

Aug. 23, 1938.

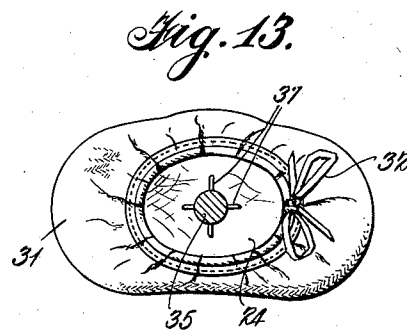
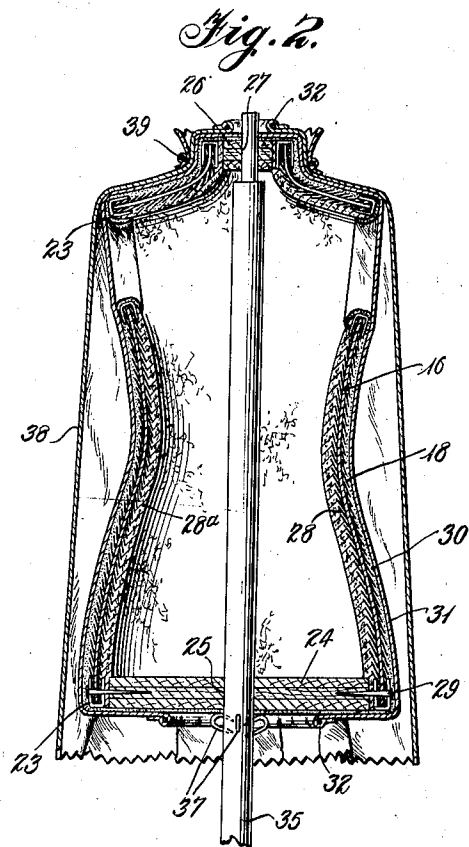
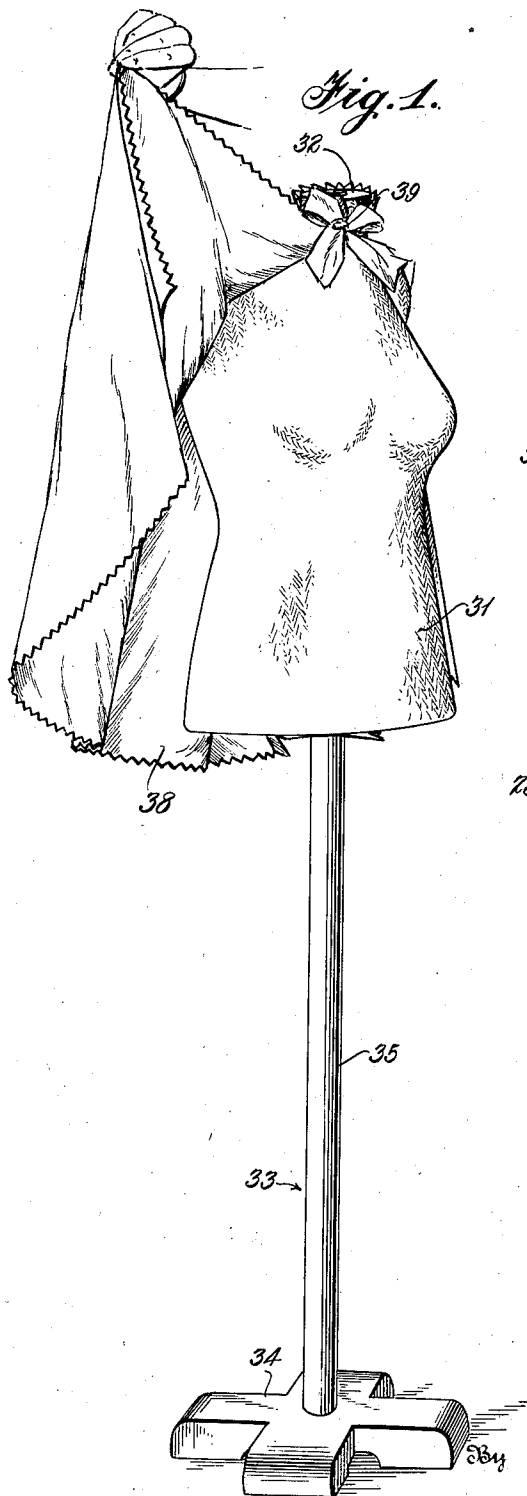
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2,128,024

GARMENT FORM AND METHOD FOR PRODUCING THE SAME

Filed April 27, 1937

3 Sheets-Sheet 1



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GARMENT FORM AND METHOD FOR PRODUCING THE SAME

Filed April 27, 1937

3 Sheets-Sheet 2

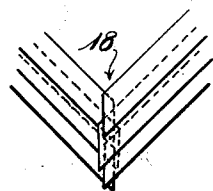
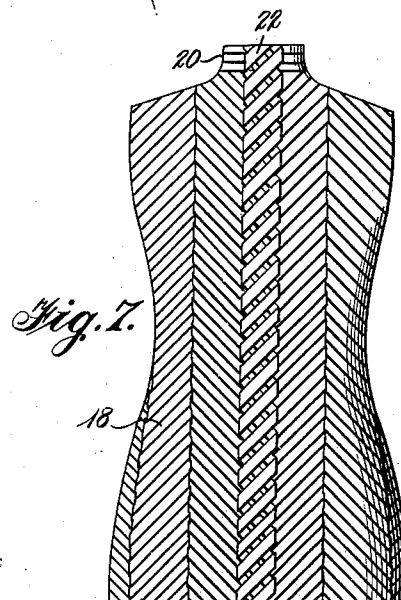
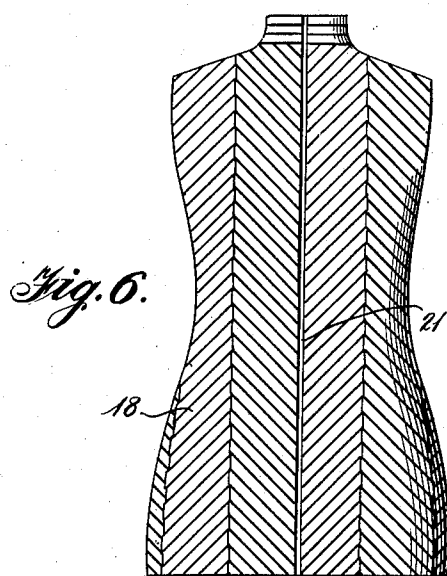
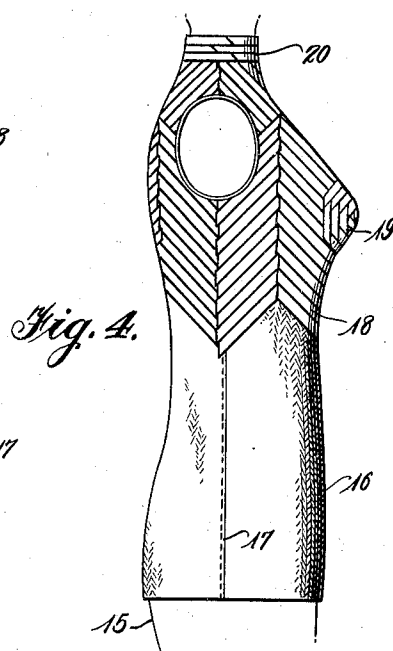
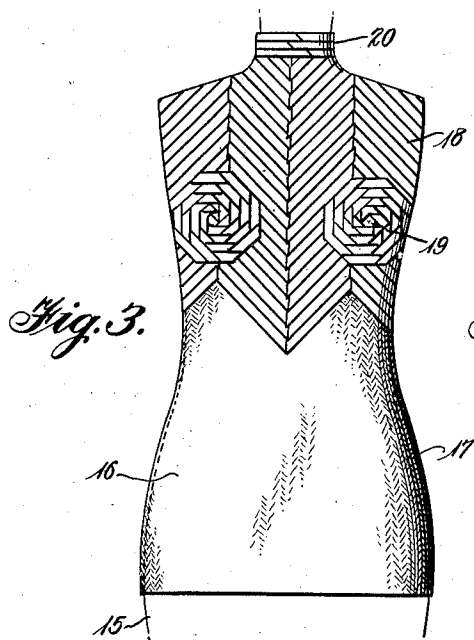


Fig. 5.

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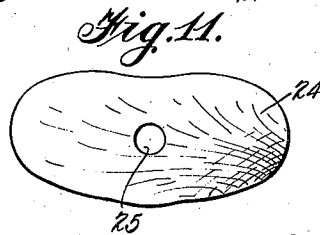
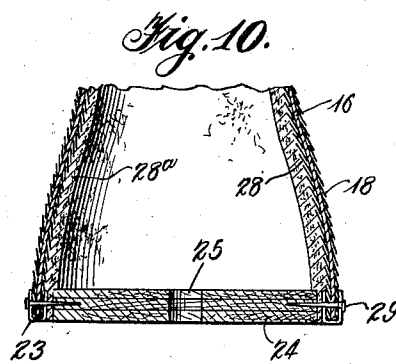
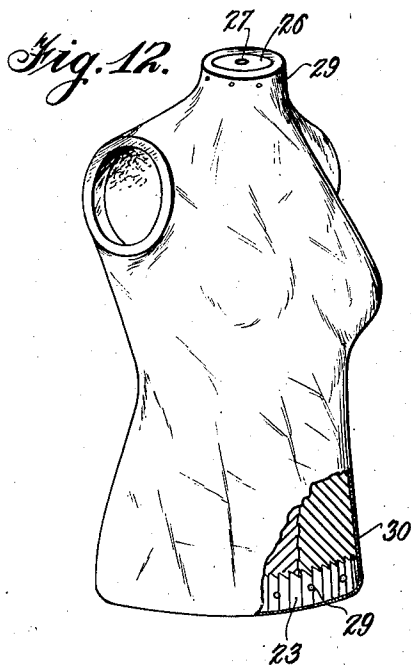
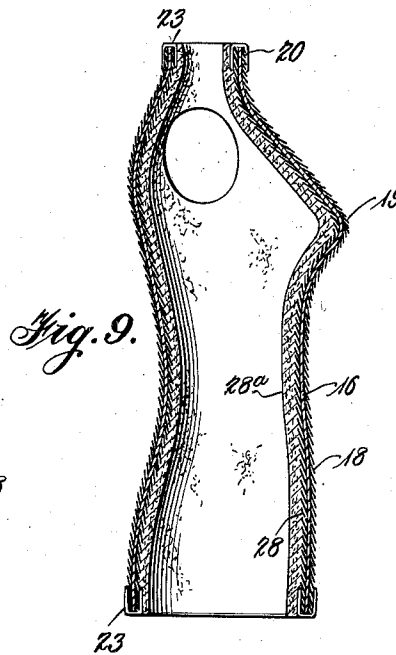
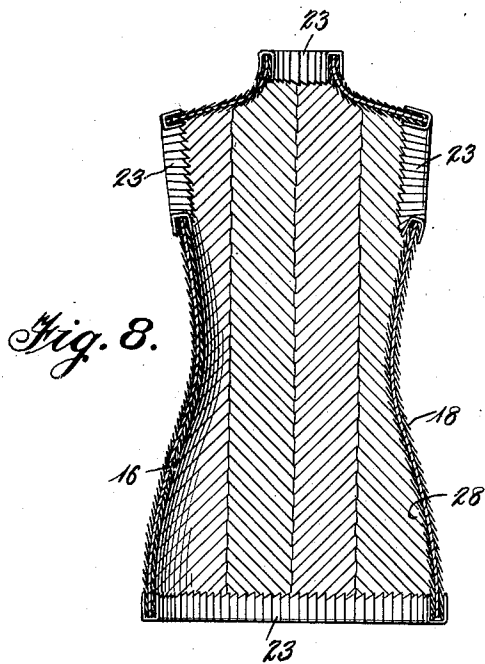
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GARMENT FORM AND METHOD FOR PRODUCING THE SAME

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3 Sheets-Sheet 3



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2,128,024

GARMENT FORM AND METHOD FOR PRODUCING THE SAME

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Application April 27, 1937, Serial No. 139,282

6 Claims. (Cl. 223—68)

This invention relates to new and useful improvements in garment forms and methods for producing the same.

The primary object of the invention is to provide a method of producing a garment form which will accurately reproduce all of the curves and hollows of the human torso being modeled.

A further object of the invention is to provide a garment form which has been made to so accurately reproduce the modeled torso that it may be employed, in the absence of its owner, to effect a perfect fit of garments, whereby the owner will be spared the tedious and time-consuming procedure heretofore resorted to for fitting each new or remodeled garment.

Another object of the invention is the provision of a garment form which will be of light weight, extremely durable, and yet present a slightly appearance.

Other objects and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawings forming a part of this specification and in which like numerals are employed to designate like parts throughout the same:

Figure 1 is a perspective view of a completed garment form embodying this invention;

Figure 2 is a central vertical sectional view of the garment form disclosed in Figure 1;

Figure 3 is a front elevational view disclosing the two initial steps of the method employed for producing the garment form embodying this invention;

Figure 4 is a side elevational view of the embryonic garment form shell disclosed in Figure 3;

Figure 5 is a detail view disclosing the manner in which the paper strips are overlapped at their sides and ends during the method step of covering the foundation or fabric base of the form;

Figure 6 is a rear elevational view of the embryonic garment form shell after the fabric base has been completely covered with paper strips and then cut up the back to permit the shell to be removed from the human body being modeled with the shell remaining in one piece;

Figure 7 illustrates the method employed for joining the cut edges of the shell;

Figure 8 is a central vertical sectional view of the shell and illustrates the steps of applying a reinforcing or stiffening cover or coating to the interior surface of the shell and binding the arm holes and the neck and bottom edges of the shell;

Figure 9 is a central vertical sectional view taken at right angles to the disclosure of Figure 8

and illustrates the step of applying a plastic material to the interior of the shell to give the shell the desired degree of durability and permanency;

Figure 10 is a fragmentary vertical sectional view of the lower portion of the shell disclosed in Figure 9 and illustrates the positioning of a block or filler in the lower portion of the shell for reinforcing this portion of the shell and for permitting the final garment form to be mounted upon a standard;

Figure 11 is a detail plan view of the bottom block or filler which is illustrated in Figure 10 as being applied to the lower portion of the garment shell;

Figure 12 is a perspective view illustrating the garment form with a block or filler positioned within the neck opening and with a final coating of colored waterproof liquid, such as enamel, applied to the exterior thereof; and

Figure 13 is a bottom plan view of the completed garment form illustrated in Figures 1 and 2.

In the drawings, wherein for the purpose of illustration are shown the preferred embodiments of this invention, and referring particularly to Figures 3 and 4, the human body or torso being modeled first has snugly fitted thereto a covering of cotton jersey, or any other thin fabric, 16, which forms the fabric base of the garment form embodying this invention. This fabric covering or base is tightly fitted to the body, care being taken to remove all slack in the fabric at the essential places, i. e., at the bust, the waist, the small of the back, shoulder blades, etc., from high on the neck to below the broad part of the hips and about one-half inch onto the arms. This tight fit is accomplished by forming exterior seams which are stitched by hand, and the seams are then all trimmed to about one sixteenth of an inch to avoid bulk. Due to the thinness of the base fabric 16, the seams 17 (see Figure 4) will not be objectionably bulky.

A stiffening and form-maintaining covering is next applied to the exterior surface of the base fabric 16. This covering consists of short strips of sticky paper tape, cut in three or four standard lengths and applied principally in herringbone fashion, as designated at 18 in Figures 3 to 7, inclusive. Figure 5 illustrates the manner in which the strips are overlapped at their longitudinal edges and at their ends. Laterally, the strips are overlapped substantially half their width with the result that the stiffening covering or layer possesses a thickness of substantially

twice the thickness of a single strip of paper. These strips of paper tape must be very carefully applied and fitted to all of the curves and hollows of the body. By applying the strips in herring-bone fashion, it has been determined that they may be made to more smoothly and easily fit the contours of the body. The curvature of the bust may be more accurately reproduced by spirally applying progressively shorter strips of paper tape, starting with the periphery and working toward the center, in the manner illustrated at 19 in Figures 3 and 4. The neck portion 20 may be best formed by applying the paper strips circumferentially in overlapped layers.

After the stiffening and form-maintaining paper covering is applied to the base fabric, the final bottom edge of the garment form should be laid off by marking or drawing a line all around the shell on a line just below the fullest part of the hips or thighs and at an even distance from the floor. This measurement becomes very important when the garment form is applied to a standard or support so that the entire garment form may be accurately positioned on the standard with respect to the floor so as to reproduce the height and posture of the human body being modeled. Lines should be marked on the shell to indicate the true arm holes on both sides of the form.

To enable the garment form shell to be removed from the human body in one piece, a straight line is drawn down the center of the back of the shell. The shell is then cut along this back line, and after complete severance, the shell is removed from the body. The cut edges of the back should at once be fitted together. This is accomplished by the short strips of paper applied diagonally across the edges and in two layers with the strips of each layer crossed with respect to the strips of the other layer. This crossing of the paper strips provides the desired strength. It has been determined that the most logical place to cut the shell for removal from the body is along the center of the back since the small strips of paper tape, employed for joining the cut edges of the shell, will fit into the small of the back and along the spinal curve without producing bulk at a point where the same will be objectionable or will prevent accurate fitting of garments to the form. Figure 6 discloses at 21 where the shell has been severed up the back. The reference character 22 in Figure 7 designates the short strips of paper tape which have been applied to the shell for the purpose of joining the cut edges of the shell.

After the shell has been properly fitted together again, as illustrated in Figure 7, the shell is trimmed on all of the lines which define the bottom edge, the arm holes, and the neck opening of the shell. These various edges should be bound, as best shown in Figure 8, with strips of sticky paper 23 which are laid in parallelism and laterally overlap. These strips are arranged at right angles to the edges of the shell and are secured to the shell at the inner and outer faces of the same.

At this point in the development of the garment form, a pattern is drafted of the neck and bottom openings of the shell. Figures 10 and 11 disclose a wood block which is cut from the pattern for the bottom opening of the shell. This block, designated by the reference character 24, is formed of ply-wood preferably and is provided with a central aperture 25. Figures 2 and 12 disclose the ply-wood block 26 which is made from the pattern of the neck opening. This

block 26 is apertured at 27. The two apertures 25 and 27 are positioned so as to determine the posture of the form when mounted on a standard. The blocks 24 and 26 are assembled in the shell at a later point in the method and will be referred to again.

One of the final steps of this method of producing a garment form consists of applying one or more layers of a plastic material to the interior of the shell to give the latter the desired degree of permanency and durability. This plastic material cannot be made to properly and permanently adhere to the inner surface of the fabric base 16. It becomes necessary, therefore, to apply a covering of some character to the inner surface of the base fabric 16 to which the plastic material will adhere. Two different coverings for the inner surface of the base fabric have been employed and found to be very satisfactory. One of these coverings is illustrated in Figures 2, 8, and 9 as consisting of a layer of sticky paper tape 28 which is applied in herring-bone fashion, as shown in Figure 8. This paper covering will adhere to the fabric base 16, and the plastic material will properly adhere to the paper layer.

The second type of covering for the inner surface of the base fabric 16 consists of applying a coating of shellac directly to the inner surface of the base fabric. This shellac covering may be applied more rapidly than the paper covering 28 and affords a very satisfactory surface to which the plastic material will adhere. The shellac coating has the further advantage that it will soak through the fabric base 16 and act as a further bond between the outer paper covering 18 and the base fabric 16.

After the paper covering 28, or the shellac covering, has been applied and is thoroughly dried and set, a thin layer of a suitable plastic material is applied to the inner surface of the shell. This plastic material may take the form of wood putty or plaster although I do not desire to limit myself to this particular material. Any other suitable workable material may be employed.

When this first thin coat of plastic material has thoroughly dried, an additional layer of the same material is applied to the inner surface of the thin layer. This second layer preferably is about one half inch in thickness. It will be appreciated that the plastic material may be applied in several thin layers, if desired, instead of one thin layer and one thick layer. The combined thickness of the layers of plastic material is such that the form will be given the desired durability, weight, and permanency.

After the plastic material has thoroughly set and hardened, the blocks 24 and 26 are then positioned within the bottom and neck openings of the form. These blocks are secured in place by wire brads 29 (see Figures 10 and 12) which are driven radially inwardly of the peripheral edges of the blocks. The wire brads may be spaced any desired distance apart.

For the purpose of rendering the garment form waterproof and to enhance the appearance of the same, a pink enamel coating 30 is applied to the exterior surface of the form. This enamel coating is illustrated in Figures 2 and 12.

A final covering of pink wool jersey is then stretched over the form for the purpose of having a fabric covering to pin to when the form is in use. This jersey covering 31 is best shown in Figures 1, 2, and 13 and is provided with

draw-strings 32 at the top and bottom to enable the jersey covering to be easily removed to permit laundering. This jersey covering also makes it possible to easily draw the same off of portions of the form, such, for example, as the hips, to permit padding to be applied to the form in case the owner varies in measurements due to gaining weight subsequent to the modeling of the form.

Figures 1 and 2 illustrate a form of standard 33 which is employed for supporting the garment form while in use. This standard consists of a suitable base 34 and an upright post 35. The post is received within the apertures 25 and 27 of the lower and upper blocks 24 and 26, respectively, and the fit is such that the form will be permitted to rotate relative to the post. Suitable brads 37 are driven into the post 35 at a proper height to support the garment form a distance from the floor which corresponds identically with the positioning of the simulated portions of the human body reproduced by the form.

To protect the finished form from dust when not in use, or otherwise, a washable fabric cape 38 is made to cover the form. This fabric cape 38 is illustrated in Figures 1 and 2 and is secured by means of a ribbon 39, or other fastening means, around the neck of the form.

It is to be understood that the forms of this invention herewith shown and described are to be taken as preferred examples of the same and that various changes in the method steps and the shape, size, and arrangement of parts of the garment form may be resorted to without departing from the spirit of the invention or the scope of the subjoined claims.

Having thus described the invention, I claim:

1. The method of making garment forms which comprises the steps of snugly fitting to the portions of the body being reproduced a fabric base, applying to the exterior of the said base a stiffening covering formed of relatively short strips of fabric secured in herring-bone fashion with all edges of adjacent strips overlapped, cutting the thus formed shell along the center of the back to permit removal from the body in one piece, joining the cut edges, trimming and binding the arm holes, the neck, and the bottom edge of the shell, applying a covering to the interior surface of said fabric base which will form a plastic bonding surface, and finally applying a plastic stiffening and reinforcing layer to the interior bonding surface on the fabric base which is of proper thickness to provide the form with the desired degree of durability and permanency.

2. The method of making garment forms which comprises the steps of snugly fitting to the portions of the body being reproduced a fabric base, applying to the exterior of the said base a stiffening covering formed of short strips of fabric secured in herring-bone fashion with all edges of adjacent strips overlapped, cutting the thus formed shell along the center of the back to permit removal from the body in one piece, joining the cut edges, trimming and binding the arm holes, the neck, and the bottom edge of the shell, applying to the interior surface of said fabric base a stiffening and plastic bonding surface formed of strips of fabric secured in herring-bone fashion with the edges of adjacent strips overlapped, and finally applying a plastic stiffening and reinforcing layer to the interior bonding surface on the fabric base which is of proper

thickness to provide the form with the desired degree of durability and permanency.

3. The method of making garment forms which comprises the steps of snugly fitting to the portions of the body being reproduced a fabric base, applying to the exterior of the said base a stiffening covering formed of relatively short strips of fabric secured in herring-bone fashion with all of the edges of adjacent strips overlapped, cutting the thus formed shell along the center of the back to permit removal from the body in one piece, joining the cut edges, trimming and binding the arm holes, the neck, and the bottom edge of the shell, applying a coating of shellac to the interior surface of said shell to give added stiffness to the shell, form a plastic bonding surface on the fabric base and to further bond the exterior stiffening covering to the fabric base, and finally applying a plastic stiffening and reinforcing layer to the interior bonding surface on the fabric base which is of proper thickness to provide the form with the desired degree of durability and permanency.

4. The method of making garment forms which comprises the steps of snugly fitting to the portions of the body being reproduced a fabric base, applying to the exterior of the said base a stiffening covering formed of relatively short strips of fabric secured in herring-bone fashion with all of the edges of adjacent strips overlapped, cutting the thus formed shell along the center of the back to permit removal from the body in one piece, joining the cut edges, trimming and binding the arm holes, the neck, and the bottom edge of the shell, applying a covering of shellac to the interior surface of said shell to give added stiffness to the shell, form a plastic bonding surface on the fabric base and to further bond the exterior stiffening covering to the fabric base, applying a thin layer of plastic material to the said bonding surface of the fabric base, and after said thin layer has thoroughly dried, applying a second layer of plastic material to the first layer with the second layer being of proper thickness to provide the desired degree of durability and permanency.

5. The method of making garment forms which comprises the steps of forming on the portions of the body being reproduced a snugly fitting, thin fabric base covering with the seams formed on the exterior and trimmed close to the body to avoid bulk, completely covering the exterior of the fabric base with relatively short strips of sticky paper tape applied in herring-bone fashion and with the edges of adjacent strips overlapped, marking the bottom portion of the shell all around at a uniform distance from the floor, marking the arm portions to provide accurate arm holes, marking the neck portion at the desired height, marking the center of the back of said shell throughout its full height, cutting the shell up the back to permit removal in one piece, joining the cut edges with strips of sticky paper crossed for added strength, trimming the bottom, the arm holes, and the neck on said markings to provide true straight edges, binding the arm holes, the neck, and the bottom edges with strips of sticky paper laid in parallel and laterally overlapped relation and secured to the inner and outer surfaces of the shell, coating the entire inner surface of the shell with shellac to further stiffen the shell and bond the outer paper covering to the base fabric, after the shellac has dried applying a thin layer of plastic wood composition to the inner surface of the shell, after thorough

hardening of the plastic layer applying a second layer of a plastic wood composition to the first layer with the second layer being of proper thickness to provide the desired degree of durability and permanency, and mounting a stiff closure block in the bottom and neck openings of the shell, and coating the exterior of the shell with a colored waterproof liquid.

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10 6. The method of making garment forms which comprises the steps of snugly fitting to the portions of the body being reproduced a fabric base, applying to the exterior of the said base a stiffening covering formed of relatively short strips

of fabric secured in herring-bone fashion with all edges of adjacent strips overlapped, cutting the thus formed shell along the center of the back to permit removal from the body in one piece, joining the cut edges, applying a covering to the interior surface of said fabric base which will form a plastic bonding surface, and finally applying a plastic stiffening and reinforcing layer to the interior bonding surface on the fabric base which is of proper thickness to provide the form with the desired degree of durability and permanency.

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