, said pocket comprising a plurality of 15 fashioned sections each including a group of partial courses of gradually decreasing length and a group of partial courses of gradually increasing length, and
- (e) a reinforced area extending downwardly from said front panel and through at least a major portion of 20 said crotch portion, including said pocket, said reinforced area including a second yarn knit in plated relationship with said body yarn.

6

**References Cited by the Examiner** UNITED STATES PATENTS

	• • • • • • • • • •		
366,931	7/1887	Cooper.	
1,515,667	11/1924	Esche 66—187	
1,798,804	3/1931	Parker 66—187	
1,949,439	3/1934	Wilcomb.	
2,114,634	4/1938	Jean 2—224	
2,406,969	9/1946	Silman 66—176	
2,519,534	8/1950	Artzt 66—177 X	
2,706,389	4/1955	Garrou et al 66—189 X	
2,717,388	9/1955	Rutledge.	
2,747,391	5/1956	Burkey 66	
2,872,685	2/1959	Denbo 2—224	
2,976,708	3/1961	Gordon 66—176	
3,023,594	3/1962	Mahler 66—42	

FOREIGN PATENTS

10/1961 France.

861,232 2/1961 Great Britain.

MERVIN STEIN, Primary Examiner.

DONALD W. PARKER, Examiner.

1,278,007

W. C. REYNOLDS, Assistant Examiner.