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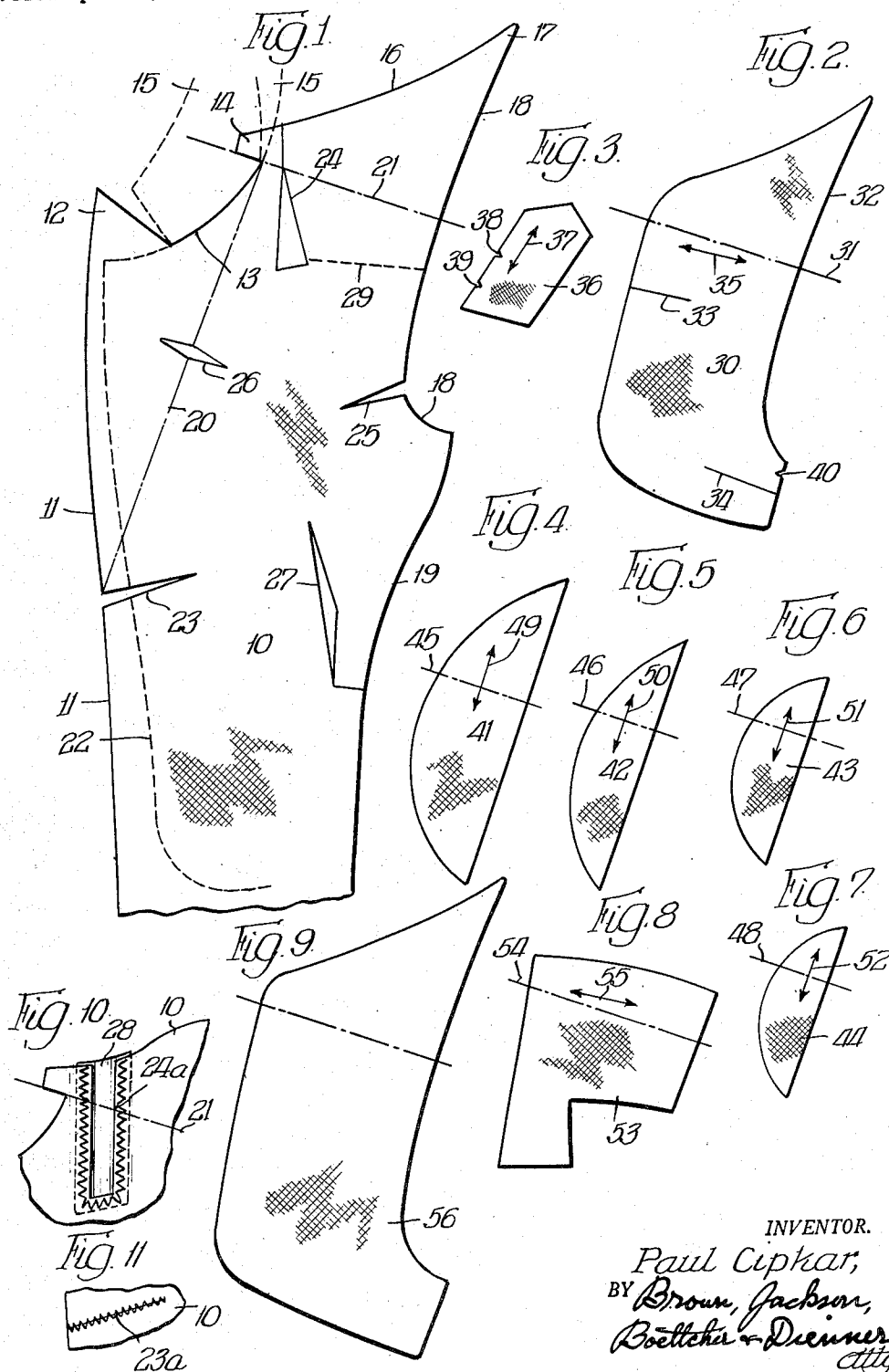
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FOUNDATION FOR GARMENT COATS AND METHOD OF MAKING SAME

Filed April 2, 1948

2 Sheets-Sheet 1



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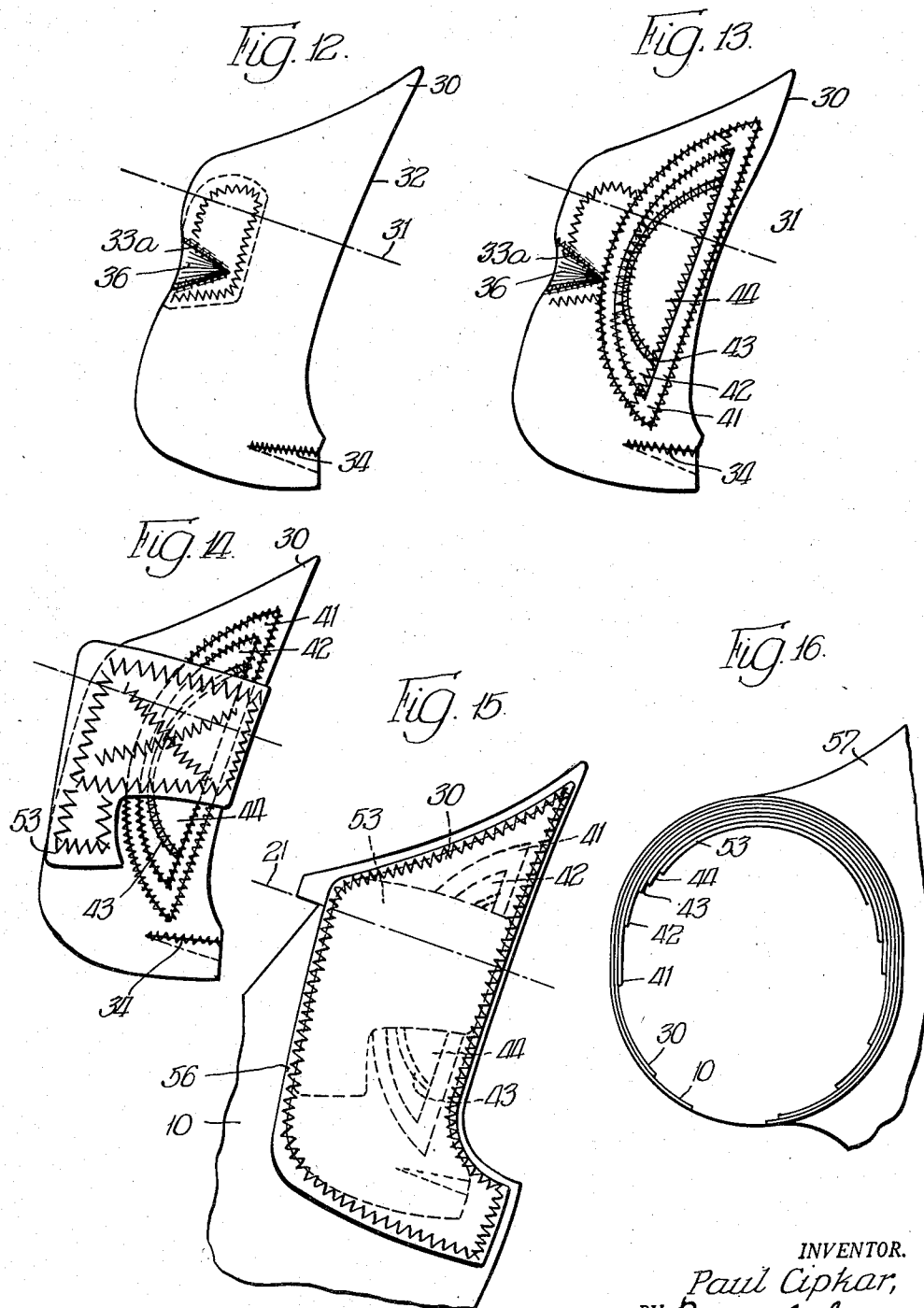
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UNITED STATES PATENT OFFICE

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FOUNDATION FOR GARMENT COATS AND
METHOD OF MAKING THE SAME

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Application April 2, 1948, Serial No. 18,577

18 Claims. (Cl. 2-255)

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This invention relates to improvements in inner foundation fronts or liners for garment coats of the type forming an integral part of the garment structure adapted to impart a desired shape and form to the finished garment and over which the exterior fabric of the garment is draped and secured; and the method of constructing the same.

Heretofore the practice in making a foundation liner of the kind referred to has been to fit the coat foundation from the shoulder point to the neck of the user, and to correspondingly directly support the foundation and the completed coat from the shoulder of the user; in cases where different forms of coat shoulders were desired from the form of the shoulders of the user, which frequently occurred, the common practice heretofore has been to use soft felt pads or similar padding material between the basic material of the foundation and the shoulders of the user, and particularly at and adjacent the shoulder points of the user, to so space said basic material and support the same from the shoulders of the user, as to impart to the shoulders of the foundation, the desired shape and proportions.

The practice referred to is objectionable for various reasons, in that, because of supporting the foundation liner shoulders, either with or without padding material, directly by the shoulders of the user, the entire weight of the finished coat is carried directly by the movable portions of the shoulders of the user, and as a result the user has no freedom of movement of his shoulders without correspondingly moving the entire coat structure, because of the basic material of the foundation liner almost invariably being tailors' canvases which is quite pliable in all directions; again, carrying a large part of the weight of the coat on and adjacent the shoulder points of the user, soon becomes fatiguing to the user, because of the restraint and weight imposed upon his shoulder points, which parts require freedom of movement if his arms and hands are to be used effectively; again, the coat shoulders being dependent on the basic material of the foundation liner for support when the coat is not in use, cleaning and pressing operations easily deform the coat shoulders, thereby depriving not only said shoulders, but the entire coat, of its ordinary appearance as to fit, form and proportion; again, to guard against deformation of the coat when not in use, and particularly the shoulders thereof, special hangers are frequently required, that are shaped to the coat shoulders, to hold the latter in place when the coat is not in use.

This invention overcomes the objections to the

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former practice above referred to, by providing an entirely different method of making and forming the coat interior foundation liner, which broadly includes making the shoulder portions of the foundation in the form of stiffened arch-shaped structures extending over, and in use adapted to drape loosely over the shoulders of the user, said arch-shaped structures being of sheet material which at least in the arched direction, is stiff enough to support without deformation, the coat weight carried by them. The arch-shaped structures rest sufficiently free from the shoulder points of the wearer to minimize hugging thereof by the shoulder arch structure so that the wearer's shoulders may have freedom of movement to any desired degree determined by the size and form of the arch-shaped structures relatively to his shoulders, the user being in a position when ordering his coat, to direct how much freedom of shoulder movement his coat must have. The shoulder movement freely permitted by the arch-shaped structures, is accompanied by substantially no corresponding movement of the coat shoulders; the arch-shaped structures and basic material of the foundation liner being so related and secured together, that the entire coat weight on the arch-shaped structures is transmitted to and carried by portions of the shoulder blades adjacent the neck of the user, rather than by the wearer's shoulder points, as a result of which, the coat is kept in shape and fit, whether on the user or not, and whether specially fitted hangers are employed when the coat is not in use. More specifically, the method of the invention produces the arch-shaped structures referred to, by using superposed thicknesses of hair cloth with the hair extending in the direction of curvature of the arch-shaped structures; the number of thicknesses varying with the weight of the coat or overcoat to be supported by the arch-shaped structures.

The invention also includes the improved foundation produced by the method above described.

My invention will be best understood by reference to the accompanying drawings illustrating a preferred embodiment thereof, in which—

Fig. 1 shows in elevation and from the rear, the right hand half of the basic material employed in the foundation liner of the invention;

Fig. 2 shows in elevation and from the rear a main piece of resilient sheet material to constitute the main piece of the arch-shaped structure employed in connection with the basic material shown in Fig. 1;

Fig. 3 is a detail view of a piece of sheet mate-

rial employed in conditioning the material shown in Fig. 2 for the application of the remaining parts of the corresponding arch-shaped structure;

Figs. 4 to 7 inclusive show in plan view re-enforcing pieces of resilient material to be applied to the material shown in Fig. 2 and in the order of said figures, in building up the corresponding arch-shaped structure;

Fig. 8 shows in elevation a piece of binding material for application to the built-up arch-shaped structure to hold the parts thereof in desired form;

Fig. 9 shows in elevation a piece of protective material for application over the built-up arch-shaped structure when the latter is secured to the basic material illustrated in Fig. 1;

Figs. 10 and 11 are detail views illustrating the preparation of parts of the basic material shown in Fig. 1 before the arch-shaped structure is applied thereto;

Fig. 12 shows in a view similar to Fig. 2, the preparation of the main piece of the arch-shaped structure for receiving the re-enforcing pieces of said structure illustrated in Figs. 4 to 8 inclusive;

Fig. 13 shows in elevation the main piece of the arch-shaped structure shown in Fig. 12, with the re-enforcing pieces shown in Figs. 4 to 7 inclusive applied thereto;

Fig. 14 shows in a view similar to Fig. 13 the structure thereof with the binding member illustrated in Fig. 8 applied thereto;

Fig. 15 shows in a view similar to Figs. 1 and 14, the application of the structure shown in Figs. 14 and 9 to the basic material shown in Fig. 1; and

Fig. 16 is a diagrammatic elevational view to an enlarged scale of the right hand arm hole of the foundation liner made of the parts above described with the protective member shown in Fig. 9 removed for the sake of clearness.

Similar numerals refer to similar parts throughout the several views.

As shown in Fig. 1, the basic material, for example tailors' canvas, used in making the right hand half of the front of the interior foundation is viewed from the back or rear of the wearer and is shown in its cut condition to fit the wearer before being given final form. The left hand half of the front portion of the foundation is the same as shown in Fig. 1 with the exception that the parts thereof are reversed. In Fig. 1, the outer line 11, 11 of the basic material 10 is adjacent the outer edge of the lapel and cut for a coat of the double breasted type, the lapel point being at 12 and the curved line 13 extending around the base of the collar to a projecting point 14 which reinforces the back portion of the collar by engaging the remaining portions thereof illustrated in broken lines at 15. The curved edge 16 extends from the collar portion downwardly on the back of the user to a point 17 which in the completed interior foundation liner is at the arm pit of the user; the line 18 in that condition, constituting the arm hole of the basic fabric 10. From the bottom of the arm hole of the basic fabric, the curved line 19 extends from the arm pit of the arm hole to the side of the coat and so to the bottom thereof, the lower end of the basic fabric being broken away to indicate its applicability to coats of different lengths.

The broken line 20 is the fold or break line of the lapel and the broken line 21 is the line of the basic material resting under the shoulder seam in the completed coat. For the sake of brevity,

in the following description, as well as in Fig. 1, the broken line 21 will be referred to as expressing the direction of the shoulder seam although there is no corresponding seam in the material illustrated in Fig. 1 or in the other parts of the foundation liner, the line 21 being for reference only in suitably applying the remaining parts to the basic material 10.

Where the basic material shown in Fig. 1 is used for a single breasted coat, the material is cut back further as shown by the broken line 22.

In order to shape the basic material 10 to the wearer of the coat, said material is provided with V's 23, 24 and 25 and darts 26 and 27, which, in preparing the basic material 10 to receive the arch-shaped structures, are sewed as shown in Figs. 10 and 11 at 24a and 23a, to accomplish which, the V's 23 and 25 and the darts 26 and 27 have their edges sewed together as illustrated for the V 23 in Fig. 11 at 23a, which shortens the break line 20 of the lapel, produces the desired chest fullness of the fabric 10 and swings the lower end of the arm hole line 18 under to fit the arm pit of the wearer. In so preparing the basic material the V 24 is opened substantially as indicated at 24a in Fig. 10 and has its edges sewed to an insert or tape 28 in order that, the point 17 may be swung around under the arm hole and substantially to the arm pit of the wearer, when mounting the completed foundation liner to the interior of the garment.

In proportioning the arm hole 18 and corresponding shoulder portion along the line 21 of the basic material 10, due allowance is made for the amount of freedom of movement that the finished coat must afford the wearer thereof to suit his requirements. In the event that he requires the shoulders of the garment to be squarer than afforded by the construction so far described, the arm hole 18 may be provided with a further slit 29 which is opened and provided with a suitable re-enforcing member or tape, similar to tape 28 sewed to the edges of said slit in a manner similar to that shown in Fig. 10, which has the effect of raising the shoulder point of the garment at the arm hole portion of the seam line 21.

In making the arch-shaped structure to go with the basic material 10 shown in Fig. 1, a main or supporting piece of resilient sheet material 30 shown in Fig. 2 is prepared having a shoulder seam line 31, an arm hole edge 32 and slits 33 and 34, the piece 30 being sufficiently narrower than the corresponding portion of the basic material 10 to not interfere with the lapel and collar of the coat. While the material of the piece 30 may be any material of sheet form having the requisite resilience, it is usually made of resilient fabric, for example hair cloth in which the hairs of the cloth extend in the direction of the double headed arrow 35. In preparing the piece 30 for use and to receive the remaining parts of the arch-shaped structure, it is treated as shown in Fig. 12, and as there shown the slit 33 is opened substantially as shown at 33a and held in open condition by the piece of resilient sheet material 36 shown in Fig. 3 which preferably consists of resilient fabric, for example hair cloth having the hairs thereof extending in the direction indicated by the double headed arrow 37. The slit 33 is expanded so that its outer points rest at the notches 38 and 39 in the piece of stay material 36 in which position the parts are securely stitched together. The preparation of the main piece 30 also includes overlapping the lower right hand portion of that piece at the slit 34 until its upper corner

is in line with the notch 40 in which position the overlapping part is securely stitched to the bottom portion of the main piece 30.

It will be understood that the structures illustrated in Figures 13, 14 and 15 are shown in developed or plan views for the sake of clearness in illustrating the relation of the corresponding parts. In making the arch shape structure, however, the main piece 30 and the reinforcing pieces 41, 42, 43 and 44 are curved to form the arch shape structure reaching from front to rear over the shoulder of the wearer or the clothing dummy before the parts are stitched together and said parts are held in that curvature position by the manner in which they are stitched together, so that when the above named parts are stitched together, as shown in Figure 13, the arch shape structure has in reality substantially the curvature from front to rear that it has in the finished foundation liner.

When the main piece 30 of the arch shaped structure has been prepared as described, the reinforcing pieces 41, 42, 43 and 44 shown in Figs. 4 to 7 inclusive are successively applied to the under or shoulder surface of the main piece 30, and in the order named, with their straight edges adjacent the arm hole line 32 of the piece 30 and with their shoulder seam lines 45, 46, 47 and 48 respectively in alignment with the shoulder seam line of the piece 30 in which position, the reinforcing pieces 41, 42, 43 and 44 are securely stitched to the main piece 30 to form the arch shaped structure. The reinforcing pieces 41, 42, 43 and 44 are of successively smaller area one than the other and in the order named, and the piece 41 is substantially smaller in area than the main piece 30, to the end that the arch shaped structure may be progressively re-enforced from the neck of the wearer to the shoulder point of the foundation liner which is adjacent the top of the arm hole of the completed interior foundation, and in this manner the arch shaped structure is progressively stiffened and strengthened outwardly from the neck portion of the wearer so that its shoulder portion is stiffest and will most effectively support a part of the weight of the coat and that this weight carrying ability of the arch shaped structure decreases progressively toward the neck of the wearer. The arch shaped structure thus constitutes an effective means for supporting a large part of the weight of the right hand side of the coat and transmitting that weight to the portion of the shoulder blade which is adjacent the neck of the wearer.

The re-enforcing pieces 41, 42, 43 and 44 are preferably of resilient fabric, for example hair cloth in which the hairs extend respectively in the direction indicated by the double headed arrows 49, 50, 51 and 52 which extend in the direction of curvature of the finished arch shaped structure. When the re-enforcing pieces have been applied to the main piece 30 as described, they will have the relation thereto indicated in Fig. 13.

After the main piece 30 and the re-enforcing pieces 41, 42, 43 and 44 have been secured together as above described and illustrated in Fig. 13, a binder piece of resilient sheet material 53, for example hair cloth, is applied to and under the composite structure and securely stitched thereto as indicated to hold the parts thereof securely together in the desired curvature, thereby completing the arch shaped structure and making it ready for application to the basic fabric 10 illustrated in Fig. 1. The shoulder seam

line of the binding piece 53 is shown at 54 and where hair cloth is used to make the piece 53, the hairs thereof preferably extend in the direction of the double headed arrow 55.

The result of making the arch shaped structure as described, is that the re-enforcing pieces 41, 42, 43 and 44 and the binder piece 53 are held in curved and stressed condition in the arch shaped structure, with an internal form and size that gives the desired play between the inner surface of the arch shaped structure and the shoulder of the coat wearer, and that also affords a support for the basic fabric 10 at the shoulder that will give the desired shoulder contour to the coat made on the foundation described. It will be appreciated that the stressed condition of the pieces 41, 42, 43, 44 and 53 imparts much more stability and load sustaining ability to the arch shaped structure, than if said pieces were in unstressed and neutral condition.

The arch shaped structure described is then applied under the shoulder portion of the basic fabric 10 with the seam line 31 under the seam line 21 and with the arm hole edges of the basic fabric 10 and main piece 30 substantially in alignment with each other, in which position the arch shaped structure is securely stitched to the main fabric 10 and a protective piece of fabric 56 is preferably applied under the arch shaped structure and also stitched to said structure and to said basic fabric 10 as indicated, to cover the edges of the parts of the arch shaped structure as described.

As a result of forming the arch shaped structure as described to the desired curvature and holding it in that position in the manner described, its application to the main fabric 10 correspondingly shapes the shoulder portion of the main fabric and in that manner insures the support of the outer goods of the coat to give the shoulders thereof the shape and proportions desired, at the same time that the desired freedom of play between the arch shaped structure and the shoulder of the wearer is provided for, without the use of padding material of any kind. This insures stability of form of the shoulders of the coat regardless of the type of coat, and whatever may be the required form of the shoulders of the coat, and whatever may be the required amount of freedom between the arch shaped structures and the shoulders of the coat wearer. As a result, the form of the coat is maintained regardless of subsequent cleaning and pressing operations and regardless of whether coat hangers of the same form as the coat shoulders are used to support the coat when it is not being worn.

The invention is applicable to coats of all different types and whether the coats are intended for men or women. For very light suit coats, for example for summer wear, the amount of re-enforcing material required in the arch shaped structure is a minimum, and in many cases the only pieces required are the pieces 30 and 41; for somewhat heavier coats it becomes desirable to use in the arch shaped structure the pieces 30, 41 and 42; for heavy suit coats and for overcoats of relatively light weight it is desirable to use in the arch shaped structure the pieces 30, 41, 42 and 43; and for very heavy overcoats it may be desirable to use all of the re-enforcing pieces described.

In Fig. 16 I illustrate schematically the relation of the parts of the arch shaped structure to

each other and to the basic material 10 in the finished garment, by showing in that figure the right hand arm hole of the garment with the sleeve removed, and with the protective piece 55 removed for clearness. In this figure the outer goods of the garment is indicated at 57 and is shown as extending entirely around the arm hole. Within this, the basic fabric 10 is shown and inside of the basic fabric 10 and in the order named, the main piece 30, the re-enforcing piece 41, the re-enforcing piece 42, the re-enforcing piece 43, the re-enforcing piece 44 and the binder piece 53 are shown in substantially the relation they occupy when the completed arch-shaped structure is applied to the basic fabric 10 as above described.

My invention includes the above described method of making garment coat interior foundation liners and also foundation liners made by that method.

While I have shown my invention in the particular embodiment above described, I do not limit myself thereto as I may employ equivalents thereof without departing from the scope of the appended claims.

I claim:

1. A foundation liner for garment coats, including in combination a sheet of basic fabric fitted to extend around part of the neck and over the chest and shoulder and upper portion of the back of a person and to an armhole of said foundation, a laminated arch-shaped coat-supporting structure connected with said basic fabric and extending from adjacent the neck portion thereof over the shoulder point and to the armhole of said foundation, said arch-shaped structure extending under said basic fabric from in front of the shoulder over the same and to the back thereof and providing a substantially loose fit throughout its front-to-rear extent between said structure and the shoulder of the coat user and adapted to support substantially the entire hanging weight of said coat from an area adjacent the neck of the wearer, whereby freedom of movement of the shoulder of the coat user is permitted without corresponding movement of said arch-shaped structure, said arch-shaped structure including a main piece of sheet resilient material curved to said arch shape and held by said basic fabric, and a reinforcing piece of resilient sheet material of smaller area than and fitting the curvature of said main piece and extending around the armhole of said foundation, and means securing together said basic fabric, said main piece and said reinforcing piece and holding the same in said arch form with the fibers of said reinforcing piece resiliently opposing the arch-shape curve imposed thereon whereby said reinforcing piece tends to draw said arch-shape structure away from the shoulder of the wearer.

2. A foundation liner for garment coats, including in combination a sheet of basic fabric fitted to extend around part of the neck and over the chest and shoulder and upper portion of the back of a person and to an armhole of said foundation, a laminated arch-shaped coat-supporting structure connected with said basic fabric and extending from adjacent the neck portion thereof over the shoulder point and to the armhole of said foundation, said arch-shaped structure extending under said basic fabric from in front of the shoulder over the same and to the back thereof and providing a substantial looseness of fit throughout its front-to-rear extent between

said structure and the shoulder of the coat user and adapted to support the majority of said coat's hanging weight from areas adjacent the neck of the wearer, whereby freedom of movement of the shoulder of the coat user is permitted minimizing corresponding movement of said arch-shaped structure, said arch-shaped structure including a main piece of sheet resilient material curved to said arch shape and held in arched condition by said basic fabric, and a plurality of reinforcing pieces of resilient sheet material each of smaller area than and bent to the curvature of said main piece and extending around the greater portion of the armhole of said foundation, said reinforcing pieces having progressively smaller areas than each other and having similar edges adjacent an edge of said main piece extending around the armhole of the foundation, and means securing together said basic fabric, said main piece and said reinforcing pieces and holding the same in said arch form with said arched curve imposed on said reinforcing pieces being in opposition to an inherent tendency of said resilient reinforcing pieces to straighten out, which effect tends to hold said arch shape structure away from the shoulder of the wearer and results in a light fitting contact therewith.

3. A foundation liner for garment coats, including in combination a sheet of basic fabric fitted to extend around part of the neck and over the chest and shoulder and upper portion of the back of a person and to an armhole of said foundation, an arch-shaped coat-supporting structure connected with said basic fabric and extending from adjacent the neck portion thereof over the shoulder point and to the armhole of said foundation, said arch-shaped structure extending under said basic fabric from in front of the shoulder over the same and to the back thereof and providing a sufficient non-gripping fit throughout its front-to-rear extent between said structure and the shoulder of the coat user, whereby freedom of movement of the shoulder of the coat user is permitted without appreciable corresponding movement of said arch-shaped structure, said arch-shaped structure including a main piece of sheet resilient material curved to said arch shape and held in curved condition by said basic fabric, and a re-enforcing piece of resilient sheet material of smaller area than and fitting the curvature of said main piece and extending around the armhole of said foundation, and means securing together said basic fabric, said main piece and said re-enforcing piece and holding the same in said arch form with said re-enforcing piece in tensioned arched condition in the direction of curvature of said arch-shaped structure, said securing means including a fabric binder applied to said arch-shaped structure and securely sewed to said main piece and to said re-enforcing piece.

4. A foundation liner for garment coats, including in combination a sheet of basic fabric fitted to extend around part of the neck and over the chest and shoulder and upper portion of the back of a person and to an armhole of said foundation, an arch-shaped coat-supporting structure connected with said basic fabric and extending from adjacent the neck portion thereof over the shoulder point and to the armhole of said foundation, said arch-shaped structure extending under said basic fabric from in front of the shoulder over the same and to the back thereof and providing a substantially loose fit through-

out its front-to-rear extent between said structure and the shoulder of the coat user, whereby freedom of movement of the shoulder of the coat user is permitted without corresponding movement of said arch-shaped structure, said arch-shaped structure including a main piece of sheet resilient cloth curved to said arch shape and held in arched condition by said basic fabric, and a plurality of re-enforcing pieces like resilient sheet material each of smaller area than and bent to the curvature of said main piece and extending around the greater portion of the armhole of said foundation, said re-enforcing pieces having progressively smaller areas than each other and having similar edges adjacent an edge of said main piece extending around the armhole of the foundation, and means securing together said basic fabric, said main piece and said re-enforcing pieces and holding the same in said arch form with said re-enforcing pieces each in tensioned arched condition in the direction of curvature of said arch-shaped structure, said securing means including a fabric binder applied to said arch-shaped structure and securely sewed to said main piece and to each of said re-enforcing pieces.

5. An interior foundation liner for garment coats, including in combination a piece of tailors' canvas cut and shaped to extend around part of the neck and over the chest and shoulder and upper portion of the back of a person and to an armhole of said foundation, an arch-shaped coat-supporting structure of hair cloth connected with said canvas and extending from adjacent the neck portion thereof over the shoulder point and to the armhole of said foundation, said arch-shaped structure extending under said canvas from in front of the shoulder over the same and to the back thereof and providing a free non-gripping fit throughout its front-to-rear extent between said structure and the shoulder of the coat user, whereby freedom of movement of the shoulder of the coat user is permitted without corresponding movement of said arch-shaped structure, said arch-shaped structure including a main piece of hair cloth curved to said arch shape and held in arched condition by said canvas, and a re-enforcing piece of hair cloth of smaller area than and fitting the curvature of said main piece and extending around the armhole of said foundation and having its hairs extending in the direction of said curvature, and means securing together said canvas, said main piece and said re-enforcing piece and holding the same in said arch form with said re-enforcing piece in arched tensioned condition in the direction of curvature of said arch-shaped structure.

6. A foundation interior liner for garment coats, including in combination a piece of tailors' canvas cut and shaped to extend around part of the neck and over the chest and shoulder and upper portion of the back of a person and to an arm hole of said foundation, an arch-shaped coat-supporting structure of hair cloth connected with said canvas and extending from adjacent the neck portion thereof over the shoulder point and to the arm hole of said foundation, said arch-shaped structure extending under said canvas from in front of the shoulder over the same and to the back thereof and providing a substantially non-hugging loose fit throughout its front-to-rear extent between said structure and the shoulder of the coat user, whereby freedom of movement of the shoulder of the coat

user is permitted without resultant wrinkling of said arch-shaped structure, said arch-shaped structure including a main piece of hair cloth curved to said arch shape and held in arched position by said canvas, and a plurality of re-enforcing pieces of hair cloth each of smaller area than and bent to the curvature of said main piece and extending around the greater portion of the arm hole of said foundation, said re-enforcing pieces having progressively smaller areas than each other and having similar edges adjacent an edge of said main piece extending around the arm hole of said foundation, and means securing together said canvas, said main piece and said re-enforcing pieces and holding the same in said arch form with the hairs of each of said re-enforcing pieces extending in the direction of curvature of said arch-shaped structure and in curvature opposing condition.

7. A foundation liner for garment coats, including in combination a piece of tailors' canvas cut and shaped to extend around part of the neck and over the chest and shoulder and upper portion of the back of a person and to an arm hole of said foundation, an arch-shaped coat-supporting structure of hair cloth connected with said canvas and extending from adjacent the neck portion thereof over the shoulder point and to the arm hole of said foundation, said arch-shaped structure extending under said canvas from in front of the shoulder over the same and to the back thereof and providing a substantially free contact throughout its front-to-rear extent between said structure and the shoulder of the coat user, whereby freedom of movement of the shoulder of the coat user is permitted without corresponding movement of said arch-shaped structure, said arch-shaped structure including a main piece of hair cloth curved to said arch shape and held in concave condition by said canvas, and a re-enforcing piece of hair cloth of smaller area than and fitting the curvature of said main piece and extending around the arm hole of said foundation and having its hairs extending in the direction of said curvature, and means securing together said canvas, said main piece and said re-enforcing piece and holding the same in said arch form with said re-enforcing piece all bent in the direction of curvature of said arch-shaped structure, said securing means including a fabric binder applied to the side of said arch-shaped structure remote from said canvas and securely stitched to said canvas and to said main piece and to said re-enforcing piece.

8. A foundation liner for garment coats, including in combination a piece of tailors' canvas cut and shaped to extend around part of the neck and over the chest and shoulder and upper portion of the back of a person and to an arm hole of said foundation, an arch-shaped coat-supporting structure of hair cloth connected with said canvas and extending from adjacent the neck portion thereof over the shoulder point and to the arm hole of said foundation, said arch-shaped structure extending under said canvas from in front of the shoulder over the same and to the back thereof, said arch-shaped structure including a main piece of hair cloth curved to said arch shape and held by said canvas, and a plurality of re-enforcing pieces of hair cloth each of smaller area than and bent to the curvature of said main piece and extending around the greater portion of the arm hole of said foundation, said re-enforcing pieces having progressively smaller areas than each other and having

similar edges adjacent an edge of said main piece extending around the arm hole of said foundation, and means securing together said canvas, said main piece and said re-enforcing pieces and holding the same in said arch form with the hairs of each of said re-enforcing pieces extending in the direction of curvature of said arch-shaped structure, said securing means including a fabric binder applied to the side of said arch-shaped structure remote from said canvas and securely stitched to said canvas and to said main piece and to each of said re-enforcing pieces.

9. The method of making underlying foundation liners for garment coats, including the steps of cutting and fitting a sheet of basic fabric to extend around part of the neck and over the chest and shoulder and upper portion of the back of a person and forming an arm hole; preparing a stiff laminated arch-shaped coat-supporting structure of multiple ply resilient material adapted to extend from adjacent the neck portion of said basic fabric over the shoulder point and to the arm hole thereof and fit with substantial looseness between said arch-shaped structure and the shoulder of the user throughout the front-to-rear extent of said arch-shaped structure; and securely fastening said arch-shaped structure to the under side of said basic fabric to lie above the shoulder of the user in such a manner that said arch shaped structure tends to maintain its rigidity over said shoulder points to the extent that the majority of said coat's hanging weight is supported substantially from areas adjacent the neck of the wearer rather than from the shoulder points, whereby providing for freedom of movement of the shoulder of the user without corresponding movement of the shoulder portion of said foundation.

10. The method of making underlying foundation liners for garment coats, including the steps of cutting and fitting a sheet of basic fabric to extend around part of the neck and over the chest and shoulder and upper portion of the back of a person and forming an arm hole; preparing an arch-shaped coat-supporting structure adapted to fit in substantially non-engaging contact from front-to-rear around the shoulder of the user by bending a main piece of resilient material to the curvature of said arch-shaped structure to extend from adjacent the neck portion to the armhole of said basic fabric, and by bending a re-enforcing piece of resilient material of smaller area than said main piece to the curvature of said arch-shaped structure, and by then securely fastening together said main piece and said re-enforcing piece with an edge of said re-enforcing piece substantially at the arm hole edge of said main piece and thereby holding said main piece and said re-enforcing piece in arched tensioned condition; and then securely fastening said arch-shaped structure to said basic fabric and thereby imparting to said basic fabric the curvature of said arch-shaped structure.

11. The method of making interior foundation liners for garment coats, including the steps of cutting and fitting a sheet of basic fabric to extend around part of the neck and over the chest, shoulder and upper portion of the back of a person and forming an arm hole; preparing an arch-shaped coat-supporting structure having a substantially free engaging contact from front-to-rear around the shoulder of the user by bending a main piece of resilient material to the curvature of said arch-shaped structure to extend from adjacent the neck portion to

the armhole of said basic fabric, and by bending a plurality of re-enforcing pieces of resilient material, each of smaller area than said main piece and of progressively decreased areas, to the curvature of said arch-shaped structure; by then securely fastening together said main piece and said re-enforcing pieces with similar edges of said re-enforcing pieces substantially in line with the arm hole edge of said main piece and thereby holding said main piece and said re-enforcing pieces in arcuate and tensioned condition; and then securely fastening said arch-shaped structure to said basic fabric and thereby imparting to said basic fabric the curvature of said arch-shaped structure.

12. The method of making underlying foundation liners for garment coats, including the steps of cutting and fitting a sheet of basic fabric to extend around part of the neck and over the chest, shoulder and upper portion of the back of a person to form an arm hole; preparing an arch-shaped coat-supporting structure designed to fit loosely from front-to-rear around the shoulder of the user by bending a main piece of resilient material to the curvature of said arch-shaped structure to extend from adjacent the neck portion of the arm hole of said basic fabric, and by bending a plurality of re-enforcing pieces of resilient material, each of smaller area than said main piece and of progressively decreased areas, to the curvature of said arch-shaped structure; by then securely fastening together said main piece and said re-enforcing pieces with similar edges of said re-enforcing pieces substantially in line with the arm hole edge of said main piece and thereby holding said main piece and said re-enforcing pieces in arcuate condition, by then applying a piece of binder fabric to the inner surface of said re-enforcing pieces and securely stitching said main piece, said re-enforcing pieces and said binder fabric together to hold said arch-shaped structure in shape to prevent displacement of the pieces thereof from each other; and then securely fastening said arch-shaped structure under and to said basic fabric and thereby imparting to said basic fabric the curvature of said arch-shaped structure.

13. The method of making underlying foundation structures for garment coats, including the steps of cutting and fitting a piece of tailors' canvas to extend around part of the neck and over the chest, shoulder and upper portion of the back of a person thereby forming an arm hole; preparing an arch-shaped coat-supporting structure of hair cloth to extend from adjacent the neck portion of said canvas over the shoulder point and to the arm hole thereof with the hairs of said hair cloth extending in the direction of curvature of said arch-shaped structure with a substantial free play contact between said arch-shaped structure and the shoulder of the user throughout the front-to-rear extent of said arch-shaped structure; and securely stitching said arch-shaped structure to the under side of said canvas to lie loosely over the shoulder of the user to support a coat made over said foundation; thereby providing for freedom of movement of the shoulder of the user without corresponding movement of the shoulder portion of said foundation.

14. The method of making underlying foundations for garment coats, including the steps of cutting and fitting a piece of tailors' canvas to extend around part of the neck and over the chest, shoulder and upper portion of the back

of a person to form an arm hole; preparing an arch-shaped coat-supporting structure with a substantially non-gripping fit from front to rear around the shoulder of the user by fitting and bending a main piece of hair cloth to the curvature of said arch-shaped structure and to extend from adjacent the neck portion to the arm hole of said canvas, and by bending a re-enforcing piece of hair cloth of smaller area than said main piece to the curvature of said arch-shaped structure and with its hairs extending in the direction of said curvature; by then securely stitching together said main piece and said re-enforcing piece with an edge of said re-enforcing piece substantially at the arm hole edge of said main piece thereby holding said main piece and said re-enforcing piece in arched condition; and then securely stitching said arch-shaped structure to the under side of said canvas and thereby imparting to said canvas the curvature of said arch-shaped structure.

15. The method of making underlying foundation liners for garment coats, including the steps of cutting and fitting a piece of tailors' canvas to extend around part of the neck and over the chest, shoulder and upper portion of the back of a person to form an arm hole; preparing an arch-shaped coat-supporting structure having substantially loose fitting contact from front to rear around the shoulder of the user by fitting and bending a main piece of hair cloth to the curvature of said arch-shaped structure and to extend from adjacent the neck portion to the arm hole of said canvas, by bending a plurality of re-enforcing pieces of hair cloth, each of smaller area than said main piece and of progressively decreased areas, to the curvature of said arch-shaped structure with the hairs of each of said re-enforcing pieces extending in the direction of said curvature, by then securely stitching together said main piece and said re-enforcing pieces with similar edges of said re-enforcing pieces substantially in line with the arm hole edge of said main piece and thereby holding said main piece and said re-enforcing pieces in arcuate and tensioned condition; and then securely stitching said arch-shaped structure to the under side of said canvas and thereby imparting to said canvas the curvature of said arch-shaped structure.

16. The method of making an interior foundation liner or front for garment coats, including the steps of cutting and fitting a piece of tailors' canvas to extend around part of the neck and over the chest, shoulder and upper portion of the back of a person for forming an arm hole; preparing an arch-shaped coat-supporting structure for free fitting contact from front-to-rear around the shoulder of the user by fitting and bending a main piece of hair cloth to the curvature of said arch-shaped structure to extend from adjacent the neck portion to the arm hole of said canvas, by bending a plurality of re-enforcing pieces of hair cloth, each of smaller area than said main piece and of progressively decreased areas, to the curvature of said arch-shaped structure with the hairs of each of said re-enforcing pieces extending in the direction of said curvature; by then securely stitching together said main piece and said re-enforcing pieces with similar edges of said re-enforcing pieces substantially in line with the arm hole edge of said main piece and thereby holding said main piece and said re-enforcing pieces in arcuate position by then applying a piece of binder fabric to the

inner surface of said re-enforcing pieces and securely stitching said main piece, said re-enforcing pieces and said binder fabric together to hold said arch-shaped structure in shape and to prevent displacement of the pieces thereof from each other; and then securely stitching said arch-shaped structure under and to said canvas and thereby imparting to said canvas the curvature of said arch-shaped structure.

17. In an inner foundation liner of the type which forms an integral part of a garment, such as a suit coat or the like, adapted to impart a desired shape and form to the finished garment and over which the exterior fabric of the garment is disposed and secured; a sheet of pliable basic fabric cut and sewn to a desired shape and size for fitting over the chest and around the neck, shoulder and the upper back of a wearer; a main supporting member of resilient sheet material of a smaller area than said basic fabric sheet and adapted to be mounted adjacent thereto, said main supporting piece being cut so that its resilient opposition to bending is exerted along an imaginary shoulder line of said garment running with the normal shoulder slope of the wearer; a plurality of resilient reinforcing members mountable below said main supporting piece in multi-ply relation and having their resilient opposition to bending exerted at approximately right angles to said imaginary garment shoulder line, said reinforcing members being of successively smaller areas with the largest member being mounted adjacent said main supporting piece; a binder member of resilient material mountable in binding relation over said reinforcing members and said supporting piece and having its resilient opposition to bending exerted along said shoulder line similar to said main supporting piece, means for securing all of said resilient material members to one another in a unitary arch shaped structure adapted to impart the necessary shoulder contour to said garment, and said shoulder arch structure being adapted to sustain its shoulder contour, stiffness and consequently the smooth exterior appearance of said garment shoulders against substantially all shoulder movements of said wearer.

18. In an inner foundation liner of the type which forms an integral part of a garment, such as a suit coat or the like, adapted to impart a desired shape and form to the finished garment and over which the exterior fabric of the garment is disposed and secured; a sheet of pliable basic fabric cut and sewn to a desired shape and size for fitting over the chest and around the neck, shoulder and the upper back of a wearer; a main supporting member of resilient sheet material of a smaller area than said basic fabric sheet and adapted to be mounted adjacent thereto, said main supporting piece being cut so that its resilient opposition to bending is exerted along an imaginary shoulder line of said garment running with the normal shoulder slope of the wearer; a plurality of resilient reinforcing members mountable below said main supporting piece in multi-ply relation and having their resilient opposition to bending exerted at approximately right angles to said imaginary garment shoulder line, said reinforcing members being of successively smaller area with the largest member being mounted adjacent said main supporting piece; means for securing all of said resilient material members to one another in a unitary arch shaped structure adapted to impart the necessary shoulder contour to said garment, and

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said shoulder arch structure being adapted to sustain its shoulder contour, stiffness and consequently the smooth exterior appearance of said garment shoulders against substantially all shoulder movements of said wearer.

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