Aug. 12, 1952 A. O. GILPIN ET AL 2,606,323

SLEEVE CONSTRUCTION

Filed March 15, 1950 2 SHEETS—SHEET 1

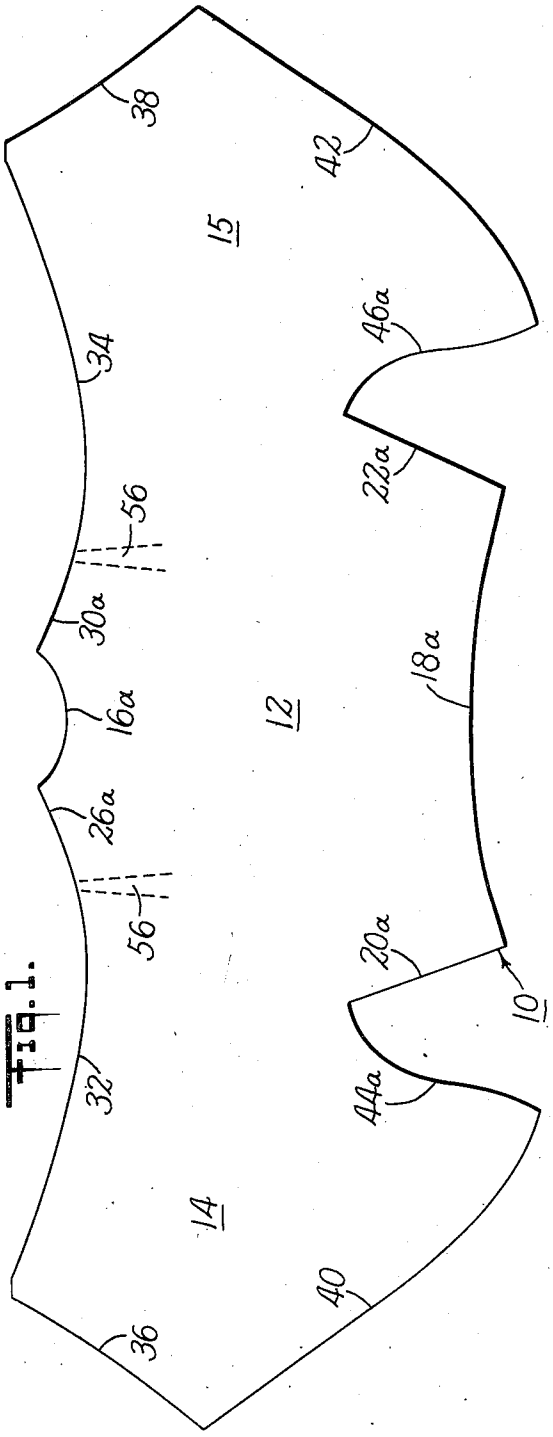


Fig. 1.

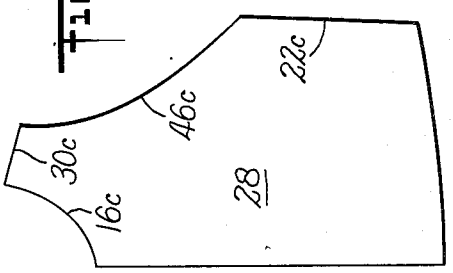


Fig. 3.

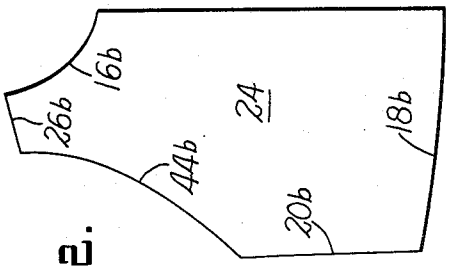


Fig. 2.

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Fig. 4.

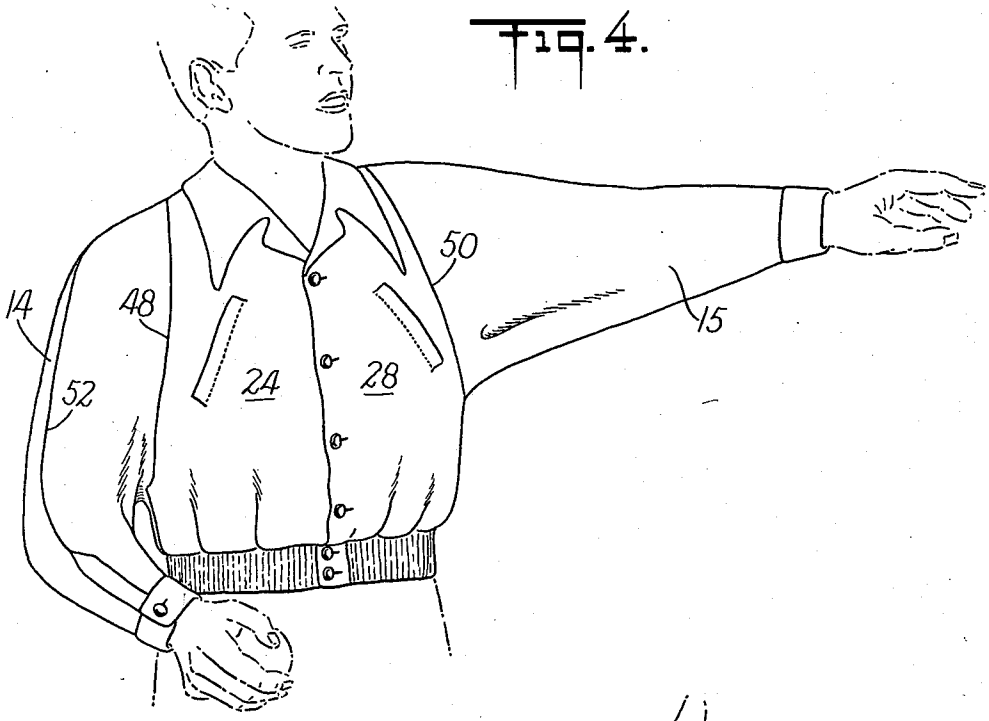
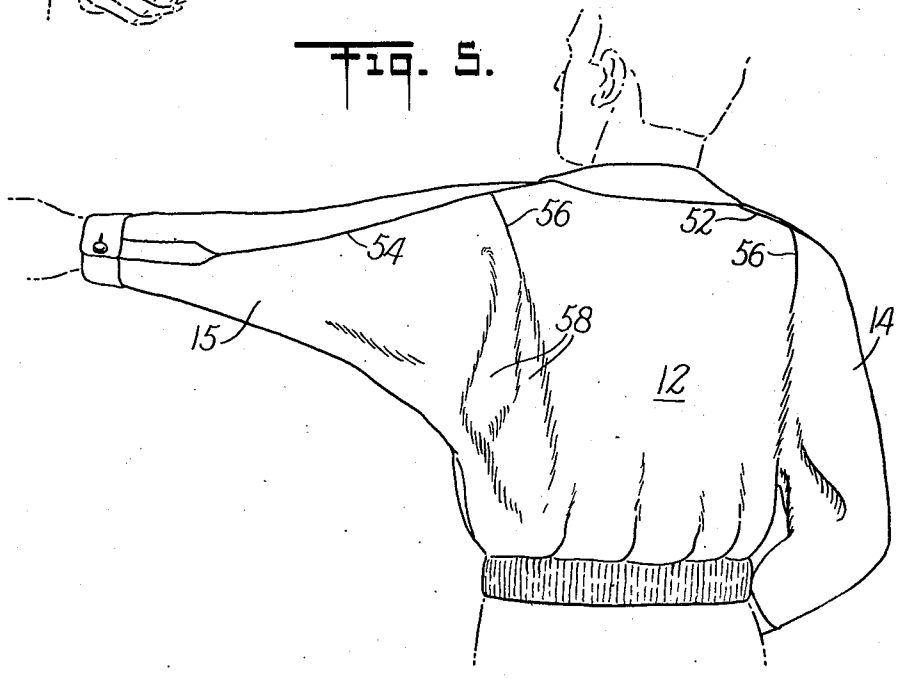


Fig. 5.



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SLEEVE CONSTRUCTION

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4 Claims. (Cl. 2—125)

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The invention relates to an upper garment construction, more particularly a sleeve and body construction permitting freedom of arm movement for use in a shirt, blouse, jacket or the like.

A garment worn by a person engaged in athletic activity should be loose and comfortable when the arms are swung about or when the body is contorted, but such requirements generally run counter to the elements of attractiveness, neatness and simplicity of construction.

Accordingly it is among the objects of the invention to provide a garment with simplified sleeve construction which permits great freedom of movement. Another object is to provide a comfortable jacket suitable for athletics which is attractively styled and economical to produce, and which has a sleeve construction with a single over arm seam so that there is no binding or limtation on arm movement. Another object of the invention is to provide such construction with such freedom of movement which retaining a neat and close fitting appearance when the arms are in recline. A still further object is to simplify the design and assembly of a long-sleeve garment. These and other objects will be apparent from the description which follows.

The invention accordingly consists in the features of construction, combinations of elements, arrangements of parts and relation and order of each of the same to one or more of the others, all as will be illustratively described herein, and the scope of the application of which will be indicated in the claims.

In the drawings:

Fig. 1 is a pattern for the back piece and integral sleeve portions of the garment;

Fig. 2 is a pattern for the right front piece of the garment;

Fig. 3 is a pattern for the left front piece of the garment;

Fig. 4 is a front view of a modelled jacket; and

Fig. 5 is a rear view of the jacket shown in Fig. 4.

Similar reference characters refer to similar parts throughout the several views of the drawings. In the illustrative embodiment of the present invention, a three-piece pattern is used to make a waist length jacket having free-swing sleeve construction. The jacket is assembled from a left front piece, a right front piece, and an integral back and sleeve piece. Each front piece covers the portion of the body from the center to the side and from the shoulder to the waist, and has arcuate sections cut out for the collar and for a front arm hole seam. The sleeve and back portions are integral and are cut from one piece of cloth. A concave section at the top forms the back half of the neck of the garment, while each side is flanked by a sleeve

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section cut on a broad, arcuate line to define sleeve seams. The lower edge of the body portion is shaped with slight concave curvature to establish the rear half of the waist, and a straight edge is provided at each side which, when stitched to similar edges of the front pieces, complete the garment around the body portion.

A sleeve portion extends from each side of the body portion, and is particularly shaped to create a completed sleeve except for certain desirable trimmings. The inner edge is curved to meet the arcuate section for the arm hole seam of the front piece, and the lower edge is curved to meet the upper arcuate line of the sleeve section in a straight line seam over the shoulder and down the length of the arm. When stitched accordingly, an underarm seam is eliminated due to the cut of the pattern, and the only seams are those over each arm from the shoulder to the cuff and those in front of the arm holes along thhe sides from the shoulders to the waist, leaving seamless the entire underarm area. Consequently a complete bias underarm drape is provided with the textile material folding neatly against the wearer's side and resulting in freedom of shoulder action, comfort, and ease of fit.

A dart may be taken on the back for a few inches from each shoulder seam to improve the fit (but these do not interfere with the freedom of action), and the usual trimmings are added in order to complete a dressy garment. The two front pieces are buttoned together, and a knitted ribbing is attached as a waist band. Cuffs and a collar are also added, and a breast pocket is located in each front piece. The finished garment is not only attractive and well fitted to the body, but is very comfortable and allows complete freedom of action through the shoulder and arm portions, and the slack material which is provided by the full cut and absence of an under-arm seam drapes in place along the side and presents a neat appearance to both the front and the back.

Referring to the drawings, a cut 10 for back portion 12 and integral sleeve portions 14 and 15 is shown unfolded in one plane in Fig. 1 with the inside facing up. Back portion 12 has arched edges 16*a* for the collar and 18*a* for the waist, and straight sides 20*a* and 22*a*. A cut 24 for the right front piece is shown in Fig. 2 with the outside up, and is shaped with edges 16*b* for the collar, 18*b* for the waist, and 20*b* for the side. Cut 24 fits directly over the left half of back portion 12 in Fig. 1 so that edges 20*a* and 20*b* may be stitched together to define the side of the garment, and so that top edge 26*b* of right front cut 24 may be stitched as a shoulder seam along edge section 26*a*. Cut 28 (Fig. 3) for the left front portion is the counterpart of cut 24

and has similar edges **16***c* for the collar, **30***c* to attach at **30***a* of back piece **12** at the shoulder, and **22***c* to meet **22***a* at the side. Thus when cuts **12**, **24**, and **28** are stitched along the lines described, the waist or vest portion of the jacket illustrated in Figs. 4 and 5 is completed, but for various trimmings.

Sleeve portions **14** and **15** are shaped with long, arcuate edges **32** and **34** respectively, straight ends **36** and **38** respectively to which cuffs may be affixed, and lower edges **40** and **42** which diverge from edges **32** and **34** to provide substantial fullness in the lower sections. Edge **44***a* of sleeve portion **14** is specially shaped between edges **40** and **20***a* to meet edge **44***b* of right front piece **24** on a spherical curvature to create a seam **48** (Fig. 4). A similar edge **46***a* stitches to edge **46***c* of left front piece **28** for a like seam **50**. The final operations to complete the jacket are stitching together edges **40** and **32** as seam **52** (Fig. 4) for the right sleeve, and joining edges **42** and **34** as seam **54** (Fig. 5) for the left sleeve. The basic construction of the finished jacket is accordingly very simple, because only two seams are required on each side, viz. seams **52** and **54** from cuff to collar, and seams **48** and **50** from the shoulders down the front and sides to the waist band.

Several trimming features are usually added to complete a garment according to the above basic construction, as for instance in manufacturing the sports jacket illustrated in Figs. 4 and 5 it is desirable to attach cuffs, a collar, a constructed waist band, breast pockets, and some means of fastening together front pieces **24** and **28**, as by buttons. The back drape and appearance are improved by use of two short darts **56** (Fig. 5) which are shown by dotted lines in Fig. 1.

The simplified jacket construction above described eliminates any binding or restriction in the movement of the shoulders or arms, by virtue both of the fullness and lack of seams on the underside of the sleeve. The sleeve is large and full next to the shoulder and tapers uniformly toward the wrist, as shown by the outstretched arm in Figs. 4 and 5. Excessive fullness is featured for complete comfort, so that folds **58** of reserve material are present even when the arm is extended (Fig. 5), and yet a trim appearance is presented, as shown around the lowered right arm in Figs. 4 and 5, because the cut and stitching along the front and down each side cause the puffed section of the sleeve to fold and drape attractively along the side under the arm.

The novel features of the invention need not be limited to use on a buttoned jacket, for any sleeved garment which covers the waist may be similarly constructed. In addition, by consolidating front pieces **24** and **28** and enlarging the neck portion, a pull-over shirt or like garment could be manufactured along the same lines.

As many possible embodiments may be made of the above invention, and as many changes might be made in the embodiment above set forth, it is to be understood that all matter hereinabove set forth or shown in the accompanying drawings is to interpreted as illustrative and not in a limiting sense.

What is claimed is:

1. A garment of the character described, comprising a back portion, a front portion and two sleeve portions, each of said sleeve portions being integral with said back portion and cut with excessive fullness which drapes underneath the arm, said portions being joined with seams disposed on the front side of said garment and down the sides from the shoulders to the waist and with seams on the top side of each arm from the shoulder to the cuff, whereby the arms of the wearer may be moved in any direction without binding of the garment at the shoulders.

2. A garment of the character described, comprising a back and sleeve piece, a left front piece, and a right front piece, said back and sleeve piece being defined when flat by curved portions for the collar and waist bands, straight side portions, top and bottom arcuate portions for each sleeve which converge toward the cuff and which are curved to define when stitched as a sleeve a straight line seam over the shoulder and arm of the garment, straight sided cuff portions, and reverse curved portions between said bottom arcuate portions and said straight sides, and each of said front pieces being defined when flat by curved collar and waist portions, straight edges which join as the front of the garment, straight sides to fit said straight side portions of said back and sleeve piece, straight shoulder portions, and curved arm hole portions, the curvatures of said arm hole portions and said reverse curved portions being such as to define a line on a spherical surface when stitched together.

3. A pattern for the back and sleeves of a garment comprising a back portion having a small arcuate section at the top to define the rear half of a collar, a larger arcuate section across the bottom to define the rear half of a waist band, and straight side sections diverging from each end of said larger arcuate section, and a sleeve portion, on each side of said back portion and integral therewith, each of said sleeve portions having a long concave arcuate section at the top, a straight end section for a cuff, a long convex arcuate section along the bottom which diverges from said long concave arcuate section toward said back portion, and a section joining the terminus of said long convex arcuate section with said straight end section at about the center thereof and having such curvature as to define a line on a spherical surface when stitched to a suitable front piece for said garment, the curvature of said long sections being such that a straight line seam over the shoulder and arm is formed on stitching together the two edges.

4. In a garment, a sleeve construction comprising a top portion shaped to fit closely over the arm and shoulder of the wearer, and an underarm drape portion which tapers from the cuff of the sleeve to a point on the side of said garment approximately half-way between the shoulder and the waist of said garment, both of said portions being part of a single piece of material so cut as to provide a single longitudinal seam located substantially on the top side of said sleeve and running from the cuff to the shoulder section thereof.

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