Nov. 22, 1949 W. R. SPEARRIN 2,489,053

FLY CLOSURE

Filed Nov. 19, 1946

Fig. 1.

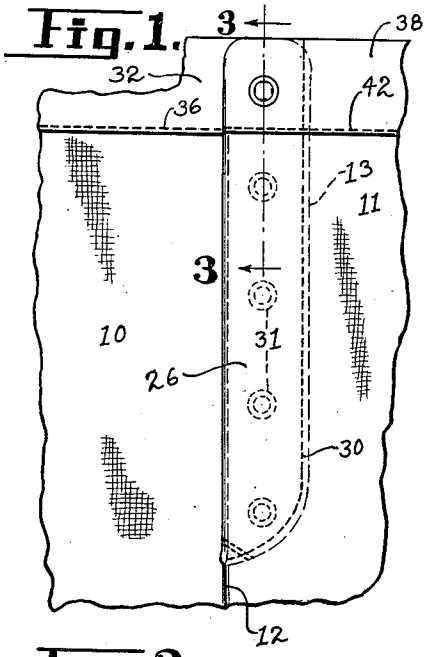


Fig. 2.

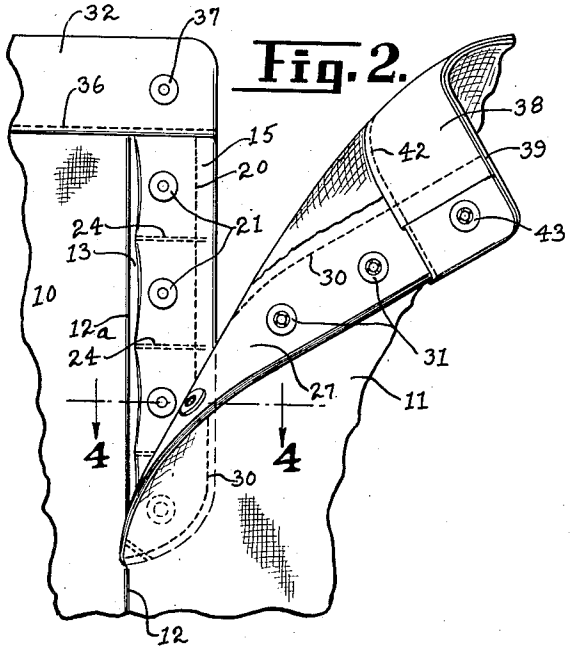


Fig. 3.

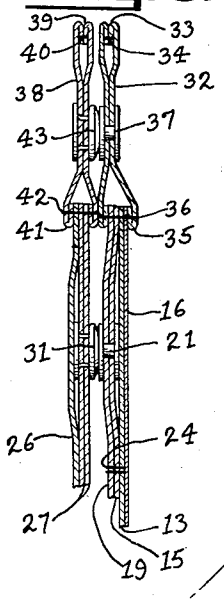


Fig. 4.

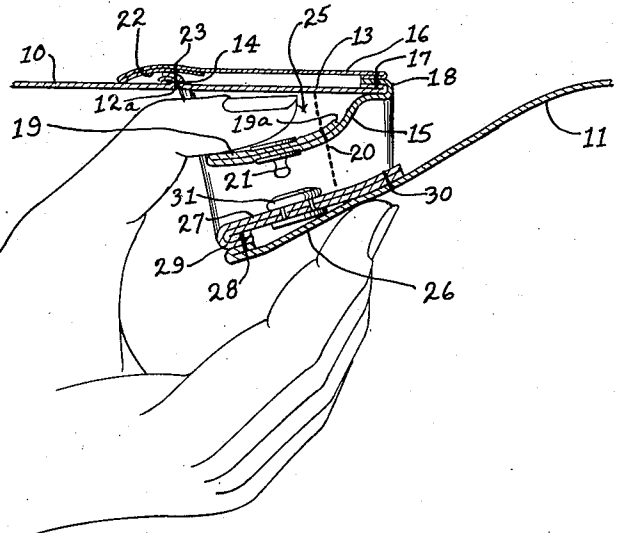
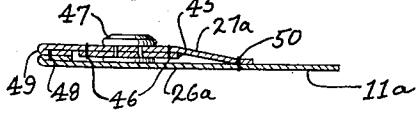


Fig. 5.



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FLY CLOSURE

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11 Claims. (Cl. 2—234)

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This invention relates to garments and particularly to the sew-on type of fly front constructions for such garments, and one wherein separable snap fastener elements are employed and set along the full length of a fly front construction such as employed in various types of garments and is a continuation of my co-pending application, Serial No. 710,931, filed November 19, 1946, now abandoned.

A further object of this invention is to design a fly front construction to accommodate a series of separable snap fastener elements and particularly to a redesign of a fly front construction so as to make it more convenient for the wearer in the manipulation of the snap fastener elements for closing up a fly front. This is accomplished by arranging a second fly strip, to which a series of one of the elements of a snap fastener member are secured, over the conventional under fly portion and bar tacking the second fly strip to the under fly portion at spaced intervals equally between the fastener elements, thus providing individual pockets as a part of the under fly portion opening away from the edge of that part of the garment, and within which the thumb of the wearer's hand may be inserted in the act of snapping the elements together.

The invention will be better understood from the detailed description which follows when considered in conjunction with the accompanying drawing showing certain preferred embodiments of my invention, and wherein—

Fig. 1 is a front view of a fly construction such as might be employed on trouser garments and showing the fly construction as it appears in closed position.

Fig. 2 is a view similar to Fig. 1, but showing the fly front construction in partially open position.

Fig. 3 is a vertical sectional view taken along the line 3—3 of Fig. 1.

Fig. 4 is a horizontal sectional view taken along the line 4—4 of Fig. 2, but showing the fastener elements in a position about ready to be snapped together, and

Fig. 5 is a view similar to the upper-left fly portion of Fig. 4 showing a modified form of construction.

Referring now in detail to the drawing, the numeral 10 designates the right front portion of a trouser garment construction adjacent the fly opening, and the numeral 11 designates the left front portion of a garment construction adjacent the fly opening. The front portions 10 and 11 are brought together below the fly proper by an infolded joining seam 12. As in the usual

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construction of this type of garment an under-right fly strip 13 is secured to the right front portion 10 by stitching 14 and providing an infolded fly connecting seam 12a substantially in alignment with the front portions joining seam 12.

In using the terms "right" and "left" to designate certain parts of the garment, I choose to use these terms in the specification as they are conventionally used in connection with the actual garment and not as to the position that the parts happen to appear in the patent drawing. It should, therefore, be understood that, when I refer to the under-right fly part of the garment, it will appear at the left of the drawing and the upper-left fly part will appear at the right of the drawing.

Attached to the outer end of the under-right fly strip 13 is a second fly strip 15, and at the same time there is secured an under facing or lining strip 16 which is usually of a lighter colored material and of lighter weight than the garment material. The parts 13, 15 and 16 are held together by a single line of stitching 17, after which stitching the parts are folded back upon themselves in a manner as best shown at 18 in Fig. 4. The main body of the second fly strip 15 lies in front of the fly strip 13 and is folded back upon itself as at 19 to provide a double thickness fly and held together by a line of stitching 20. The end 19a of the folded portion 19 is preferably left short from the attaching portion of the strip 15 so that there will be a minimum of thickness at the folded portion 18. Set at equally spaced positions along this second fly strip 15 and particularly in the mid part of the folded-over portion 19 are a series of one of the elements of detachable snap fastener elements, and in this case showing particularly stud elements 21, it being understood that the elements 21 are set upon the second fly strip prior to the stitching operation 17.

After the lining strip 16 has been stitched to the outer end of the fly strip 13, as described above, it is folded back upon itself as shown in Fig. 4, and the opposite end likewise is folded back upon itself as at 22. This folded portion 22 in turn is stitched to the inturned seam 12a as by a line of stitching 23 passing substantially through the seam 12a and line of stitching 14. Equally spaced between the point of attachment of the series of stud elements 21 is a double bar tacking 24 that secures the second fly strip 15 directly to the fly strip 13 and thus provides a series of pockets 25, the purpose of which will appear later.

To the outer end of the left front portion 11 is secured a two-ply under fly strip 27 as by a line of stitching 28. After the stitching operation of 28 this two-ply fly strip 27 is then folded back upon itself along one edge as at 29 to underlie that portion of the left front portion as designated at 26 in the manner as shown in Fig. 4. After the folding operation the innermost end of the two-ply strip 27 is stitched to the left front portion as by a line of stitching 30. Prior to the stitching operations 28 and 30 a series of fastener elements, which in this case are shown to be specifically socket elements 31 complemental to the studs 21, are secured to the double ply strip 27 and are properly spaced to be in registering alignment with the stud members 21.

To finish off the upper part of the garment construction the usual form of waist band may be secured thereto. As best shown in Fig. 3 the waist band attached to the right front portion 10 of the garment is of double material thickness 32, having its upper end infolded as at 33 and stitched together by a line of stitching 34 in the usual manner. The lower ends of the two-ply material of this right waist band 32 are spread apart and each lower edge infolded upon itself as at 35 and compressed against the opposite sides of the garment part 10 and at the underright fly embracing the fly strip 13, the lining 16, the double folded portion 19 of 15, and all folded parts stitched together as by a line of stitching 36. Adjacent the end of this right waist band 32 is secured a stud element 37 through both thicknesses of the waist band material and in vertical alignment with the stud elements 21, the element 37 being identical with elements 21.

The left waist band construction 38 is made and attached in a similar manner to the right waist band 32 having at its upper edge the infolded seam 39 and stitched at 40. The lower ends of the two-ply material of the left band 38 are likewise spread and infolded as at 41 and stitched as at 42 to the left portion of the garment 11 and at the fly portion including the upper-left garment portion 26 and the two-ply under fly strip 27. After the left waist band 38 is secured in place, a socket element 43 complemental to the stud element 37 is secured adjacent the end thereof in vertical alignment with the socket elements 31 previously referred to.

It is to be noted that all the studs 21, by the manner in which they are attached to the reinforcing strip 15, are concealed and covered relative to the underside of the right garment part 10 as by the lining strip 16, and it is only the attaching element of the stud 37 secured to the right waist band that shows to the underside face of the garment. Similarly all of the socket elements carried by the upper-left fly are concealed from the front portion of the garment except for the upper fastener element 43 secured to the end of the left waist band, and this will be normally covered by the belt worn with the trousers.

In the closing up of the fly front by reason of the pockets 25 that are provided in the underright fly portion, it will be a relatively simple matter for the wearer to slip one's thumb into the several pockets so as to support the underside of the stud members 21 while compressing the front of the upper-left fly portion by the index finger for snapping the series of separable snap fastener elements together in a manner as clearly shown in Fig. 4. By this construction it eliminates the necessity of having to force one's thumb underneath the under-right fly portion as would be required if the fastener elements were attached directly to the fly strip 13.

The fly construction having the snap fastener elements attached, as shown in Figs. 1 to 4 inclusive, is designed with a view for use in connection with heavier types of work trouser garments such as dungarees and the like. With a view of employing snap fasteners on lighter garments, such as slacks, there is shown a modification of Fig. 5 wherein the thickness of the upper-left fly may be measurably decreased at the seams for a lighter constructed garment. In this case the fly strip 27*a* is only a single thickness, but has a reinforcing strip 45 stitched longitudinally of its mid portion as by spaced stitching 46 in a manner as shown in Fig. 5. Attached to this reinforced portion of the strip 27*a* is a series of socket elements 47. After the assembly of the reinforcing strip 45 and socket element 47 to the fly strip 27*a*, the latter is then secured to the underside of the left garment portion 11*a* by first stitching one end of said strip 27*a* to the outer end of the upper-left garment portion 26*a* as by a line of stitching 48 and infolded as at 49. The opposite end of the strip 27*a* is finally stitched to the garment proper 11*a* as by a line of stitching 50.

While the invention is shown and described in connection with a sew-on fly construction for men's trousers it should be understood that the invention is applicable to other types of garments, as for instance, it could equally as well be applied to various types of ladies' garments having sew-on fly constructions, the only difference being that in ladies' garments the under fly portion having the pockets for the reception of the thumb would be at the left of the garment instead of at the right.

I claim:

1. In a fly construction for a garment comprising an under-right fly portion, a fly strip overlying the under-right fly portion and secured its full length to said under-right fly portion garment edge, a series of spaced elements of a detachable fastener element secured to said fly strip, said fly strip being bar tacked to the under-right fly portion at positions substantially equal between the elements to provide for a series of pockets having their openings away from the garment edge and within which the wearer can insert one's thumb and support the underside of the elements, the opposite or upper-left fly part constructed with an underlying fly strip stitched to the under-side of the upper-left fly part, and elements complemental to the first elements attached to said underlying fly strip and being concealed from the front of the garment.

2. In a fly construction for a garment comprising right and left garment portions stitched together at an infolded seam below the fly construction, an under-right fly strip stitched to the edge of the right garment portion, a second fly strip attached its full length to the outer end of the under-right fly strip and folded to overlie the same, a series of stud fastener elements attached to said second fly strip in spaced relationship, said second fly strip being bar tacked to the underright fly strip at equally spaced positions between the stud fastener elements to provide for a series of individual pockets having their openings away from the garment edge and within which the wearer can insert one's thumb and support the underside of the stud elements, the opposite or

upper-left garment portion also having a fly strip stitched to the underside of said left garment portion, and a series of socket elements complemental to the stud elements secured to said latter fly strip.

3. In a fly construction for a garment, an under-right fly strip stitched to the fly opening of the right portion of the garment, a second fly strip secured its full length to the outer end of the under-right fly strip and folded about the unattached edge of said fly strip to overlie said latter fly strip, a series of equally spaced fastener elements secured to said second fly strip, said second fly strip being bar tacked to said under-right fly strip equally between the fastener elements carried thereby to provide for a series of pockets having their openings away from the garment edge to permit the thumb of the wearer's hand to slip in back of the fastener elements from the front of the right garment portion, an upper-left section formed as a part of the left portion of the garment and adapted to normally overlie the under-right fly strip, and a series of equally spaced fastener elements secured thereto which latter elements are detachable with the elements secured to the second strip of said under-right fly.

4. In a fly construction for a garment, an under-right fly strip stitched to the fly opening of the right portion of the garment, a second fly strip secured its full length to the outer end of the under-right fly strip and positioned to overlie said under-right fly strip, a series of equally spaced fastener elements secured to said second fly strip, said second strip being bar tacked to said under-right fly strip at substantially spaced positions between the fastener elements carried by said second fly strip to provide for a series of pockets having their openings away from the garment edge to permit the thumb of the wearer's hand to slip in back of the fastener elements from the front of the right garment portion, an upper-left fly section formed as an integral part of the left portion and adapted to overlie the under-right fly strip, another fly strip underlying said upper-left fly portion and stitched along opposite longitudinal edges thereof, and a series of fastener elements complemental to the first mentioned elements secured to said latter reinforcing strip prior to the stitching operations and being concealed from the front part of the garment.

5. In a fly construction for a garment, an under-right fly strip stitched to the fly opening of the right portion of the garment, a second fly strip secured its full length to the outer end of the under-right fly strip and positioned to overlie said under-right fly strip, a series of equally spaced fastener elements secured to said second fly strip, said second fly strip being bar tacked to said under-right fly strip equally between the fastener elements carried thereby to provide for a series of pockets having their openings away from the garment edge to permit the thumb of the wearer's hand to slip in back of the fastener elements from the front of the right garment portion of the garment, an upper-left fly section formed as an integral part of the left portion of the garment and adapted to overlie the under-right fly strip, another fly strip underlying said upper-left fly section and stitched thereto along opposite longitudinal edges thereof, a series of fastener elements complemental to the first mentioned elements secured to said latter fly strip prior to the stitching operations and being concealed from the front part of the garment, and a waist band secured to the upper edge of the right and left garment portions and the fly strip ends, the ends of the waist band having fastener elements attached thereto which are like to those secured to their associated fly strips.

6. In a fly construction for a garment, an under-right fly strip stitched to the fly opening of the right portion of a garment, a second fly strip stitched its full length to the outer end of said under-right fly strip and folded around the edge thereof to overlie said under-right fly strip, said second fly strip having a portion folded upon itself inwardly to a considerable extent to provide for a double ply reinforcing portion with the end of the folded portion stitched to an intermediate part of the second fly strip and removed from the latter's attached line of stitching, a series of stud elements attached to said double ply portion of said second fly strip, a series of bar tacks securing the double ply portion of said second fly strip to said under-right fly at substantially equal positions between said elements and providing for a series of pockets one in back of each stud element said pockets having their openings away from the garment edge for convenience in manipulating said elements from the front of the garment, an upper-left fly section provided as part of the left portion of the garment and adapted to overlie the under-right fly strip, and a series of socket elements secured to said upper-left fly section and being complemental to said stud elements for detachable engagement therewith.

7. In a fly construction for a garment, an under-right fly strip stitched to the fly opening of the right portion of a garment, a second fly strip stitched its full length to the outer end of said under-right fly strip and folded around the edge thereof to overlie said under-right fly strip, said second fly strip having a portion folded upon itself inwardly to a considerable extent to provide a double ply reinforcing portion with the end of the folded part stitched to the mid-portion of the second fly strip and removed from the attached line of stitching, a series of stud elements attached to the double ply folded portion of said second fly strip, a series of bar tacks securing the double ply folded portion of said second fly strip to the under-right fly strip at substantially equal positions between said stud elements and providing for a series of pockets one in back of each stud element, said pockets having their openings away from the garment edge for convenience in manipulating said elements from the front of the garment, an upper-left fly section provided as part of the left portion of the garment, a double ply reinforcing fly strip stitched to the underside of said upper-left fly portion, said double ply fly strip having a series of spaced socket elements attached thereto which elements are complemental to said stud elements for detachable engagement therewith, said socket elements being concealed from the front part of the garment.

8. In a fly construction for a garment, an under-right fly strip stitched to the fly opening of the right portion of a garment, a second fly strip stitched to the outer end of said under-right fly strip and folded around the edge thereof to overlie said under-right fly strip, said second fly strip having a portion folded upon itself inwardly to a considerable extent to provide for a double ply reinforcing portion with the end of the folded part stitched to the mid-portion of the second fly strip and removed from the attached line of stitching, a series of stud elements attached to the double ply folded portion of said second fly strip, a series of bar tacks securing the double ply

folded portion of said second fly strip to the under-right fly strip at substantially equal positions between said stud elements and providing for a series of pockets one in back of each stud element, said pockets having their openings away from the garment edge for convenience in manipulating said elements from the front of the garment, and an upper-left fly section provided as part of the left portion of the garment, a double ply reinforcing fly strip stitched to the underside of said upper-left fly portion, said double ply fly strip having a series of spaced socket elements attached thereto which elements are complemental to said stud elements for detachable engagement therewith, said socket elements being concealed from the front part of the garment, and a waist band secured to the upper edges of the right and left portions of the garment and including the upper ends of the fly strip, the ends of the waist band having complemental stud and socket elements secured thereto and both elements being so secured as to be exposed to opposite sides of the waist band.

9. In a fly construction for a garment comprising an under-right fly portion, a fly strip overlying and stitched its full length to the outer face of the under-right fly portion, a series of spaced elements of a detachable fastener element secured to said fly strip, said fly strip being bar tacked to the under-right fly portion at positions substantially equal between the elements to provide for a series of pockets having their openings away from the garment edge and within which the wearer can insert one's thumb and support the underside of the elements in the attaching operation, a lining strip secured to the rear face of said under-right fly portion, the opposite or upper-left fly part constructed with an underlying fly strip stitched to the underside of the upper-left fly part, and elements complemental to the first elements attached to said underlying fly strip and being concealed from the front of the garment.

10. In a fly construction for a garment comprising upper and under overlapping fly portions, a fly strip secured to the outer edge of the under

fly portion and positioned to overlie said under fly portion, a series of equally spaced fastener elements secured to said fly strip, said fly strip being bar tacked to said under fly portion equally between the fastener elements carried thereby to provide for a series of pockets having their openings away from the garment edge to permit the thumb of the wearer's hand to slip in back of the fastener element from the front of the under fly portion, and a series of equally spaced fastener elements secured to the upper overlapping fly portion which latter elements are detachable with the elements secured to the fly strip of said under fly portion.

11. In a fly construction for a garment comprising upper and under overlapping fly portions, a fly strip secured to the outer edge of the under fly portion and positioned to overlie said under fly portion, a series of equally spaced fastener elements secured to said fly strip, said fly strip being bar tacked to said under fly portion equally between the fastener elements carried thereby to provide for a series of pockets having their openings away from the garment edge to permit the thumb of the wearer's hand to slip in back of the fastener element from the front of the under fly portion, another fly strip underlying said upper fly portion and stitched along opposite longitudinal edges thereof, and a series of fastener elements complemental to the first mentioned elements secured to said other fly strip prior to the stitching operation for the purpose of concealing said latter elements from the front part of the garment.

WILLIAM R. SPEARRIN.

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