

E. M. D. LANDENBERGER.
METHOD OF MAKING GARMENT FORMS.
APPLICATION FILED DEC. 24, 1909.

1,012,565.

Patented Dec. 19, 1911.

2 SHEETS—SHEET 1.

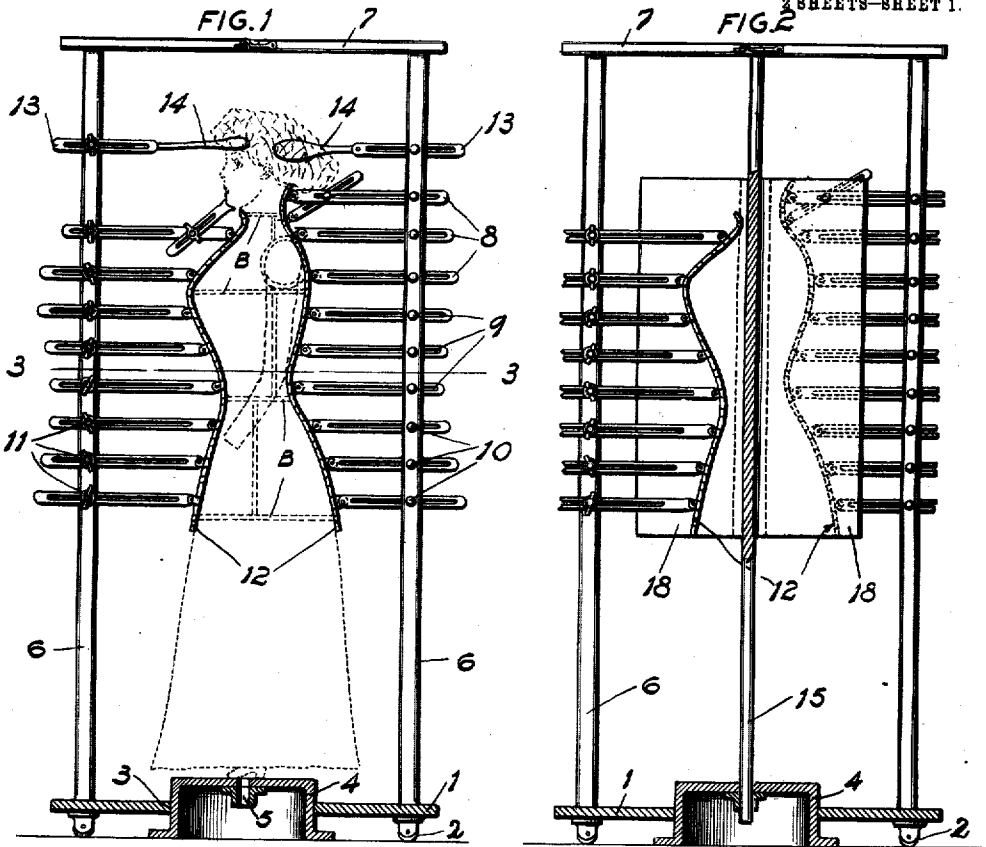
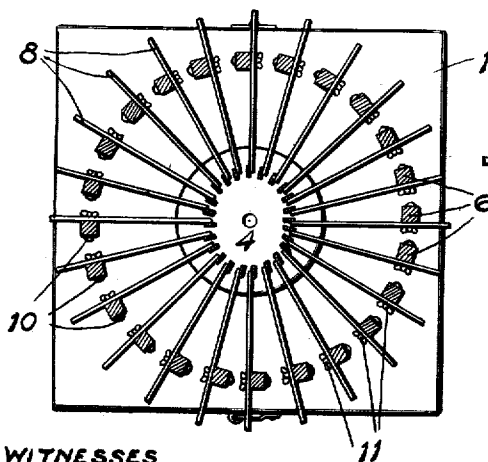


FIG. 3.



WITNESSES
J. J. J. J.
E. M. J. J.

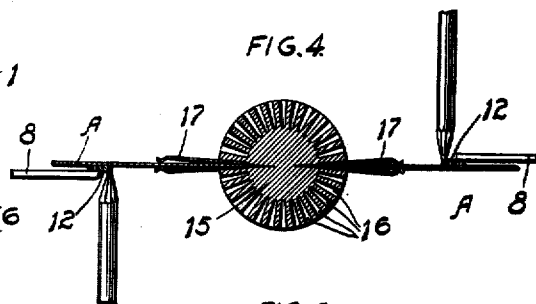
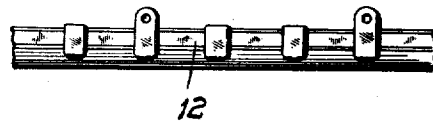


FIG. 5.



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2 SHEETS—SHEET 2.

FIG. 6

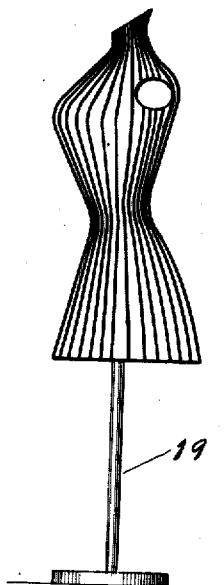


FIG. 7

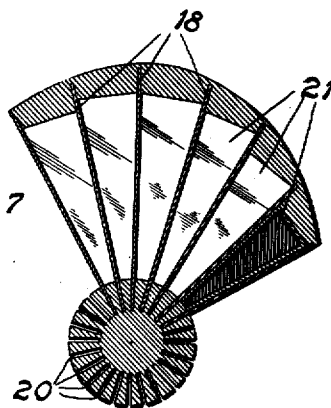


FIG. 8

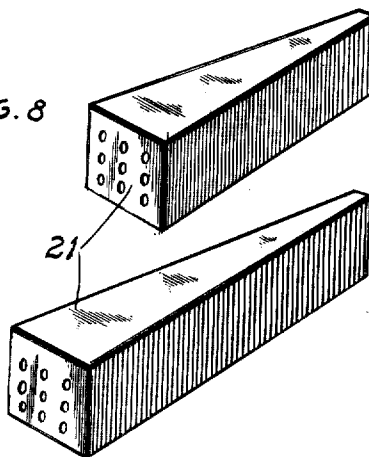


FIG. 9

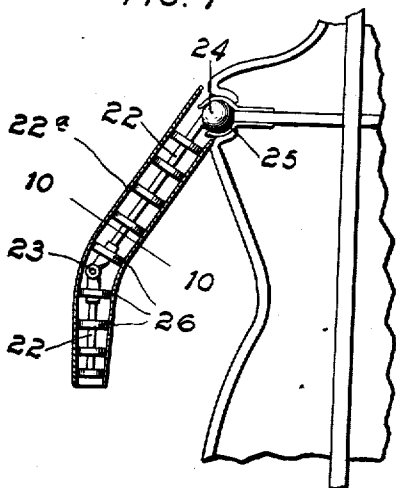
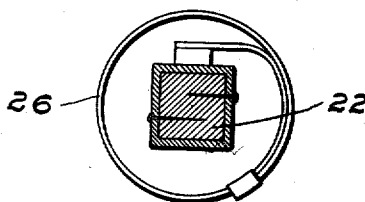


FIG. 10



WITNESSES

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UNITED STATES PATENT OFFICE.

EMMA M. D. LANDENBERGER, OF ST. LOUIS, MISSOURI.

METHOD OF MAKING GARMENT-FORMS.

1,012,565.

Specification of Letters Patent.

Patented Dec. 19, 1911.

Original application filed July 30, 1909, Serial No. 510,402. Divided and this application filed December 24, 1909. Serial No. 534,850.

To all whom it may concern:

Be it known that I, EMMA M. D. LANDENBERGER, a citizen of the United States, residing at St. Louis, Missouri, have invented a certain new and useful Improvement in Methods of Making Garment-Forms, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical section taken through the approximate center of the type of conformator used in my improved method of making garment forms, said conformator being shown as applied for use. Fig. 2 is a section similar to Fig. 1 and showing sections of cardboard or the like in the conformator ready to be marked. Fig. 3 is a horizontal section taken on the line 3—3 of Fig. 1. Fig. 4 is a horizontal section, illustrating the means employed for holding the sections of cardboard while the same are being marked. Fig. 5 is a detail view of one of the pliable strips made use of in the conformator. Fig. 6 is an elevation of a completed dress form obtained by means of my improved art. Fig. 7 is a horizontal section showing the construction of the completed form. Fig. 8 is a perspective view of a pair of filler blocks utilized in making up the dress form. Fig. 9 is a section of one of the forms for the arm applied to the dress form. Fig. 10 is an enlarged cross section taken on the line 10—10 of Fig. 9.

My invention relates to an improvement in methods of making garment forms, the principal object of my invention being to produce by suitable apparatus and by several successive steps, a manikin or dress form, upon which wearing apparel can be readily fitted.

One of the important features of the conformator used in practicing my improved art is the series of pliable strips which are readily bent and fitted directly against the body to obtain the size, lines and curves thereof, and which pliable strips are locked in position after having been bent, thus insuring accuracy in the reproduction of the size, lines and curves in the manikin

or dress form which is subsequently constructed.

This application is a division of, and should be read in connection with an application filed by me July 30, 1909, Serial No. 510,402.

In the drawings I have illustrated a single form of conformator or apparatus suitable for practicing my improved art, and referring by numerals to said drawings, 1 designates the base of the apparatus which is constructed in two parts separable on a central line and hinged to one another at one side and normally held together at the opposite side by means of a hook and staple. The base so formed is mounted upon casters 2 in order that the entire apparatus can be readily shifted from one position to another. Formed in the center of the base is an opening 3 and projecting upward therethrough is a circular platform 4 in the center of which is formed a bearing 5. Fixed on the two parts of the base 1 and arranged in a circular row, concentric with the opening 3 is a series of posts or upright bars 6.

The upper ends of these posts are seated in a top piece 7, the same being constructed in mating parts separable on a central line and hinged together at one side and held together at the opposite side by means of a hook and staple.

Arranged on each post or standard 6 is a series of horizontally disposed bars 8, the same being slotted longitudinally as designated by 9, and seated in each post 6 is a series of bolts 10 which pass through the slots 9 in the bars 8, and located on the threaded ends of said bolts are winged nuts 11. By this construction, the bars 8 are all independently adjustable. Connected in any suitable manner to the inner ends of the bars in each vertical row of bars 8 is a pliable strip or member 12, preferably lead or rubber or a combination of the same, *i. e.* a strip of lead faced or covered with rubber.

Adjustably arranged on an opposite pair of the posts 6 above the sets of bars 8 and pliable strips carried thereby, are bars 13, the inner ends of which are provided with head rests 14, which when the conformator is in use engage and serve as a rest for the

head of the person for whom the dress form is being constructed. The means employed for holding the section of card board while the same is being marked, comprises a center post 15, the lower end of which is detachably mounted in the bearing 5, the upper end being detachably engaged in the center of the top piece 7. Formed in this post 15, is a series of vertically disposed grooves 16, the number of said grooves corresponding to the number of pliable strips 12. Removably seated in these grooves 16 are spring clips 17 which are adapted to receive and hold vertically disposed rectangular sections A of card board or the like.

When my improved conformator is to be used, the base 1 and the top piece 7 are swung apart upon their hinges and all of the winged nuts 11 are loosened in order to permit the bars 8 to slide freely backward or forward. The person for whom the dress form is being made now takes a position on the platform 4 after which the base and top piece 7 are closed. The pliable strips 12 are now moved forward until they contact with the body of the person on the platform 4 and as the said strips are pliable, they can be readily bent to conform with the contour and outlines of the person's body.

After each pliable strip has been properly bent and fitted, the winged nuts 11 are all tightened on the bolts 10 to lock the supporting bars 8 and hold the pliable strips in their bent positions, and the base 1 and top piece 7 are now swung apart to permit the person to step from the platform 4.

The post 15 is now seated in the bearing 5, after which the base and top piece are closed, thus bringing the pliable strips into position around the post 15. Sections of card board A are now engaged in the clips 17, the outer portions of which sections of card board extend past the curved and bent strips 12. A pencil or the like is now passed along the edge of each pliable strip and thus the curve or outline thereof is transferred to the corresponding section of card board or the like.

The entire series of card board sections are consecutively numbered in order that they may be properly reassembled during a subsequent operation in the formation of a dress form, and after all of the card board sections have been marked they are removed from the clips 17 and the outer portions of said sections are cut away along the lines traced from the pliable strips. Thus a series of card board sections are obtained, the outer edges of which correspond to the lines and curves of the body of the person for whom the dress form is being made, and these sections of card board are now assembled in proper order on a post 19 which is provided with a series of vertically disposed slots 20

which receive the inner edges of the sections of card board.

The spaces between the sections of card board thus assembled, are filled with filler blocks 21 constructed of light card board or the like and the spaces between the outer ends of these filler blocks and the outer edges of the sections of card board are filled with plaster of Paris or analogous material while in a plastic condition, care being taken to smooth off the surface of this plastic material flush with the outer edges of the sections of cardboard. When the plastic material has become set and hardened, the form is complete, and the various articles of wearing apparel can be readily fitted thereupon.

If desired, arm forms may be applied to the dress form, which arm forms comprise a pair of bars 22 hinged to one another at 23 and which hinge corresponds to the elbow of the arm. The upper end of the upper bar is provided with a ball 24 which is seated in a socket 25 and which latter can be inserted in the dress form at the point corresponding to the shoulder thereof. Located on the bar 22 are flat springs 26 bent into circular form, the outer end of each spring being arranged to slide upon the body portion of said spring in order to adjust the size of the arm form.

22^a is a sleeve preferably made like a sleeve lining of a size to snugly fit the arm of the person whose measurement is being taken. This sleeve 22^a is arranged over the springs to determine the size of the arm form, the springs expanding therein as far as they may, and holding the sleeve 22^a distended.

In some instances it may be found desirable to place steel tapes or the like upon the body of the person for whom the dress form is being made before the conformator is applied to the body, thus locating fixed lines or points for measurement on the body of the person. These tapes are shown by dotted lines B, Fig. 1.

The dress form obtained by practicing my improved art is an accurate facsimile of the form and contour of the person for whom the form is intended, and by thus obtaining a perfect facsimile, much of the time and labor usually involved in the making and fitting of garments can be entirely obviated, as where a dressmaker or tailor makes use of the conformator, the patron, after having a form made, is not subjected to the annoyance and loss of time incident to numerous fittings.

The conformator used in connection with my improved art is very simple in construction and operation, and does away with the necessity of making a large number of measurements and calculations, and as a series of pliable strips are made use of in the apparatus, the lines and contour of any figure may be readily and accurately obtained and re-

produced in a light, strong manikin or dress form.

I claim:

The herein described method of making
5 garment forms, which consists in obtaining a
series of exact vertical contour lines at numerous closely adjacent points around the
entire body, transferring said contour lines,
so obtained, to thin sheets, cutting said sheets
10 along the transfer lines, assembling the

sheets in relation to each other according to the position of the contour lines obtained, and then filling the spaces between the sheets.

In testimony whereof I hereunto affix my signature in the presence of two witnesses, 15
this 22nd day of December, 1909.

EMMA M. D. LANDENBERGER.

Witnesses:

F. R. CORNWALL,

M. P. SMITH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."