E. LEVIN.

GARMENT FORM.

APPLICATION FILED MAR. 11, 1914.

1,136,148.

Patented Apr. 20, 1915.

6 SHEETS—SHEET 1.

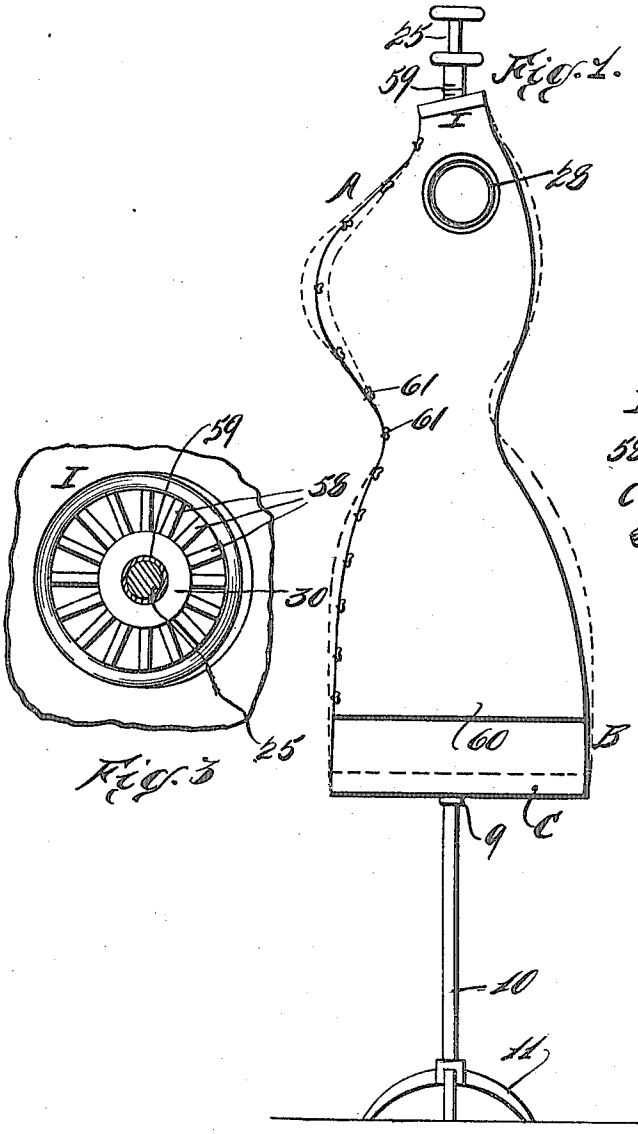


Fig. 1.

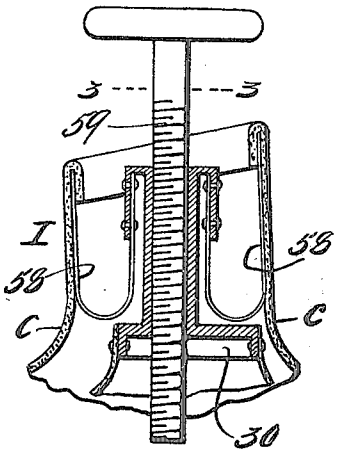


Fig. 2.

Fig. 3.

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6 SHEETS—SHEET 2.

Fig. 7.

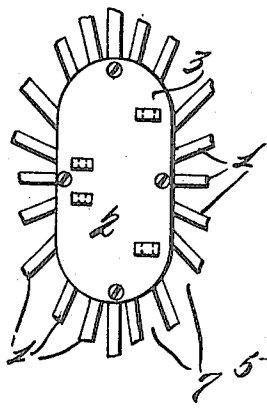
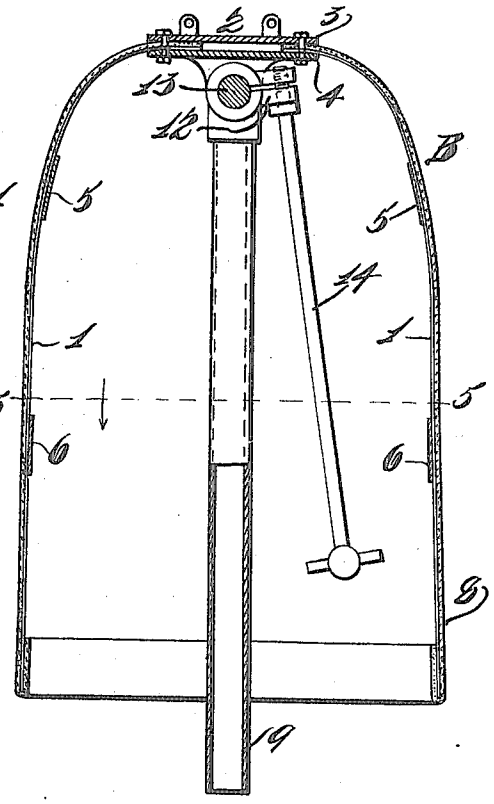


Fig. 4.



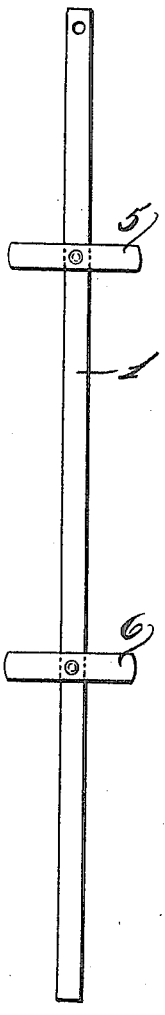


Fig. 6.

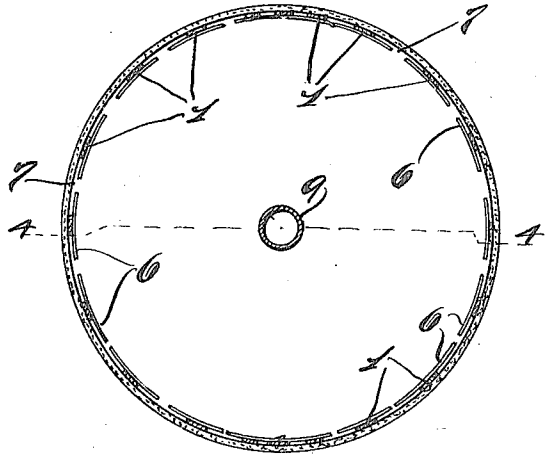


Fig. 5.

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6 SHEETS—SHEET 3.

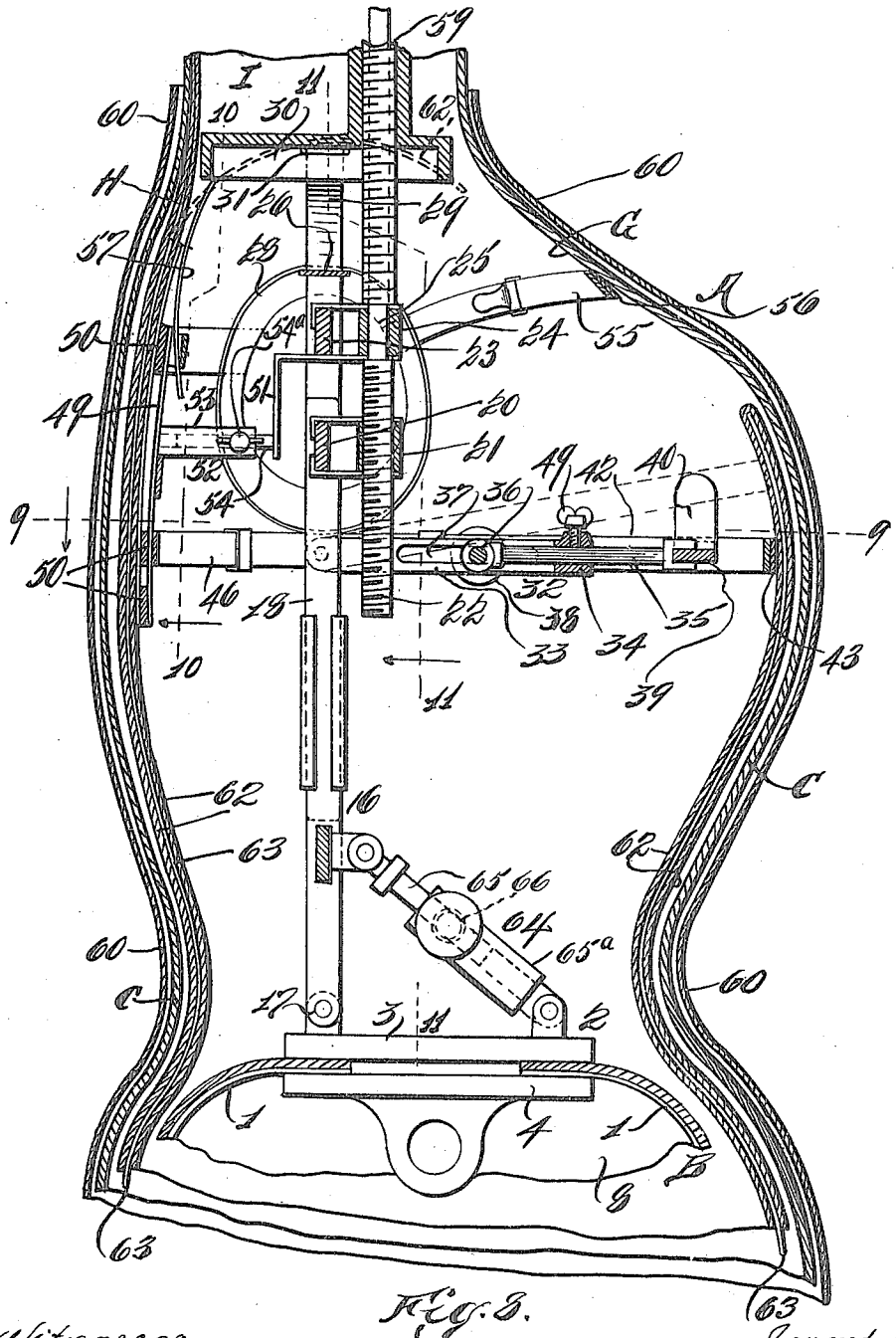


Fig. 3.

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6 SHEETS—SHEET 4.

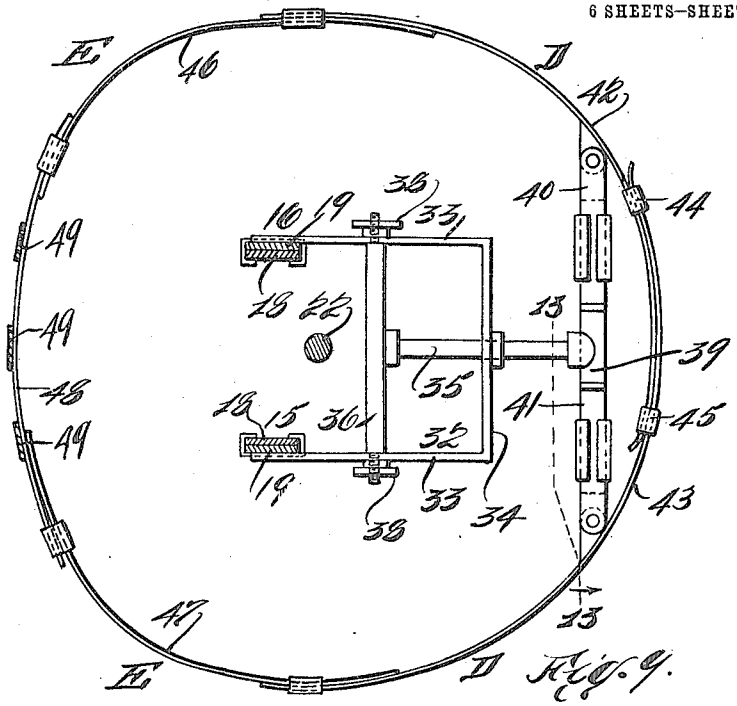


Fig. 9.

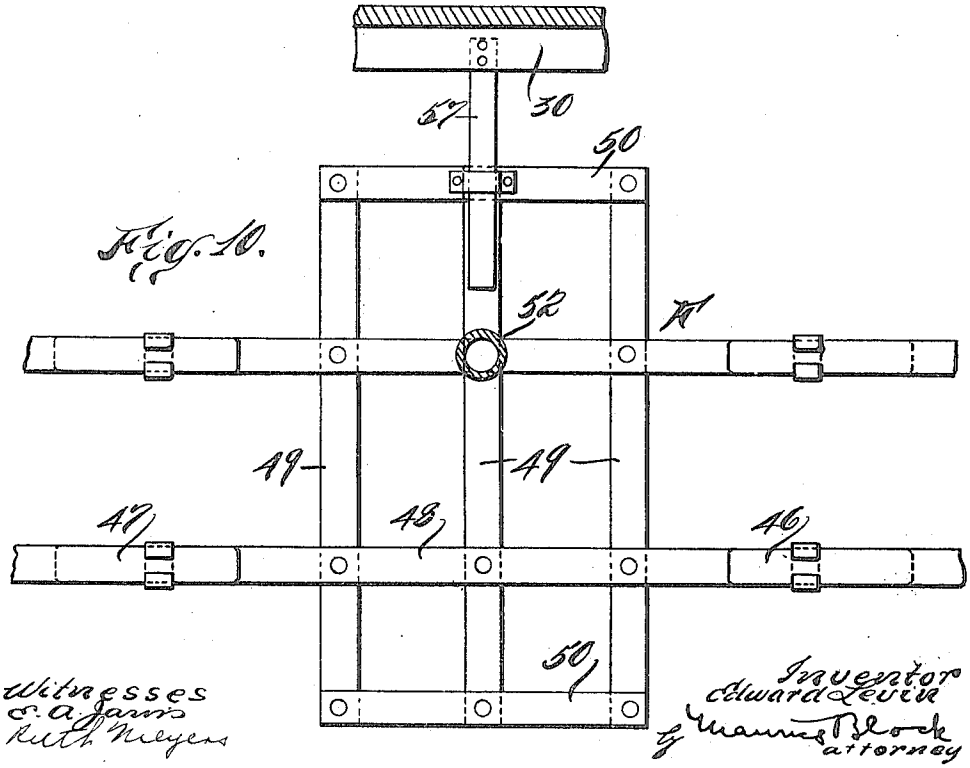


Fig. 10.

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APPLICATION FILED MAR. 11, 1914.

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6 SHEETS—SHEET 5.

Fig. 11.

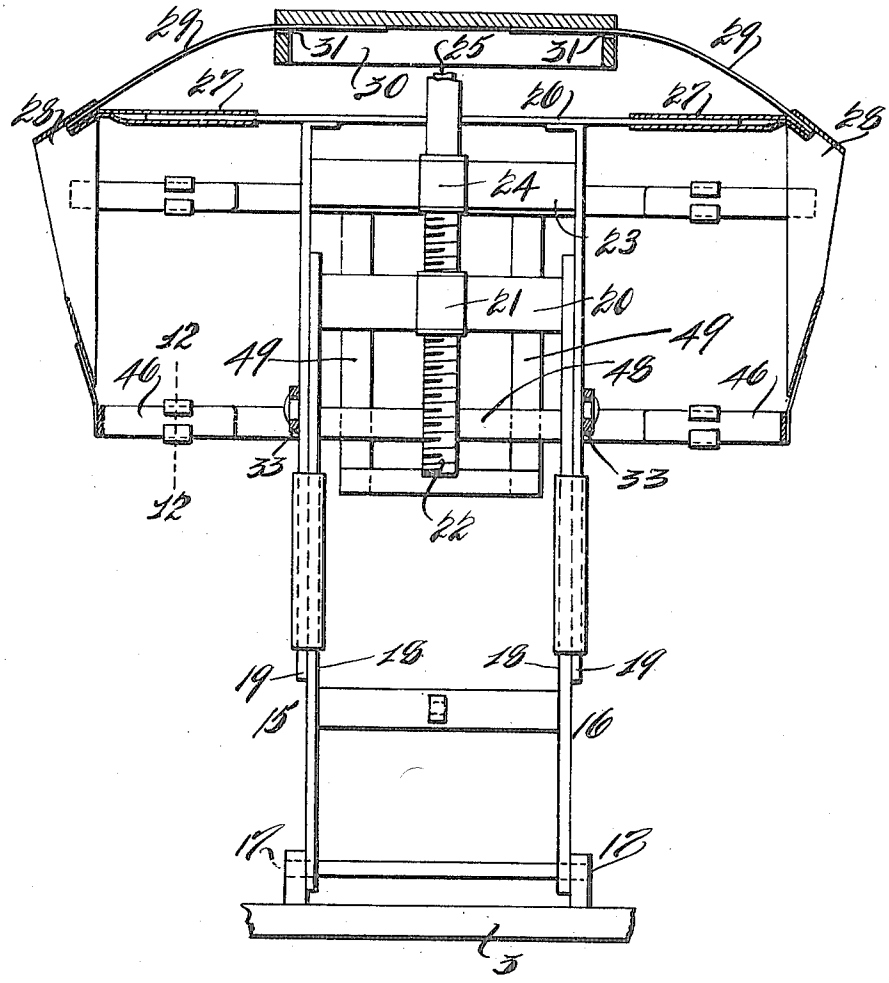


Fig. 12.

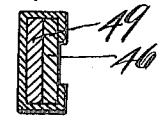
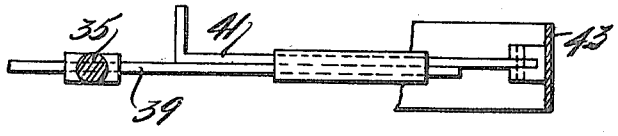


Fig. 13.



Witnesses
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6 SHEETS—SHEET 6.

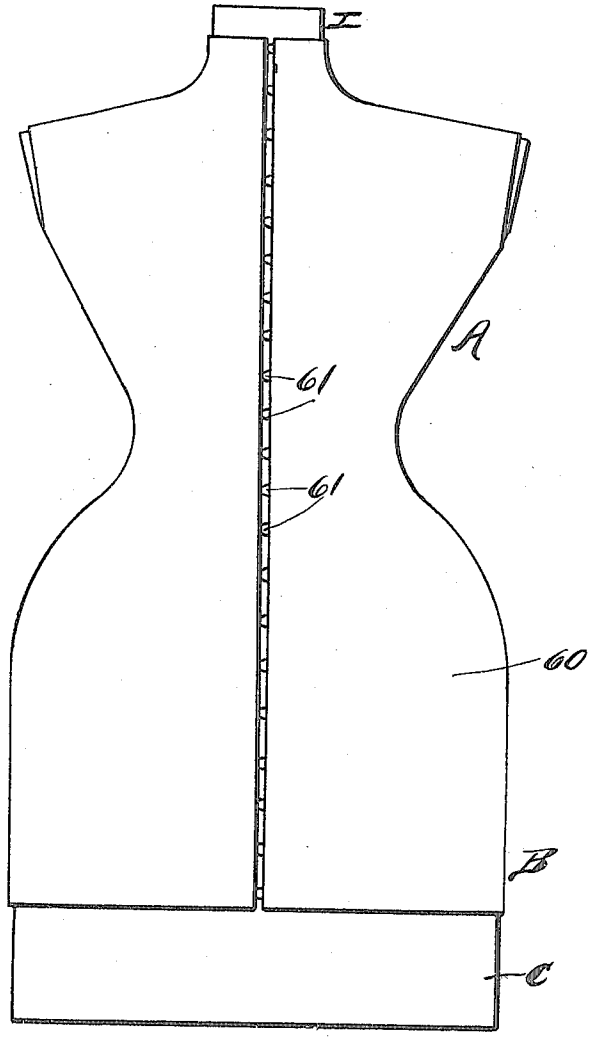


Fig. 14.

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UNITED STATES PATENT OFFICE.

EDWARD LEVIN, OF NEW YORK, N. Y.

GARMENT-FORM.

1,136,148. Specification of Letters Patent. Patented Apr. 20, 1915.

Application filed March 11, 1914. Serial No. 823,854.

To all whom it may concern:

Be it known that I, EDWARD LEVIN, a subject of the Czar of Russia, residing at New York city, borough of Brooklyn, county of Kings, State of New York, have invented certain new and useful Improvements in Garment-Forms, of which the following is a full, clear, and exact description.

This invention relates to an improvement in garment-forms, the object being to provide a garment-form that can be adjusted as to waist dimensions, hip dimensions or length of waist, that is, to be made long or short-waisted, and made to conform to the shape of the person for which a garment is to be made.

To conform my improved garment form to the shape of a person, a master-pattern, waist, or full length garment is first fitted to the person, for whom a garment is to be made. The fitted master-pattern or garment will naturally conform to all of the irregular lines of the person, particular care being used to produce such a result. After the master garment has been completed, it is placed upon the form, the said form being manipulated to be slack, so to speak, that is to say, placed in condition for expansion. After the form has been placed in such condition, the master garment is placed thereupon, and secured together by hooks, buttons or other means around the form. After the master garment has been placed upon the form, the adjustable elements of the form are manipulated to fill out the master garment.

My improved form is provided with adjustable devices, or devices designed to expand or contract the form at certain points; the remainder of this form being adapted to accommodate itself to the master-garment. The points of the form at which the adjustable devices are located are those which could not be readily otherwise altered, for instance, the breadth of the shoulders, high or low chest region, flat or rounded back, etc. The skirt portion of my improved form is designed to accommodate itself to the master garment including the hips, no mechanical adjustments being utilized.

I will now proceed to describe my invention in detail, the essential features of which will be summarized in the appended claims, reference being had to the accompanying drawings, forming part hereof; wherein:

Figure 1 is a diagrammatic side elevation of my improved form; Fig. 2 is an enlarged vertical sectional view of the neck section; Fig. 3 is a sectional plan view thereof, the section being taken on a line 3—3 in Fig. 2; Fig. 4 is an enlarged vertical sectional view of the skirt portion of the form, the section being taken on a line 4—4 in Fig. 5; Fig. 5 is a sectional plan view, the section being taken on a line 5—5 in Fig. 4; Fig. 6 is an enlarged face view of one of the elements of the skirt portion; Fig. 7 is a top plan view of the upper end of the skirt portion; Fig. 8 is an enlarged vertical sectional view of the bust portion of the form, the neck portion being broken away, the upper end of the skirt-portion being also shown; Fig. 9 is an enlarged sectional top plan view of the adjustable mechanism located at the bust region of the bust-section, the section being taken on a line 9—9 in Fig. 8; Fig. 10 is an enlarged vertical sectional view showing the adjustable mechanism located at the back of the form, the section being taken on a line 10—10 in Fig. 8; Fig. 11 is a vertical sectional detail view showing the mechanism for altering the length of the waist, the section being taken on a line 11—11 in Fig. 8; Fig. 12 is a detail view, taken on a line 12—12 in Fig. 11; Fig. 13 is a similar view, taken on a line 13—13 in Fig. 9; and Fig. 14 is a diagrammatic face view, showing the master-garment in the form of a waist or jacket applied to the form.

As herein embodied my improved garment form consists of a bust-section or portion A and a skirt section B, both of which are covered with a sheathing C common to both, that is to say, the sheathing C is preferably in one piece, and covers both the bust and skirt sections.

The skirt portion of the form, designated by B, consists of a plurality of independently yieldable ribs 1 secured, at their upper ends, to a support 2 (see Figs. 4 to 7) consisting in this instance of two plates 3 and 4. The remainder of each rib 1 is free to come and go independently of its adjacent rib. Each rib 1 is provided with plates 5 and 6 which act as filling elements for the space 7 between the ribs. To complete the skirt portion, I place over the ribs 1 a covering 8 of yieldable fabric. The plates 5 and 6 keep the fabric from bulging into the spaces 7 between the ribs.

To build up the skirt portion B, I place one end of each of a plurality of the ribs 1 (while straight, as shown in Fig. 6) upon the plate 4. I then place the covering 8 upon the ribs after the ribs have been bent or bowed downwardly, the ribs being resilient; hence the ribs are held in the formation illustrated by the covering 8. The ribs and covering are then secured in place by the plate 3. The above is my preferred way of assembling the skirt parts; but this can be accomplished otherwise.

It will be obvious that the skirt portion B is a yieldable structure throughout and is adapted to be contracted by the application of external pressure, for the reason that the ribs 1 are not connected together intermediate the ends thereof. The skirt portion will of course be constructed much larger than would ever be used for a garment, and hence it may be contracted to any of the usual sizes required. In this instance the whole form is supported by a tubular post 9 fitting a rod 10 (Fig. 1) which rod is carried by a stand 11. The upper end of the post 9 is provided with a clamp 12 engaging a trunnion 13 on the plate 4. The clamp 12 is opened or closed by means of the clamping rod 14. By means of the connection described, the whole form can be tilted to any angle relative to the supporting posts.

The bust portion A of the form is made up of a skeleton frame, so to speak, and a yieldable covering therefor, the skeleton frame being supported by tiltable posts 15 and 16 (Figs. 8, 9 and 11) pivotally secured as at 17 to the plate 3 of the skirt section B. The posts 15 and 16 consist of slidably connected rods 18 and 19, the rods 18 carrying a cross-bar 20 to which is secured a nut 21 engaging a threaded spindle 22. The rods 19 carry a cross-head 23 carrying a smooth bored hub 24 through which the smooth portion 25 of the spindle 22 passes and in which the said spindle rotates. To the upper end of each rod 19 is secured a bar 26 extending transversely of the form, each end of the said bar being slidably fitted in a socket 27 secured to the arm-hole plates 28 of the bust section. Each arm-hole plate 28 is connected by a resilient band or strip 29 to the neck section support 30, the connection being slidable or adjustable, the bands or strips 29 passing through slots 31 in said support 30. By manipulating the spindle 22 the rods 19 can be moved longitudinally of the rods 18, thereby increasing or decreasing the length of the waist of the form. By pulling outwardly upon the arm-hole plates 28 the shoulders can be broadened or made narrower by pushing the said plates 28 inwardly. The yieldable strips 29 act to fill out the covering at the collar-bone region of the bust-section. To the rods 19 is also pivotally secured a frame 32 consisting of side-bars 33, 33. Secured to the side bars 33 is a cross-bar 34 through which a rod 35 passes. The inner end of the rod 35 is carried by a slidable cross-head 36 fitted in slots 37 in the side-bars 33, 33. The cross-head 36 is held in an adjusted position by binding nuts 38 in the form of hand-wheels. To the outer end of the slidable rod 35 is secured a bar 39 to which are slidably connected or upon which are slidably mounted slides 40 and 41. The outer end of the slide 40 is pivotally connected to a resilient band 42, and the outer end of the slide 41 to a similar band 43, the said two bands being held in slidable engagement by straps 44 and 45. Each band 42 and 43 is slidably connected to similar bands 46 and 47 respectively, located at each side of the bust-form, and each side band 46 and 47 is slidably connected to a band 48 located at the back of the bust section. By moving the cross-head 36 in or out the bust can be enlarged or decreased, the said adjustment being maintained as above stated. The slidable connection of the bands 42, 46 and 48, and the bands 43, 47 and 48, and the slidable connections of said bands one to the other, permit of such adjustment.

To increase the fullness of the bust at the sides or region indicated by D—D Fig. 9, it is but necessary to force the bands 42 and 43 outwardly at these points; the same would follow at the points indicated by E—E Fig. 9, the slidable connection being stiff enough to hold the bands when adjusted.

To alter the back of the bust-section, I provide a frame F of resilient members (Fig. 10) consisting of vertical plates 49 and cross-plates 50 and connect said frame F to the supporting post rods 19 by means of a bracket 51 (Fig. 8) and an adjustable connection 52 consisting of a socket 53, on the frame F, and a rod 54 slidably fitted thereto, carried by the bracket 51. To alter the back, to make it more full or more flat, the set screw 54ª will be manipulated or released and the socket 53 moved in or out and secured in the desired position.

To alter the crown G of the chest, I provide adjustably connected strips 55 and 56 (Fig. 8) which are similar to the other adjustable strips described. The strips 55 and 56 extend from one arm-hole plate 28 to the other.

To fill out the nape portion H of the neck, I provide a resilient shield strip 57 (Fig. 8) which is carried by the neck portion support 30.

The neck section of the form designated by I is yieldable throughout, similarly to the skirt portion B and is similarly constructed. The neck section I consists of the said support 30 and resilient ribs 58 carried thereby and secured thereto at one end thereof. The outer end of each rib 58 is secured to the covering C of the form. It will be evident that

the neck section is compressible or expansible, being held in a compressed or expanded position by the master garment 60 hereinafter referred to. To raise or lower the neck section to adjust the strips 29, I provide a threaded sleeve 59 which engages the support 30 and which is carried by the smooth portion 25 of the spindle 22.

In connection with my garment-form I employ a master-garment indicated by 60 (see Figs. 8 and 14), which is secured upon the form by buttons or hooks indicated by 61, Fig. 14. The master garment 60 is, as has been stated, made to fit the figure of the person to be fitted and then placed upon the form and secured. Atfer the master garment has been placed upon the form the various adjustable devices are manipulated to cause the bust-portion particularly to fill out the master garment. The skirt portion B will adjust itself to the master garment, as will the neck portion I.

A further feature of my invention consists of a yieldable covering for the bust and skirt portions, the said yieldable covering consisting of fabric 62 having yieldable stays 63 sewed or otherwise secured thereto. The yieldable stays 63, which are preferably made out of thin spring steel, serve to offer a little resistance when the master garment is secured to the form, thereby causing the said covering to fit itself to the master garment.

It will be noted that the stays 62 at the front of the form do not extend to the neck, while those at the back do, those at the sides passing over the shoulders. The crown portion G of the bust is made free from stays in order that it can be raised or lowered. The bust portion A is held in any tilted position by a securing device 64, consisting of a piston 65 which is pivotally secured to the supports 15 and 16, and which slides in the socket 65ª, the socket being pivotally secured to the plate 3. A spring 66 bears against the piston 65, thereby exerting a certain amount of frictional resistance, which acts to prevent the piston sliding too freely.

Having now described my invention, what I claim and desire to secure by Letters Patent is:

1. In a garment form, the combination of a skirt-portion with a horizontal support to which the upper end of said skirt-portion is attached, a bust-portion mounted on said support, means, also mounted on the latter, for permitting the tilting the said bust-portion, a horizontal trunnion attached to the underside of said support, a post and a clamp on said post engaging said trunnion and permitting the entire form to be tilted to any desired angle and fastened in such position.

2. In a garment form, the combination of a skirt-portion with a bust-portion, means for supporting the entire form and adjusting it as a whole to different angles of inclination, and means for adjusting the bust-portion independently in any tilted position.

3. In a garment form, the combination of a skirt-portion with a bust-portion, a support between and connecting these portions, a post provided with means for adjustably engaging said support to permit the adjustment of the form as a whole to different angles of inclination, a pair of posts pivoted on said support and sustaining the bust-portion and an inclined securing device consisting of a spring held piston sliding in a socket said device connecting said pair of posts obliquely to said support and said posts and securing device providing for the independent adjustment of said bust-portion to different positions of inclination.

4. In a garment form, a skirt-portion consisting of expansible elements, in combination with a horizontal support composed of a pair of plates holding the upper ends of said elements between them and having a normally horizontal trunnion suspended rigidly from the under plate, a clamp engaging said trunnion for adjusting said skirt-portion to any desired angle of inclination and means for supporting said clamp.

5. In a garment form, a bell-shaped skirt-portion consisting of suspended resilient radially expansible ribs and a covering for holding them in position, in combination with a pair of horizontal plates adapted to receive the upper ends of said ribs horizontally between them, means for holding said plates together, a post supporting said plates and skirt-portion, and connections between said post and the lower plate permitting said skirt-portion to be adjusted to different tilted positions.

6. A garment form having a skirt portion consisting of two horizontal plates at the top thereof, flexible depending ribs adapted to have their upper ends secured in horizontal position between said plates and a covering fitting on said ribs to hold the greater part of each rib in position extending downward.

7. A garment form having a skirt portion provided with a circular series of depending individually flexible ribs, means for holding their upper ends bent inward toward each other, means for holding the ribs in downwardly extending position and plates attached to said ribs for filling the spaces between them.

8. In a garment-form a bust section comprising a yieldable neck section, arm-hole plates, a support for said neck section, yieldable straps connecting said support and said arm-hole plates, and means to raise or lower said neck-section support and the straps secured thereto.

9. In a garment form, a skeleton frame consisting of a radially expansible skirt-portion and a radially expansible bust-portion, means for adjusting them collectively to different tilted position, means for adjusting the bust-portion independently to different tilted positions, and means for holding the parts of said frame against spreading in order that it may retain its proper form.

Signed at New York city, N. Y., this 7th day of March, 1914.

EDWARD LEVIN.

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