

Jan. 1, 1935.

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1,986,217

METHOD OF DESIGNING AND CONSTRUCTING COAT SLEEVES

Filed June 3, 1933

3 Sheets-Sheet 1

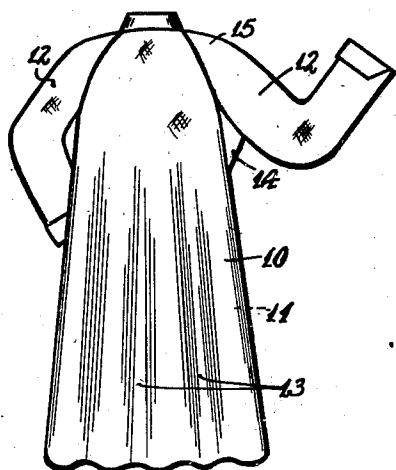


Fig. 1.

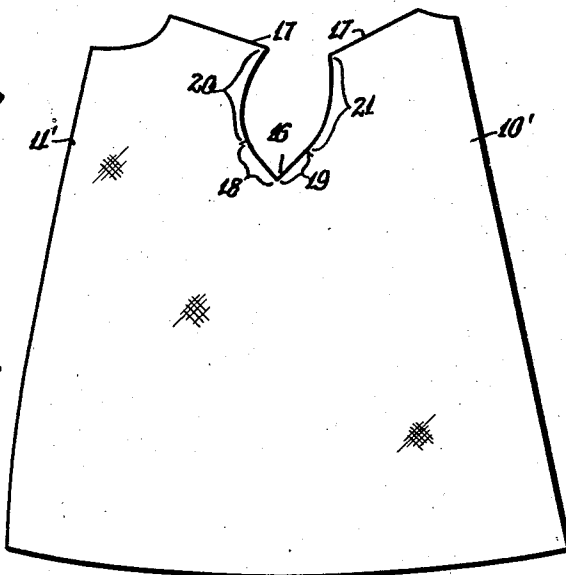


Fig. 2.

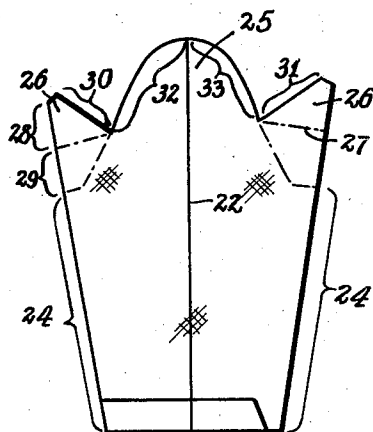


Fig. 3.

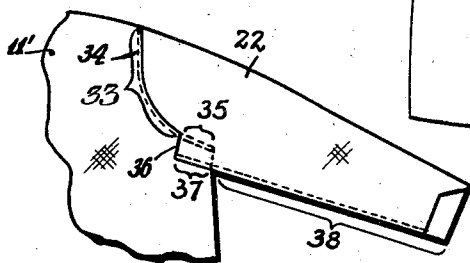


Fig. 4.

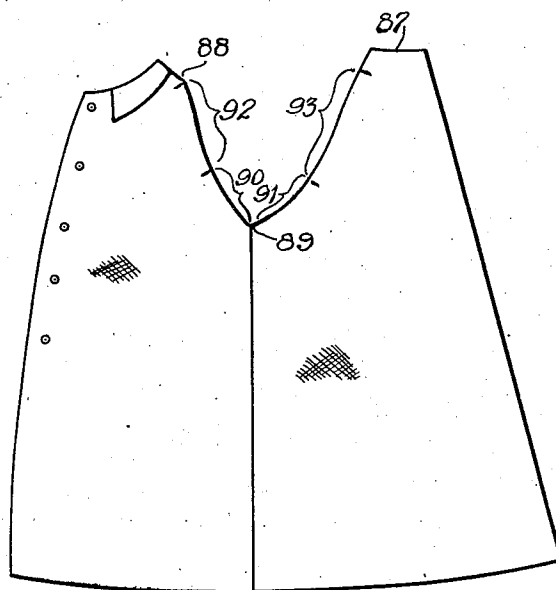


Fig. 5.

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3 Sheets-Sheet 2

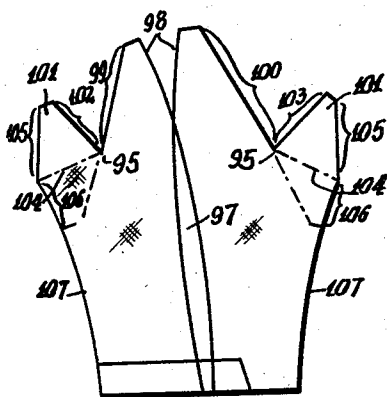


Fig. 6.

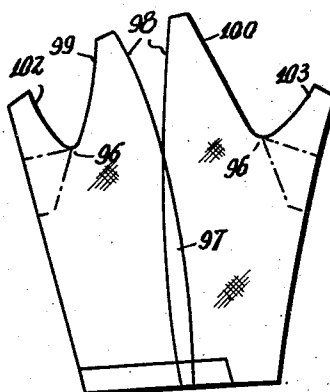


Fig. 7.

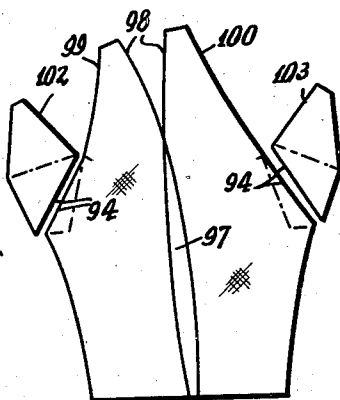


Fig. 8.

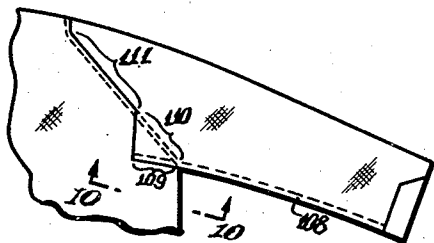


Fig. 9.

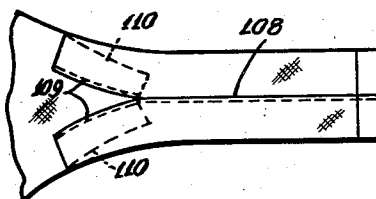


Fig. 10.

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3 Sheets-Sheet 3

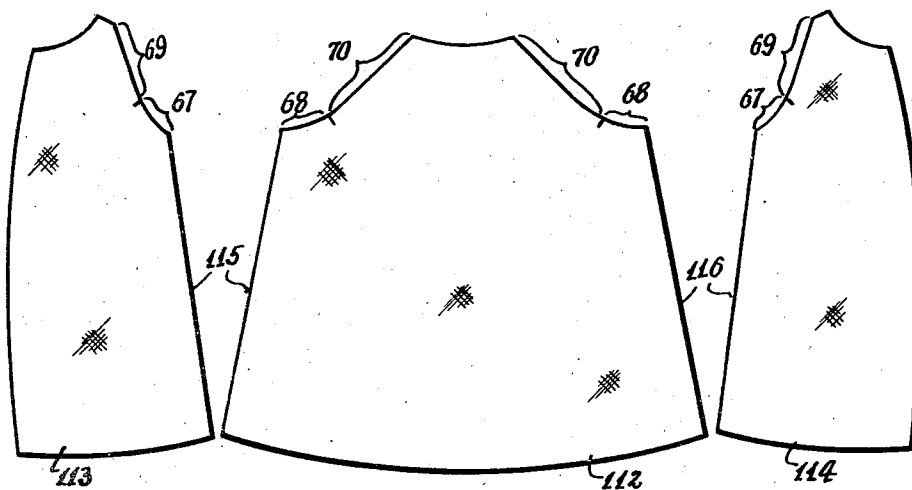


Fig. 11

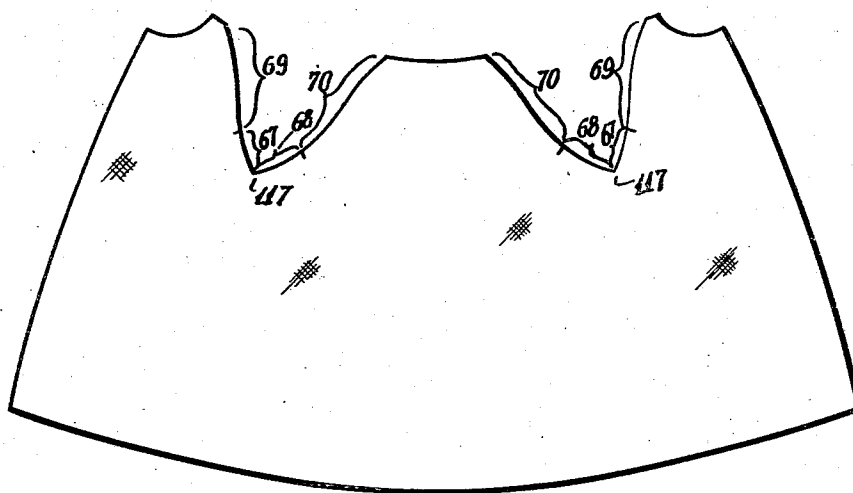


Fig. 12.

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UNITED STATES PATENT OFFICE

1,986,217

METHOD OF DESIGNING AND CONSTRUCTING COAT SLEEVES

Luciano E. Pilla, New York, N. Y.

Application June 3, 1933, Serial No. 674,186

3 Claims. (Cl. 2-93)

This invention relates to new and useful improvements in a coat and sleeve construction.

The present invention is an improvement on my previous Patent No. 1,178,872 issued April 11, 1916.

The invention has for an object the provision of a novel coat and sleeve construction wherein the sleeves are set into the body portion of the garment in a manner so that there is a hinge in the vicinity of the arm pit for comfort and ease in moving the arms.

Still further the invention proposes arranging the hinge so as to be disposed to the front and to the rear of the central vertical line of the garment beneath the arm pit.

Still further an arrangement is contemplated whereby the sleeve and material forming the coat may be cut from an integral blank or a blank composed of various pieces matched together which may assume a natural flat condition and which may be bent and secured together so as to produce the coat and sleeve construction.

Still further an arrangement is proposed whereby the hinges are arranged to the front and rear of the vertical central line of the garment beneath the arm pit and furthermore arranged so that the tops of the hinges connect with an opening in the garment for the sleeve and bottoms of the hinges connecting the material of the sleeve itself in a manner so that ease is possible.

Still further the invention proposes the construction of a garment as mentioned which is simple and durable and which may be manufactured and sold at a reasonable cost.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure:—

Fig. 1 is a rear elevational view of a garment constructed according to this invention.

Fig. 2 is a developed view of a portion of the material of the coat which is located beneath the arm pit, said portion constituting one-half of the coat front and one-half of the coat rear.

Fig. 3 is a developed view of a sleeve construction according to this invention for insertion into the material illustrated in Fig. 2 in the construction of the coat.

Fig. 4 is a fragmentary elevational detailed view showing the appearance of the sleeve and coat construction illustrated in Figs. 2 and 3 when these parts have been separated.

Fig. 5 is a view similar to Fig. 2 but illustrating another embodiment.

Figs. 6-8 inclusive illustrate developed views of various embodiments of sleeves for coaction with the coat material illustrated in Fig. 5.

Fig. 9 is a fragmentary side elevational detailed view of the coat and sleeve construction according to the embodiment illustrated in Figs. 6-8 inclusive.

Fig. 10 is a bottom elevational view of a portion of Fig. 9 looking in the direction of the line 10-10 of Fig. 9.

Fig. 11 is a developed view of the material for constructing main portions of a coat, shown without the sleeves or other details.

Fig. 12 is a view similar to Fig. 11 but illustrating another arrangement.

In Fig. 1 a coat constructed according to this invention is illustrated. This coat comprises a coat back 10 connecting with a coat front 11 which is provided with sleeves 12. The coat back 10 is shown formed with a plurality of vertical drapes 13. The important feature of the coat construction according to this invention resides merely in the construction of the arm pits 14 of the coat. The details of the arm pits will hereafter be given in full. It should be noticed that the coat is of a type in which the sleeves extend from points 15 near the collar thereof beneath the arm pits.

In Figs. 2-4 inclusive, one type of sleeve and coat construction has been illustrated according to this invention. Fig. 2 illustrates portions of the material forming the bottom of the coat. The point 16 constitutes the central point of the arm pit. The material 10' represents one half of the coat back, this material being located upon one side of a vertical central line extended from beneath the arm point 16, and the material 11' represents one half of the coat front. The portions 17 of the materials 10' and 11' constitute a shoulder portion of the garment. These shoulder portions must be secured together in the manufacture of the garment and this construction will form an opening for receiving the sleeve. This opening is substantially of oval shape except that it has a substantially V-shaped bottom. The sides of the V-shaped bottom are indicated respectively by numerals 18 and 19. The sides of the upper portion of the opening for the sleeve is indicated by reference

numerals 20 and 21. Brackets are used upon the drawings to clearly point out the sides designated by the reference numerals.

Fig. 3 illustrates a developed view of the sleeve.

5 This sleeve should be bent along its longitudinal central line 22 which will then constitute the top central line of the sleeve. The important construction of the sleeve according to this invention resides in the construction of its rear edge in engagement into the opening of the coat construction. The sides 24 of the sleeve are 10 sewn together so as to give the sleeve a substantially tubular form. Only those portions of the sides limited by the bracket to the numeral 24 should be sewn together. The top rear edge of 15 the sleeve is formed with a convexed portion 25 and at diametrically opposite sides also at the rear there are a pair of hinges 26. The hinges 26 during the manufacture of the coat should be bent frontwards upon the dot and dash lines 27. Then the portions of the sides of the hinges divided off by the brackets 28 and 29 should be 20 sewed together. The upper edges of the hinges 26, viewing Fig. 4 when the garment is completed, are indicated by the brackets 30 and 31 respectively. The side 30 should be secured upon the side 18 of the arm hole opening and the side 31 of the other hinge should be secured 25 upon the side 19 of the arm hole opening. The sides of the convexed portion are indicated on the drawings by brackets 32 and 33. The side 32 should be secured upon the side 20 and the side 33 upon the side 21. This then completes the construction of the coat and sleeve according 30 to this invention.

35 A line of stitches 34 serve to secure the sides of the convexed portion 25 with the upper portions of the sides of the arm hole opening. A line of stitches 35 serve to secure the upper sides 40 of the hinges 26 with the lower portions of the sides of the arm hole opening. The portions indicated by the reference numeral 36 constitute the bends of the hinges produced when the hinges are sewn along the lines 27. The line of 45 stitches 37 serve to secure the sides 28 and 29 of the hinges together. Stitches 38 serve to secure the sides 24 of the sleeve together. The short edges of the hinges 26, that is the edges between the sides 28 and 30, are free and not 50 sewed so that small openings exist from the outside of the garment to the inside. These openings are for venting purposes. Since normally these openings are covered by the hinges they are not objectionable. A sleeve constructed in 55 this manner will give ease at the arm pit. Normally the hinges are disposed flat in position, but in the event that the arms move these hinges may bend so as to produce the easiness mentioned.

60 In Figs. 5-10 inclusive another embodiment of the invention has been illustrated. According to this form the coat material is indicated by reference numeral 86 and is formed with an arm opening where the shoulder portions 87 and 88 65 are joined together. The arm opening will be substantially of oval shape except that it has a bottom portion of substantially V-shape. The point 89 constitutes the bottom point at the center of the arm pit. The sides of the V-shaped bottom portion of the opening are indicated 70 by numerals 90 and 91. The upper portions of the arm pit openings are indicated by reference numerals 92 and 93.

75 In Figs. 6, 7 and 8 several embodiments of sleeves have been illustrated which may be set

into the coat material illustrated in Fig. 5. These sleeves are substantially the same. The sleeves 19 and 21 are identical except for the fact that the sleeve 21 is formed with several 5 pieces while the sleeve 19 is from one integral piece. The sleeve 20 distinguishes slightly from the sleeve 19 in that while of one integral piece certain portions are formed with curved joints instead of sharp points. When the sides 94 of 10 the pieces forming the sleeve illustrated in Fig. 1 are secured together then the sleeve will be identical to that illustrated in Fig. 6. Fig. 7 distinguishes merely from Fig. 6 in the fact that the rear-edge of the sleeve in Fig. 6 is formed 15 with pointed portions 95 which distinguish from rounded portions 96 in Fig. 7. A detail will be given of the manner in which the sleeve 19 is set in and the sleeve 20 will have corresponding sides bearing the same reference numerals so 20 that its mounting may be also understood.

Each of the sleeves illustrated in Figs. 6, 7 and 8 are formed from two main pieces of material having overlapping sides at the areas 97 and 25 should be secured together along its area. The sides 98 should be secured together which will give slight fullness to the sleeve at the shoulder portion of the garment. The sleeve is formed at the rear with a substantially convexed portion having sides 99 and 100 respectively. The sleeve is also formed with hinges 101. These 30 hinges have sides 102 and 203 respectively. The hinges 101 should be bent downwards and frontwards upon the lines 104. Then the sides 105 of the hinges and portions 106 of the sides 107 of the sleeve should be secured together. Next the sides 102, 103, 99 and 100 should be respectively 35 secured to the sides 90, 91, 92 and 93 of the arm opening in the coat material 86.

The construction described in the previous paragraph is shown completed in Figs. 9 and 10. 40 Reference numeral 108 indicates a line of stitches which secures the sides 107 of the sleeve together. Reference numeral 109 indicates a line of stitches which secures the sides 104 and 105 of the sleeve together. Reference numeral 45 110 indicates a line of stitches which secures the sides 102 and 103 to the sides 90 and 91 respectively. Reference numeral 111 indicates a line of stitches which secures the sides 99 and 100 to the sides 92 and 93 respectively. The hinged 50 portions 101 will give ease in motion of the arms when the garment is worn.

In Fig. 11 material for producing the body portion of the coat has been disclosed. This material comprises a piece 112 constituting the 55 complete back of the garment and pieces 113 and 114 constituting the front quarters of the garment. These pieces during the manufacture of the garment are sewed together along the sides 115 and the sides 116. The materials 112, 60 113 and 114 are formed with cutouts for the sleeves. The sides of the openings for the sleeves are given the reference numerals of Fig. 12 so that the parts thereof may be recognized.

In Fig. 12 one piece of material has been 65 shown cut so as to constitute the back and front portions of the coat. The arm pits of this material are indicated by reference numeral 117. This material is cut so as to have arm holes for receiving the sleeves and these arm holes 70 are shaped similar to the arm holes of the material illustrated in Fig. 11. The same reference numerals are used in Fig. 12 so that the sides of the arm holes may be recognized.

While I have shown and described the pre- 75

ferred embodiment of my invention, it is to be understood that I do not limit myself to the precise construction herein disclosed and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claims.

Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patent is:—

- 10 1. In a coat and sleeve construction, material for extending beneath the arm pit and constituting portions of the coat front and coat rear and formed with a substantially oval opening having a substantially V-shaped point at the bottom, a sleeve comprising a substantially tubular construction having the top portion of the rear edge formed with a convexed portion to set into the top portion of said oval opening and the lower portion of said rear edge having hinged portions with short top edges and long bottom edges and bent under and forwards along lines between the junctions of the top edges and the said rear edges, and said bottom edges, superimposing portions of the bottom edges and secured along the top edges thereof along the sides of said V-shaped bottom portion of said opening and having said superimposed edges secured together.
- 20 2. In a coat and sleeve construction, material for extending beneath the arm pit and constituting portions of the coat front and coat rear and formed with a substantially oval opening having a substantially V-shaped point at the bottom, a sleeve comprising a substantially tubular construction having the top portion of the rear edge formed with a convexed portion

to set into the top portion of said oval opening and the lower portion of said rear edge having hinged portions with short top edges and long bottom edges and bent under and forwards along lines between the junctions of the top edges and the said rear edges, and said bottom edges, superimposing portions of the bottom edges and secured along the top edges thereof along the sides of said V-shaped bottom portion of said opening and having said superimposed edges secured together, said hinged portions being substantially of triangular shape.

3. In a coat and sleeve construction, material for extending beneath the arm pit and constituting portions of the coat front and coat rear and formed with a substantially oval opening having a substantially V-shaped point at the bottom, a sleeve comprising a substantially tubular construction having the top portion of the rear edge formed with a convexed portion to set into the top portion of said oval opening and the lower portion of said rear edge having hinged portions with short top edges and long bottom edges and bent under and forwards along lines between the junctions of the top edges and the said rear edges, and said bottom edges, superimposing portions of the bottom edges and secured along the top edges thereof along the sides of said V-shaped portion of said opening and having said superimposed edges secured together, said hinged portions being substantially of triangular shape and arranged with the altitudes constituting the bent portions and the hypotenuse constituting the upper sides.

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