C. A. UFFORD.

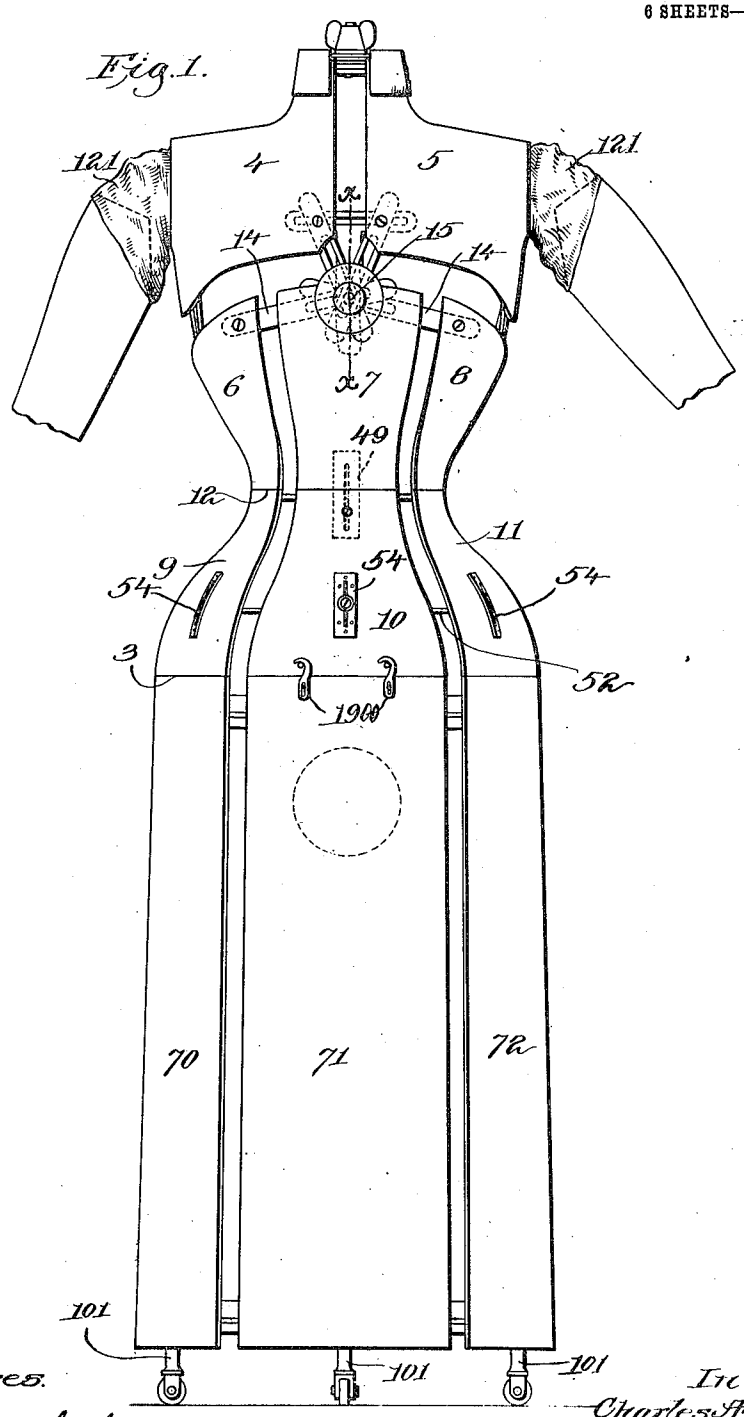
DRESS FORM.

APPLICATION FILED MAR. 7, 1904.

906,087. Patented Dec. 8, 1908.

6 SHEETS—SHEET 1.

Fig. 1.



Witnesses.
W. C. Sumsford
Warren D. Owen

Inventor:
Charles A. Ufford,
by Crosby Gregory
Attys

C. A. UFFORD.

DRESS FORM.

APPLICATION FILED MAR. 7, 1904.

906,087. Patented Dec. 8, 1908.

6 SHEETS—SHEET 2.

Fig. 2.

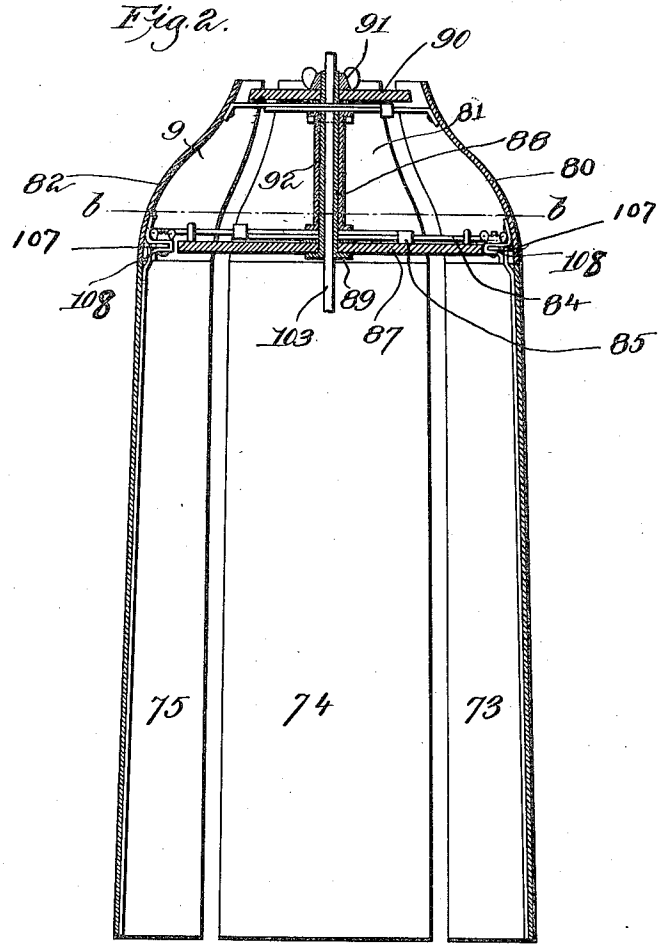
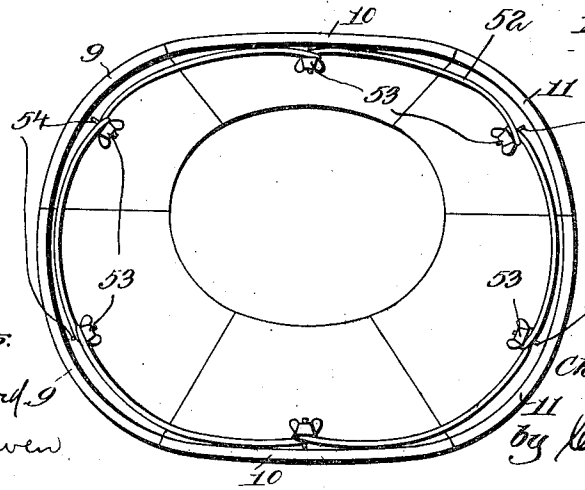


Fig. 3.



Witnesses:
H. C. Sumsford.
Warren D. Owen

Inventor.
Charles A. Ufford,
By Crosby Gregory.
Attys.

C. A. UFFORD.

DRESS FORM.

APPLICATION FILED MAR. 7, 1904.

906,087. Patented Dec. 8, 1908.

6 SHEETS—SHEET 3.

Fig. 4.

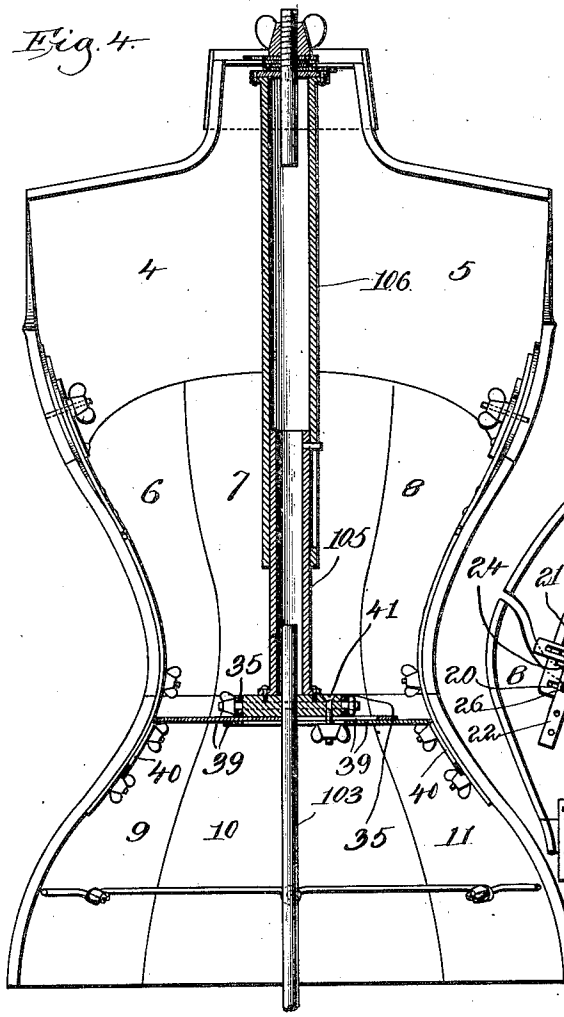
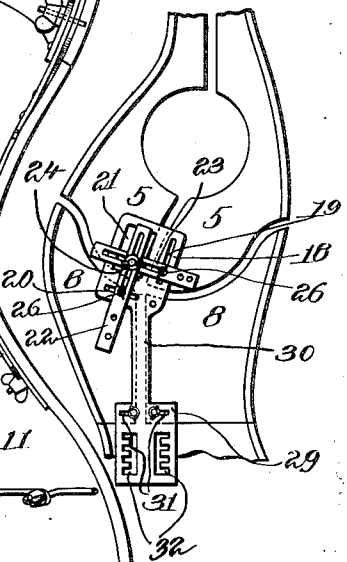


Fig. 6.



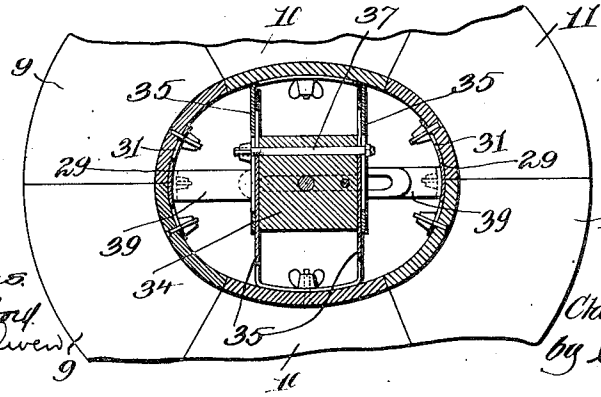


Fig. 5.

Witnesses.
H. C. Sumford.
Warren D. Oliver.

Inventor.
Charles A. Ufford,
by Crosby Gregory.
Attys.

C. A. UFFORD.

DRESS FORM.

APPLICATION FILED MAR. 7, 1904.

906,087. Patented Dec. 8, 1908.

6 SHEETS—SHEET 4.

Fig. 9.

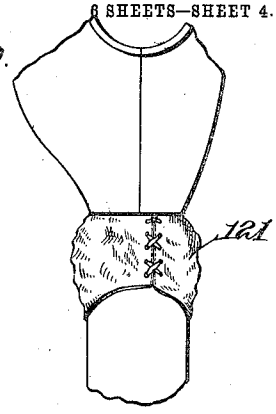


Fig. 7.

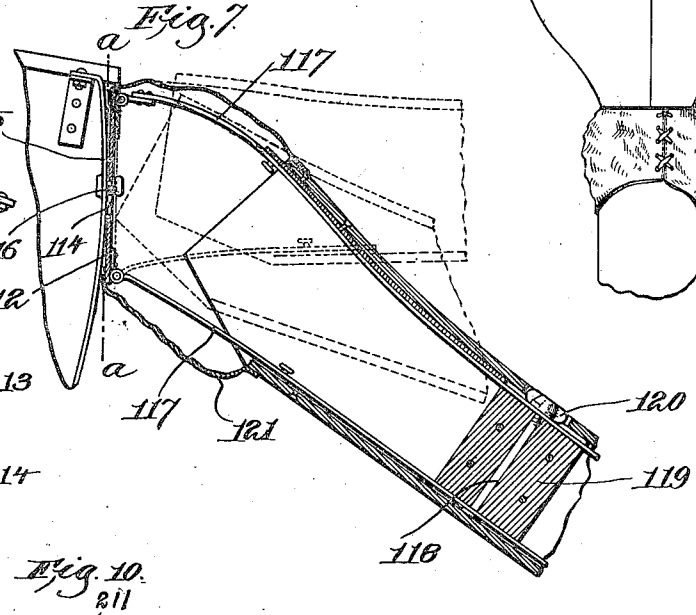


Fig. 8.

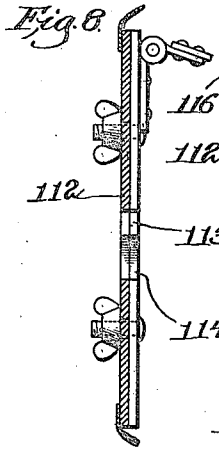


Fig. 10.

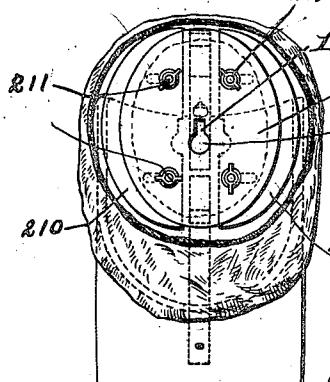
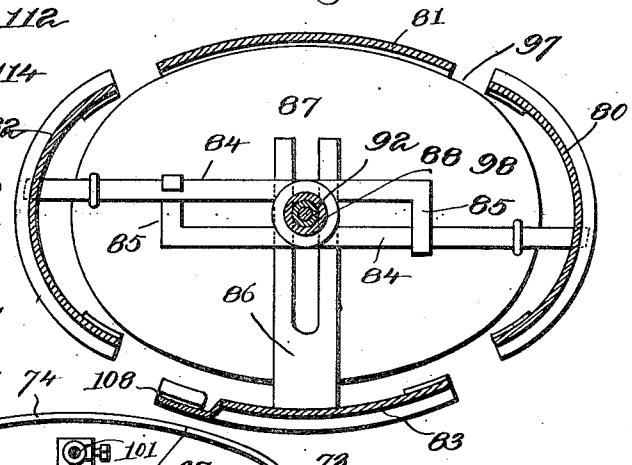


Fig. 11.



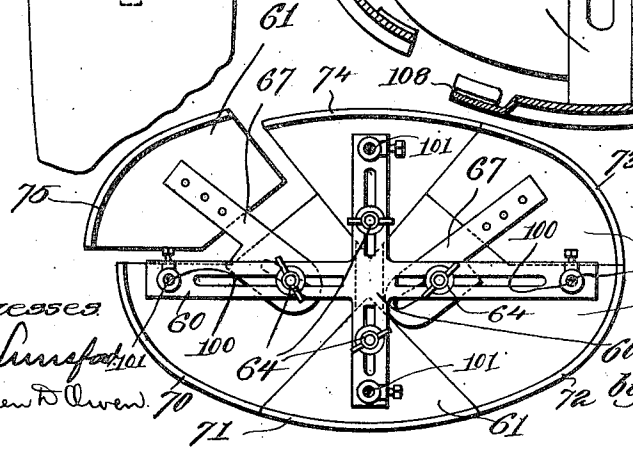


Fig. 12.

Witnesses
W. C. Linnefort
Warren D. Owen.

Inventor,
Charles A. Ufford,
by Crosby & Gregory
attys

C. A. UFFORD.

DRESS FORM.

APPLICATION FILED MAR. 7, 1904.

906,087. Patented Dec. 8, 1908.

6 SHEETS—SHEET 5.

Fig. 13.

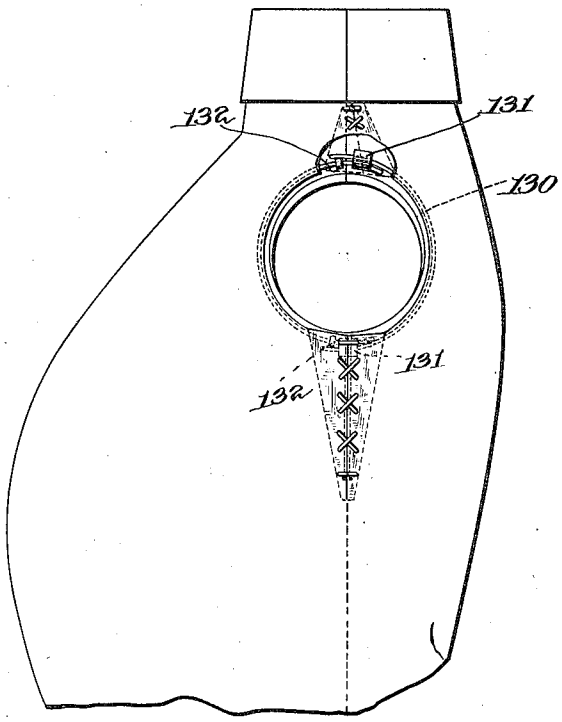


Fig. 14.

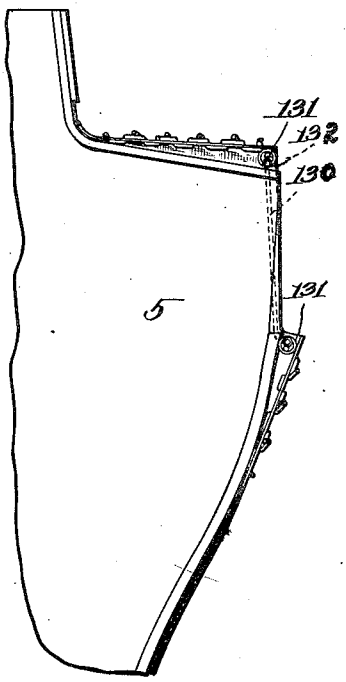


Fig. 21.

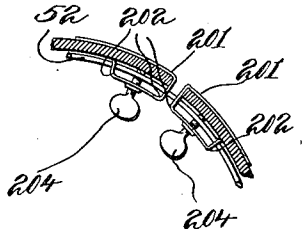
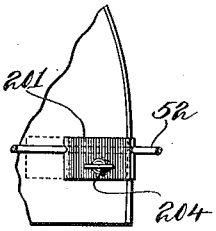


Fig. 22.



Witnesses.
W. C. Lunsford.
Warren & Owen

Inventor.
Charles A. Ufford,
by Morsby Gregory.
Atty's.

C. A. UFFORD.

DRESS FORM.

APPLICATION FILED MAR. 7, 1904.

906,087. Patented Dec. 8, 1908.

6 SHEETS—SHEET 6.

Fig. 15.

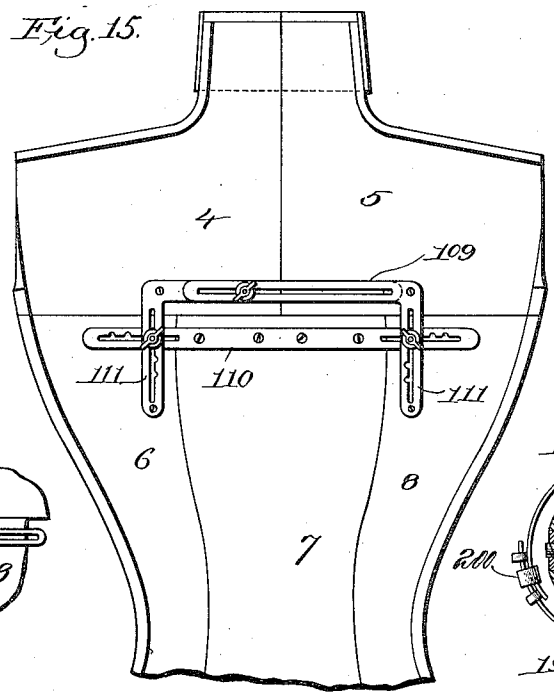


Fig. 20.

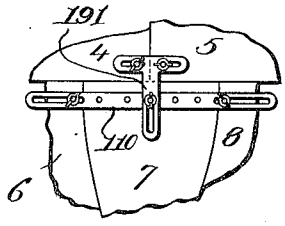


Fig. 19.

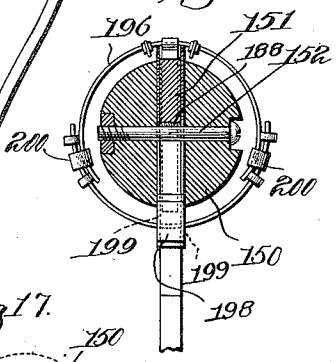


Fig. 16.

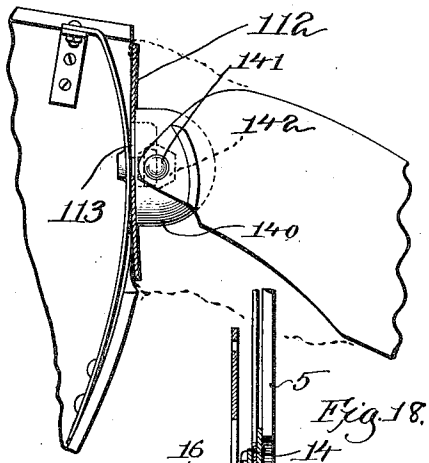


Fig. 17.

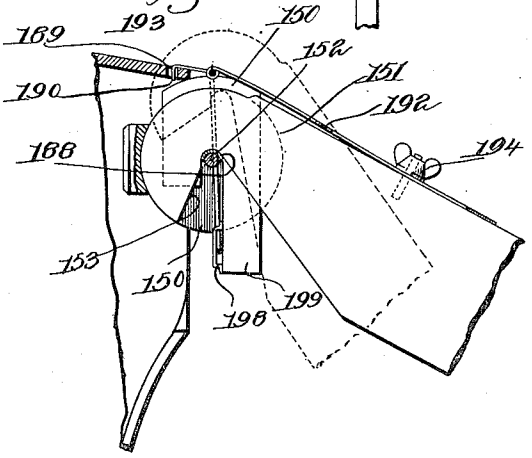
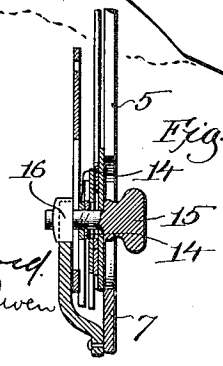


Fig. 18.



Witnesses.
H. C. Sunsford
Warren B. Owen

Inventor.
Charles A. Ufford.
by Crosby Gregory.
attys.

UNITED STATES PATENT OFFICE.

CHARLES A. UFFORD, OF BOSTON, MASSACHUSETTS.

DRESS-FORM.

No. 906,087. Specification of Letters Patent. Patented Dec. 8, 1908.

Application filed March 7, 1904. Serial No. 196,793.

To all whom it may concern:

Be it known that I, CHARLES A. UFFORD, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Dress-Forms, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention relates to an expansible dress form which can be readily adjusted to present any desired shape, and the object of the invention is to provide a dress form which is simple in construction and easily adjusted.

The features wherein the invention resides will be more fully hereinafter described and then pointed out in the claims.

Figure 1 is a front elevation of my improved dress form; Fig. 2 is a vertical sectional view of the skirt section of the form; Fig. 3 is a bottom plan view of the waist section; Fig. 4 is a vertical central section through the waist portion of the form; Fig. 5 is a detail of the manner of adjusting the waist section at the waist line; Fig. 6 is a vertical central section of the upper portion of the waist form in a plane at right angles to that on which Fig. 4 is taken; Figs. 7 and 8 are details of the way of adjusting the arm of the form; Fig. 9 is a detail hereinafter referred to; Fig. 10 is a section on the line *a*—*a*, Fig. 7, looking toward the right; Fig. 11 is a section on the line *b*—*b*, Fig. 2, with a portion of the section 83 broken out to show the clip 108; Fig. 12 is a bottom plan view of the skirt section; Figs. 13 and 14 show the way of adjusting the arm-hole; Fig. 15 is a modification; Figs. 16 and 17 show modified forms of arm; Fig. 18 is a detail view on line *x*—*x*, Fig. 1, hereinafter referred to. Fig. 19 is a vertical section through the arm shown in Fig. 17; Fig. 20 shows a modification of my invention; Fig. 21 is a horizontal section through Fig. 22; Fig. 22 shows a modification.

My improved form is divided horizontally substantially at or a little below the hips, and the portion above the division line is detachable and constitutes in itself a complete waist section.

When the two parts of the form are together a complete dress form is provided. To make the portion of the form below the horizontal division a complete skirt form when the waist portion is removed I have provided a hip section which can be detachably secured to the portion of the form below the horizontal division, and which constitutes with such form a complete skirt section. It is possible, therefore, to use my form as a complete dress form, or to remove the waist portion and apply the hip portion and then have a complete waist form and a complete skirt form. Both the waist sections and skirt sections are expansible in such a way that the size of the bust, waist and hips may be varied, and also so that the length of the waist may be varied.

Fig. 1 illustrates the complete dress form which is divided horizontally at or below the hips, as at 3, this division line being so placed that the portion above it constitutes a complete waist section, as illustrated. The waist section is divided vertically and horizontally across the bust, and also preferably horizontally at the waist. The portion above the bust is divided vertically at its center both in front and in the rear to make the shoulder portions 4 and 5. Below the bust the form is divided on substantially the lines of the dart seams to form both front and rear the sections 6, 7 and 8, which extend clear to the bottom of the waist section; unless the latter were divided across the waist on substantially the line 12, as shown in Fig. 1; in the latter event there would be both front and rear sections 9, 10 and 11, below the line 12. These various sections can be adjusted with relation to each other to change the shape of the form.

In Fig. 1, I have illustrated each of the sections 4, 5, 6 and 8, as having secured thereto a slotted adjusting member 14, which extends to the common adjusting screw 15 secured in the section 7. This adjusting screw extends through the slots in each of the members 14 and passes through a non-rotative nut 16, Fig. 18. The head of the screw 15 can be operated from the outside of the form, so that by loosening said screw all of said sections can be adjusted with relation to each other and held in their adjusted position by merely tightening the screw. For adjusting the sections 5, 5, and 8, 8, with relation to each other beneath the arm, I prefer to use the device shown in Fig. 6.

18 designates a plate provided with the

two slots 19 and 20 at right angles to each other and the substantially square aperture 21. Said plate is secured to one section, as for instance the section 8, and slotted members 22 and 23 are secured to two of the other sections, and arranged to cross each other, as shown in Fig. 6. A short clamping screw 24 rigidly carried by the left hand section 5 passes through the slots of the two members 22 and 23, and other clamping screws 26, rigidly carried by two other sections, pass through the slots 19 and 20 and also through the slots in the members 22 and 23. By loosening one or more of these clamping screws the various form sections can be adjusted as desired. These clamping screws are preferably provided with winged clamping nuts which can be loosened by reaching in through the arm-scye. The adjustability I have above described provides for varying the size of the form at the bust.

Where the form is divided across the waist horizontally, as at 12, the waist may be lengthened or shortened, and I prefer the following devices for holding it in its adjusted position.

29 designates adjusting plates at each side of the form at the waist line, said plates preferably being connected to the plates 18 by suitable arms 30. The plates 29 are each provided with the two slots 31 and the two rows of connected slots 32.

Suitable clamping screws pass through the two sections 6 or 8, and through the two slots 31; and other clamping screws pass through the sections 11 or 9 and through the two series of connected slots 32. By loosening said screws the two sections 6 or 8 or the two sections 9 or 11 may be spread apart and also the waist can be lengthened, and after the proper adjustment has been made the parts are held in their adjusted position by tightening the clamping screws.

To hold the various sections of the form steady at the waist line I employ a construction such as shown in Fig. 5.

34 designates a clamping-block, and 35 U-shaped clamping members provided with slotted arms secured either to the lower edge of the front and back sections 7, or to the upper edge of the sections 10; said slotted arms lying either side of the block 34. A clamping-bolt 37 extending through the block and through the slots in the arms serves to hold these sections 7 in place after they have been properly adjusted.

39 designates other slotted clamping members having downturned slotted ends 40 which overlie and are adjustably secured to the block by means of a clamping screw 41 passing through the slots. With this construction the various sections may be separated or closed toward each other and then held in the desired position.

The sections 9, 9, and 11, 11, are adjusted with respect to each other to expand the waist line and held in their adjusted position by the plates 29 above referred to.

If the U-shaped members 35 are secured to the lower edge of the section 7 it will be necessary to provide some special means for holding the upper edges of the sections 10 in their adjusted position, and similarly if said members 35 are secured to the upper edges of the sections 10 it will be necessary to provide some special means for holding the lower edges of the sections 7 in their adjusted position. For this purpose I will preferably employ a suitable slotted member 49 secured either to the sections 7 or 10 as the case may be and overlying the other section, a suitable adjusting screw in said other section passing through the slot in the member 49, and holding the adjacent edges of the sections 7 and 10 in alinement.

The bottom edge of the sections 9, 9, 10, 10, and 11, 11, may be held in their adjusted position in any suitable way. I prefer, however, to employ the construction shown in Figs. 1 and 3 wherein 52 designates an annular expanding and contracting member to which is secured a plurality of adjusting screws 53, each passing through a slot 54 in one of the sections of the form. The portion of the form where this adjusting member is located has a progressively increasing diameter, and, therefore, the moving of the annular expanding member up or down with reference to the slots results in expanding the sections or contracting them. By tightening the nuts on the screws the sections are held in their desired position. The portion of the form below the division line 3 is also divided vertically to form the sections 70, 71, 72, 73, 74, 75, and these sections are adjustable with relation to each other, and are held in their adjusted position by some suitable device, preferably that shown in Fig. 12. Each section has projecting inwardly both at its top and bottom an end member 61, which is preferably of wood.

60 designates a four-armed member, the arms of which are slotted and overlie the end-pieces connected to the sections 70, 71, 72 and 74. Suitable adjusting screws 64 passing through the slotted arms and said end pieces serve to clamp the latter to the former. The end pieces connecting with the sections 73 and 75 have rigid therewith slotted arms 67 which overlie the longer arms of the member 60; the clamping screws 64, which pass through said longer arms, also pass through the slots of the arms 67 and thus serve to clamp the sections 73 and 75 in their adjusted position. By merely loosening the adjusting screws 64 both at the top and bottom the lower portion of the form can be expanded or contracted, and the tightening of said screws holds it in its adjusted position. The hip section, shown in

Fig. 2, is also divided vertically and is expansible. Any suitable clamping means for holding it expanded may be employed, though I prefer that shown in Fig. 11. The various sections of the hip section are designated by 80, 81, 82, 83. Secured to the sections 80 and 82 are arms 84 which are offset at their ends, as at 85, each offset portion being bent to partially encircle the other arm. Extending inwardly from the member 83 is a slotted arm 86 which overlies the arms 84. The section 81 is secured to an oval end-piece 87 which is non-expansible.

88 designates a tubular member which extends through the base-piece 87, and is flanged at its lower end, as at 89, and also extends through the end-piece 90 at the top of the hip-section. The upper end of the tubular member 88 is screw-threaded and a clamping nut 91 applied thereto. Outside of the tubular member 88 is a second tubular member or sleeve 92 having flanges at either end which coöperate with the flanges on the other member. The tubular member 88 passes through the slot in the member 86 and between the arms 84, as seen in Fig. 11. With this construction the tightening of the winged nut 91 will clamp the arms 84 and the member 86 both at the top and bottom of the hip section between the flanges on the tubular members 88 and 92, and thus hold the sections of the hip form in their adjusted position. The member 60 at the bottom of the form is provided with apertures 100 in which are adjustably secured vertical supports 101 carrying casters at their lower end, said supports passing through suitable slots in the end member 61. By adjusting the supports in the arm of the member 60 the form may be raised or lowered. Secured to the member 60 is a vertical rod 103 which extends slightly above the waist-line. When the waist form is in the position, as shown in Fig. 1, said rod 103 passes through the block 34 and into the lower end of a vertical tubular member 105 which is rigidly secured to said block 34. Said tubular member 105 telescopes into a second tubular member 106 which is secured to the neck of the form. The object in making 105 and 106 telescope is to permit the form to be extended vertically. When the hip section is in place, as shown in Fig. 2, the rod 103 passes up through the tubular member 88 and thus properly positions the hip section.

I may, if desired, provide the sections 70, 71, 72, at their upper ends with fingers or ears 107, which are adapted to enter clips, such as 108 in Figs. 2 and 11, either in the bottom of the waist section or in the bottom of the hip section. These fingers and clips serve to hold the meeting edges of the form section in proper alinement.

Instead of the adjusting means shown in Fig. 1, for adjusting the sections of the bust, I may employ that shown in Figs. 15 and 20. In the form of my invention shown in Fig. 15 the section 5 has rigid therewith a slotted arm 109, through the slot of which a clamping screw in the section 4 passes. The section 7 has rigid therewith a member 110, the ends of which are slotted and overlie the sections 6 and 8. Suitable slotted arms 111 fixed to the sections 4 and 5 overlie the slotted ends of the member 110, and clamping screws in the section 6 and 8 pass through both the members 110 and 111.

In Fig. 20 a still different form of the invention is shown wherein the section 7 has secured thereto a slotted piece 110 which overlaps the pieces 6 and 8 and to which said pieces are adjustably secured. A slotted T-shaped member 191 is adjustably secured to each of the sections 4 and 5 and also to the section 7.

The arms of my improved dress form are detachable and also adjustable. To make them detachable I secure to the end of each arm a plate 112 having a slot 113 terminating in an aperture 114, and provide at the arm-scye of the form a member 115 having a headed stud 116 adapted to be inserted through the aperture 114, the shank of said stud being received in the slot 113.

Hinged to the plate 112 both at the top and bottom are slotted strips 117 which extend down the arm, as seen in Fig. 7, and through the slots of which passes a clamping bolt 118. Said bolt is supported by a suitable block 119 and has at one end a clamping nut 120 which is preferably received in a recess in the arm. When the nut 120 is loosened the arm may be swung into any desired position, as shown by dotted lines Fig. 7, the slotted strips 117 sliding over the block 119 as will be obvious. By tightening the nut 120 the arm will be held in its adjusted position.

The body of the arm is preferably made of papier-mâché but the shoulder portion thereof will be stuffed with hair or some equivalent material and covered with a flexible covering 121, as seen in Fig. 9. This hair filling makes the body of the arm yieldable at the shoulder joint so that it will readily accommodate itself to different positions.

210 designates two parts of a size-member by means of which the size of the arm-scye of the dress may be determined. These two parts, 210, can be adjusted toward and from each other and are held in position by clamping screws 211.

In Fig. 16 I have shown another form of my invention wherein the arm is received between two halves of a split ball member 140, and is hinged thereto by means of a hinge-pin 141 having a nut 142 thereon. The ball member 140 is rigid with the plate 112 provided with a slot 113 that terminates in

an aperture adapted to receive the headed stud. The arm may be held in its adjusted position by tightening the nut on the pin 142.

In Fig. 17 is shown another form of detachable arm. In this construction 150 designates a socket-piece secured in the shoulder of the form, and having a vertical slot. The arm has a hinge member 151 received in said slot and turning on the pin 152. This hinge member is cut away as at 153 so that the arm can be removed without removing the pin. At each side of the hinge member 151 is a plate 199, said plates having secured thereto at their upper ends a size ring 196 the lower portion of which passes through slots 198 at the bottom of said plates. 192 designates a slotted member which is hinged at one end to said size ring and at its other end is clamped to the arm by means of a clamping screw 194. 190 designates fastening devices or hooks which are secured to the size ring and hooked in the apertures 189 in the shoulder of the form, thus holding the size ring in proper position. The arm may be adjusted into various positions by loosening the clamping screw 194. The size ring 196 which controls the size of the arm is made in two parts which are adjustably secured together by clamping devices 200. 188 designates a guard member extending across and connecting the two plates 199 immediately adjacent the pivot 152, said guard preventing the plates from being disengaged from the hinged member. In removing this form of arm the hooks 190 are disengaged after which the hinge member and arm may be disconnected from the pivot pin 152.

The various sections of the form are made of papier-mâché or similar material, and, therefore, cannot be pinned to while a waist dress is being fitted over the form, accordingly, I propose to cover my form with a detachable cloth-covering, as in my Patent No. 737175, dated August 25, 1903.

To adjust the size of the arm-scye of the cloth covering I sew into the seam an adjustable size ring 130, as shown in Figs. 13 and 14; said ring is made of two parts and the adjacent ends of the parts pass through a clamping ring 131. Slidably mounted on one of the parts is a lock sleeve 132, which is adapted to be slid under the projecting end of the other part, as shown in Fig. 13, and by this action lock the two parts in any adjusted position.

In Figs. 21 and 22 I have illustrated a modified form of the feature shown in Fig. 3. In this embodiment of my invention suitable clips 201 are placed over the edge of each of the sections of the form and the expanding member 52 passes through the arms 202 of said clips. The clips are held in any adjusted position up or down by means of set screws 204. The construction obviates the necessity of making slots in the sections of the dress form.

The details of my invention may be varied in many ways without in any way departing from the spirit of the invention embodied in the appended claims.

I desire to state that the various adjusting devices herein shown are not necessarily used at the exact location illustrated in the drawings, and it is within my invention to employ in place of the expanding and contracting member 52 for instance, one of the other adjusting devices illustrated, and also to use any of the adjusting devices illustrated in any position desired in the form.

I may if desired provide the skirt sections at their upper edges with hooks 1900 adapted to hook over pins or projections in the lower edges of the waist section for the purpose of holding the meeting edges of the skirt and waist sections in alinement. This construction is not essential to my invention however.

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

1. An expansible dress form divided horizontally across the bust and vertically below said horizontal division on the dart seams and above said horizontal division substantially centrally of the figure.

2. A full length expansible dress form divided substantially at or below the hips, the portion above said division line constituting a complete expansible waist form, combined with an expansible hip section separate from said waist form and of a shape to be associated with the portion of the dress form below said division line to constitute a complete expansible skirt section.

3. A full length dress form divided horizontally substantially at the hips and also at the waist, the portion above the first division line constituting a complete waist form, and the portion below the waist section constituting a complete skirt form.

4. A full length dress form divided horizontally substantially at or below the hips to form two separable portions, the portion above the division line constituting a complete waist form and being divided horizontally at the waist, combined with an expansible hip section which forms with the portion below said division line a complete skirt section.

5. A dress form divided horizontally substantially at or below the hips, the portion above said division line constituting a complete waist form, and both the portions above and below said division line being made in sections adjustable with relation to each other, and means to hold said sections in their adjusted position, combined with a hip portion separate from the waist form,

said hip portion constituting with the portion below the division line of the dress form a complete skirt form.

6. In a dress form, a waist form divided horizontally across the bust and vertically through the shoulders, a slotted member rigidly secured to one of the several adjacent sections at either side of the form, and means to adjustably secure others of the adjacent sections to said slotted member by a single clamping bolt.

7. In a dress form a waist section divided horizontally across the bust and vertically through the shoulders, a slotted member rigidly secured to one of the four adjacent sections at either side of the form, and a single clamping bolt to adjustably secure each of the other three adjacent sections to said member.

8. In a dress form, a waist section divided horizontally both across the bust and through the waist and vertically through the shoulders, and means for adjusting the various sections of the form with relation to each other.

9. In a dress form, a waist section divided horizontally across the bust and vertically through the shoulders, an adjusting plate rigidly secured to one of the four adjacent sections at each side of the form, means to adjustably secure each of the other three adjacent sections to said plate, said form being divided horizontally at the waist also, a second adjusting plate at the meeting corners of the four adjacent sections at the waist, and means to adjustably secure each section to said plate.

10. A dress form divided vertically in six places, a stiffening piece at the end of each section, a member having four slotted arms to which four of said end pieces are adjustably secured, the other two end pieces having slotted arms secured thereto, and means to adjustably secure said latter slotted arms to the first named slotted arms.

11. A vertically divided hip section for a dress form, an end plate secured to both the top and bottom of one section, each end plate being of substantially the size of the hip section at the corresponding end, arms extending inwardly from both the top and bottom of the other sections, a sleeve secured to one plate and passing through the other, a flanged strut member through which the sleeve passes, and a clamping nut upon the end of said sleeve.

12. In a dress form, a body portion having a headed arm-supporting stud at its shoulder, an arm provided at its upper end with a slotted member, the slot therein terminating in an aperture of sufficient size to receive the head of the stud, and means associated with the slotted member to give the desired size and shape to the arm at its upper end.

13. In a dress form, a body portion having a headed arm-supporting stud at its shoulder, an arm provided at its upper end with a slotted member, the slot therein terminating in an aperture of sufficient size to receive the head of the stud, and means separate from the body of the arm and associated with the slotted member to give the desired shape and size to fit the arm-scye of a dress waist to.

14. In a dress form, a body section having a headed stud at its shoulder, an arm having a plate provided with a slot terminating in an aperture of sufficient size to receive the head of the stud, slotted strips hinged to said plate, said strips extending longitudinally of the arm and slidable with relation thereto, and clamping means to engage said strips and hold the arm in its adjusted position.

15. A sectional dress form, a fabric covering therefor, and an expansible size member of a definite shape in the arm-scye of the cover.

16. In an expansible dress form comprising a plurality of slotted sections, an annular expanding and contracting member, and clamping screws secured to said member and passing through and adjustable in the slots in the sections of the form.

17. In an expansible dress form comprising a plurality of slotted sections, an annular expanding and contracting member located on the interior of the form, and clamping screws secured to said member and passing through and adjustable in the slots in the sections of the form.

18. An expansible dress form divided horizontally across the bust and also at the waist line, means to adjustably secure the sections of the form together, a depending tubular member secured to the neck of the form, and a vertical tubular member telescoping within the first named member and secured to the form below the waist division, said tubular members serving to stiffen the form.

19. In a dress form, a waist section divided horizontally across the bust and vertically through the shoulders, a slotted member rigidly secured to one of the adjacent sections at the side of the form and overlapping other adjacent sections, and means to clamp the slotted member to the other sections.

20. An expansible dress form divided into sections, means to adjustably secure the sections of the form together, a depending tubular member secured to the neck of the form, and a vertical member telescoping within the tubular member and secured to the form below the waist line.

21. A dress form comprising a waist portion divided horizontally across the bust and vertically below said horizontal division on the dart seams, combined with a skirt section detachably secured to the waist section.

22. In a dress form, the combination with a waist section divided both horizontally and vertically, a slotted member rigidly secured to one of several adjacent sections and overlapping other adjacent sections, means to clamp the slotted member to one or more of the other sections, and a sectional skirt form detachably secured to the waist section.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

CHARLES A. UFFORD.

Witnesses:
LOUIS C. SMITH,
GEO. W. GREGORY.