

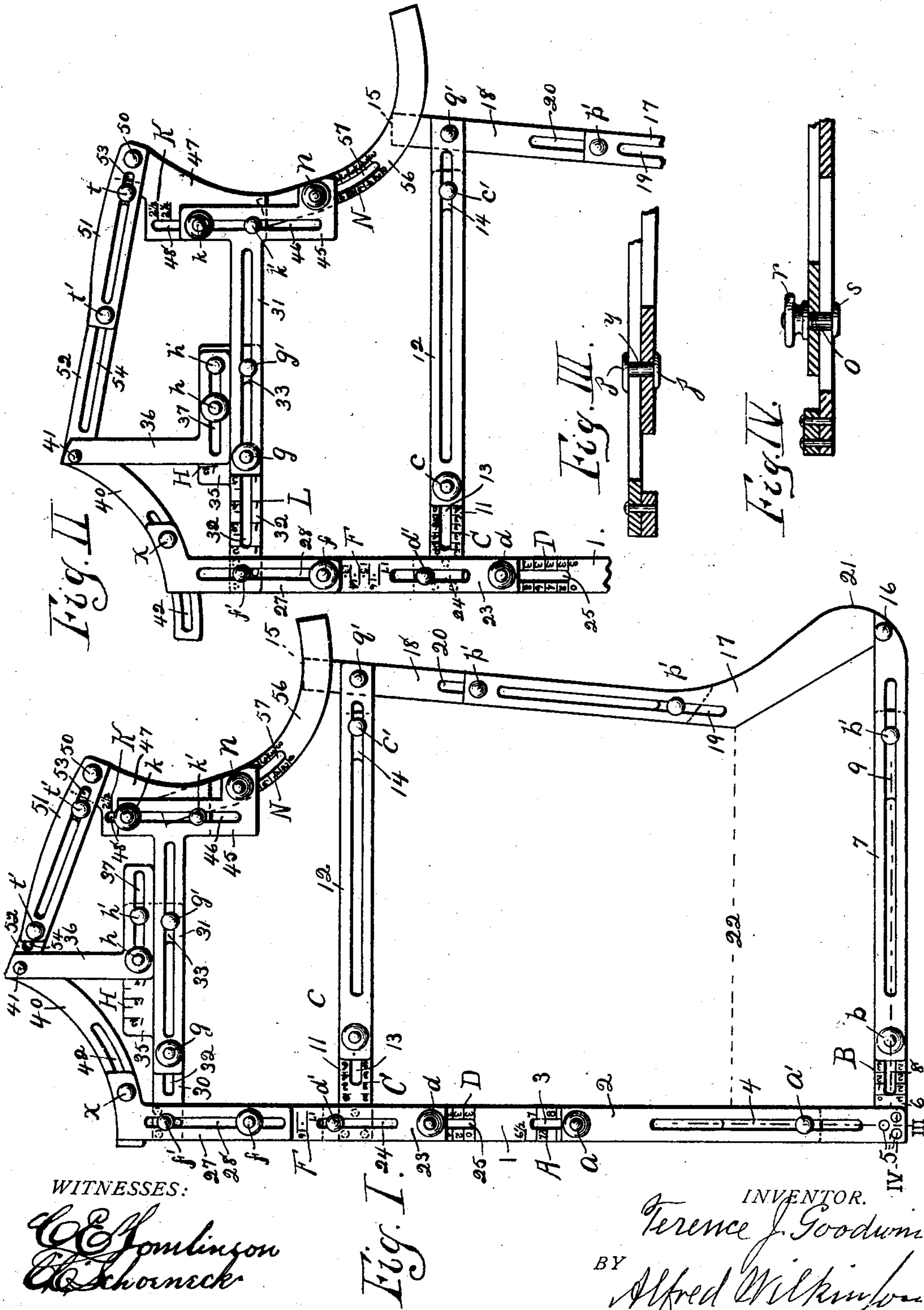
No. 688,300.

Patented Dec. 10, 1901.

T. J. GOODWIN.
ADJUSTABLE CHART.

(Application filed June 11, 1900.)

(No Model.)



WITNESSES:

C. E. Boulton
C. Schornack

Fig. I.

INVENTOR.
Terence J. Goodwin
BY
Alfred Wilkinson
ATTORNEY.

UNITED STATES PATENT OFFICE.

TERENCE J. GOODWIN, OF SYRACUSE, NEW YORK.

ADJUSTABLE CHART.

SPECIFICATION forming part of Letters Patent No. 688,300, dated December 10, 1901.

Application filed June 11, 1900. Serial No. 19,798. (No model.)

To all whom it may concern:

Be it known that I, TERENCE J. GOODWIN, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Adjustable Patterns for Shirt-Waists, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to an adjustable pattern for drafting shirt-waists or similar garments which may be used easily with little technical instruction or experience by any one of ordinary intelligence; and it consists of a frame, preferably made of metallic plates adjustable in relation to each other, scales or gages inscribed thereon for guiding the adjustment according to measurements taken from the body, and means for connecting the plates and locking them in position after adjustment. The pattern is the same in its essential features for both the front and back of the garment. The form here shown is particularly adapted to guide the drafting or cutting of the front. In a companion application to be filed I have described the detail construction of a pattern more particularly adapted for the back. The two patterns for front and back are adapted to be used together.

The principal parts of this adjustable pattern or frame are a straight side plate of two sections longitudinally adjustable upon each other, secured thereto and arranged substantially at right angles, a bottom plate and a bust-plate, each composed of two sections adjustable one on the other, a side-seam plate attached to the outer ends of the bottom plate and bust-plate, also composed of two sections sliding on each other, one or more extensions adjustable on the upper end of the side plate, a neck-plate or shoulder-plate connected to upper end of such extension, and plates laterally adjustable on the neck-plate to bring the curved armhole-plate, shoulder-piece, and curved neck-piece into proper position. The various plates and pieces are slotted and secured together by studs, permitting adjustment. One stud of each adjustable connection is made in the form of a set-screw with thumb-piece, which may be loosened and tightened to permit adjustment of the parts

and to fix them in the desired position. At suitable points the plates are marked with scales or gages to guide the adjustment. The divisions of these scales correspond to the inches of the particular measure and are marked with numbers indicating the extreme measurements of the part of the body to which the particular scale corresponds.

My invention will be better understood by reference to the accompanying drawings, in which the same reference numerals and letters indicate the same parts in all the figures.

Figure I is a plan of my new pattern. Fig. II is a corresponding plan of the upper portion enlarged, the parts being shown in different positions. Figs. III and IV are sections, respectively, on lines III III and IV IV of Fig. I, showing the form of adjustable connection between the various plates and sections and the construction of studs and screws.

In the drawings, 1 and 2 indicate, respectively, the upper and lower sections of the side plate, respectively slotted at 3 and 4 and connected by the usual stud a' , fitting slot 4, and the set-screw a , slot 3. Section 1 is marked with side-seam scale A, numbered from about "6½" to about "10½," to guide the adjustment of the upper end of section 2, which is moved to register with the number corresponding to the measure (in inches) taken from armpit to hip-joint or to lower edge of belt. To the lower edge of this side plate is secured by rivets 5 5 the bottom plate, composed of the two sections 6 and 7, slotted, respectively, at 8 and 9 and secured together by the usual stud b' and set-screw b , B being the waist-scale, with divisions numbered from about "20" to about "36," corresponding to waist-measure and guiding adjustment of upper section 7 according to that measure in inches. The laterally-extending bust-plate has its inner section 11 fixed to the upper section 1 of side plate and its outer section 12 adjustably secured thereto by usual stud c' and set-screw c , 13 and 14 being the slots and C the bust-scale, numbered from about "30" to about "46," corresponding to the measure of the bust in inches and set according to that bust-measure. The bottom plate by rivet 16 is hinged to the lower curved section 17 of side-seam plate sliding on the straight upper section 18, having extending end 15 and hinged

to outer section 12 of bust-plate by stud q' , 19 and 20 being the respective slots, the sections being secured to slide on each other by studs $p' p'$. The point 21 indicates the widest portion of the garment fitting over the hip-joint. The dotted line 22 indicates the narrowest portion of the garment below the bust and the bottom of the belt, where the garment is drawn in around the waist. Near its upper end the side plate is inscribed with the scale D, numbered from about "30" to about "46," corresponding also to bust-measure, to guide the longitudinal adjustment of the extension-plate 23, slotted at 24. 25 is slot in side plate, and d and d' set-screw and stud for connecting extension-plate. This scale D is called the "armhole-scale," because it regulates the depth of the armhole.

On the upper end of the extension-plate is adjustably secured by stud f' and set-screw f' the upper plate 27, formed with slot 28 and adjusted according to neck-scale F on extension-plate, numbered from about "12" to about "17," corresponding to neck-measure, by which depth of neck is fixed.

To the upper end of the extension-plate is fixed the lateral shoulder-plate or neck-plate, composed of sections 30 and 31, slotted at 32 and 33 and secured adjustably together by set-screw and stud g and g' . Section 30 may be marked with shoulder-scale L, as shown in Fig. II, numbered from about "12" to about "18" to correspond to width of shoulders; but I prefer to omit this scale, as in Fig. I, and to adjust the corresponding parts on the rear pattern according to a corresponding rear scale L and then by moving section 31 and thumb-screw g set the inclined front shoulder-piece of equal length to the corresponding rear shoulder-piece. Section 30 has an upper extension 35, marked with lateral neck-scale H, numbered from about "12" to about "17," corresponding to neck-measure, like scale F. 36 is the right-angle neck-plate, slotted at 37 and secured to this extension 35 by usual stud h' and set-screw h , by which it is adjusted on scale H. The adjustment of this plate 36, like upper plate 27, is regulated by the neck-measure, the form and position of the neck being indicated by neck-piece 40, hinged to right-angle neck-plate by rivet 41 and adjustably connected to upper plate by usual stud x , engaging in slot 42, so that this neck-piece is brought into proper position by the adjustment of right-angle neck-plate and upper plate just referred to. Outer section 31 is formed with a cross-piece 45, provided with slot 46, to which is adjustably connected by usual stud k' and set-screw k the vertical armhole-plate 47, slotted at 48 and marked with height-of-shoulder scale K, numbered from "1" to "2½," indicating slope of shoulders, armhole-plate 47 being adjusted according to the slope of the shoulders, so that the proper division registers with upper end of cross-piece. To the upper end of this armhole-plate is hinged by rivet 50 the outer

section 51 of shoulder-seam piece, 52 being its inner section, hinged to upper end of neck-plate by rivet 41, the two sections being slotted, respectively, at 53 and 54 and connected by studs $t' t'$, so as to move on each other as the parts are adjusted according to the scales H K, and after those scales are set this inclined front shoulder-piece is lengthened or shortened (by moving section 31 of shoulder-plate) exactly to agree in length with inclined shoulder-piece on rear pattern, as aforesaid, whereby the shoulder-piece is adjusted to proper position to fix the length and inclination of the shoulder-seam.

The curved armhole-plate 56, slotted at 57, is secured to lower end of cross-piece 45 by set-screw n and is marked with curved armhole-scale N, numbered from about "30" to about "46," also corresponding to bust-measure, according to which it is set, and its lower portion turned to register with upper end 15 of side-seam plate to produce armhole of proper size and shape. The set-screws, as best shown in Fig. IV, are composed of screw O, having the integral head s , and the thumb-piece r , the shank of the screw being fitted to slide easily in the slot. The studs connecting the various plates are formed of the shank y , fitting the slot and the enlarged integral heads $z z$.

My pattern is so simple that it may be adjusted easily and quickly without calculation by anyone having sufficient intelligence to take the measure of the person, and from this the paper pattern or cloth is cut or drafted of proper size and proportion to fit any shape. The various adjustments are guided by the eight scales, (omitting L,) set according to the five measures. Side-seam scale A is set according to length from armhole to hip-joint or lower edge of belt; waist-scale B, according to waist-measure; bust-scale, armhole-scale, and curved armhole-scale C, D, and N, to bust-measure, neck-scales F and H, to neck-measure; height-of-shoulder scale K, to shoulder slope. These scales differ in actual length, but are numbered to be set according to the measures taken in inches. The scale is preferably on the lower section or plate, the upper being moved over it. Each half of the front is cut separately, the halves overlapping about an inch to provide for the plaits of the front opening.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination with the extensible side plate and side-seam plate connected together by the extensible bust and hip plates, of an extension-plate adjustably attached to the side plate, an upper plate adjustably attached to said extension-plate, an extensible shoulder-plate attached to the extension-plate, one of the sections of said shoulder-plate being provided with an upwardly-extending adjustable neck-plate and the other section with a cross-piece, a curved neck-piece

having one end pivoted to the neck-plate and its other end adjustably connected with the upper plate, an armhole-plate vertically adjustable in the cross-piece, a curved armhole-plate adjustably secured to said cross-piece, and an extensible shoulder-seam plate connecting the upper end of the vertical armhole-plate with the neck-plate, all constructed and arranged so as to be adjusted to the body measurements taken of a person, and thereby serve as a pattern to lay off the garment.

2. In a shirt-waist pattern composed of plates adjustable in relation to each other, according to scales marked thereon corresponding to the various measurements of the figure, the combination of a slotted extension-plate secured to and adjustable on the upper end of a side plate, a slotted upper plate longitudinally adjustable on the extension-plate, a lateral shoulder-plate composed of two slotted sections, secured to about the upper end of said extension-plate and extending on one side therefrom substantially parallel to the breast-plate, the outer section being adjustable on the inner section and having an integral slotted cross-piece, a shoulder-plate vertically adjustable on the cross-piece, an extension on the inner section of the lateral shoulder-plate, a right-angle neck-plate laterally adjustable on said extension, a shoulder-piece composed of two slotted sections sliding on each other, one of said sections being hinged to the upper end of the right-angle neck-plate and the other section hinged to the upper end of the vertical shoulder-plate, a curved slotted neck-piece hinged to the upper end of the right-angle neck-plate and means for securing said plates in position after adjustment.

3. In a shirt-waist pattern composed of plates adjustable in relation to each other, according to scales marked thereon corresponding to the various measurements of the figure, the combination of an adjustable side plate, an extension-plate vertically adjustable on the side plate, a lateral shoulder-plate composed of two slotted sections adjustable on each other, one of said sections being secured to the extension-plate, an integral extension on one of said sections, a right-angled cross-piece on the other of said sections, a curved armhole-plate adjustable on said cross-piece, an adjustable bottom plate, an adjustable bust-plate, an adjustable side-seam plate, an upper plate adjustable on said extension-plate, a right-angle neck-plate, a neck-piece, a vertical shoulder-plate, and a slotted shoulder-seam piece.

4. In a shirt-waist pattern composed of plates adjustable in relation to each other, according to scales marked thereon corresponding to the various measurements of the figure, the combination of a side plate, a bottom plate, a bust-plate, a side-seam plate, an extension-plate, a lateral shoulder-plate secured to said extension-plate, an integral extension on said lateral shoulder-plate, a slotted up-

per plate vertically adjustable on said extension-plate, a right-angle neck-plate laterally adjustable on said shoulder-plate, a slotted curved neck-piece hinged to the upper end of the right-angle neck-plate and sliding on the upper end of the upper plate, a shoulder-seam piece, and a curved armhole-plate.

5. In a shirt-waist pattern composed of plates adjustable in relation to each other according to scales marked thereon corresponding to the various measurements of the figure, the combination of a side plate and an extension-plate, of a bottom plate and a bust-plate laterally adjustable in relation thereto, of an upper plate vertically adjustable on the extension-plate, a lateral shoulder-plate composed of two slotted sections, one secured to the adjustable extension-plate and laterally adjustable in relation thereto, an integral extension on one of said sections, an integral slotted cross-piece on the other of said sections, a right-angle neck-plate laterally adjustable on said extension, a curved armhole-plate carried on the lower end of said cross-piece and adjustable thereon, a vertical shoulder-plate also adjustable on said cross-piece, a slotted two-section shoulder-seam piece pivoted to the upper end of said vertical shoulder-plate and to the upper end of the right-angle neck-plate, and a curved neck-piece hinged to the upper end of said right-angle neck-plate and sliding on the upper end of said upper plate.

6. In a shirt-waist pattern composed of plates adjustable in relation to each other, according to scales marked thereon corresponding to the various measurements of the figure, the combination with a side plate and plates laterally adjustable thereon to guide the cutting of the lower portion of the pattern, of an extension-plate vertically adjustable on said side plate, a lateral shoulder-plate laterally adjustable on the extension-plate, and a single curved armhole-plate adjustable on the lateral shoulder-plate to guide the cutting of the armhole, of an upper plate vertically adjustable on the extension-plate, a right-angle neck-plate laterally adjustable on the lateral shoulder-plate, a vertical shoulder-plate, a curved neck-piece hinged to the right-angle neck-plate and sliding on the upper plate, and a two-section slotted shoulder-seam piece pivoted to the vertical shoulder-plate and to the right-angle neck-plate to guide the cutting of the neck and the shoulder.

7. In a shirt-waist pattern composed of plates adjustable in relation to each other, according to scales marked thereon corresponding to the various measurements of the figure, the combination with adjustable plates to guide the cutting of the neck, the shoulder and the armhole, of a side plate composed of two slotted sections adjustable on each other, a bottom plate composed of outer and inner sections, the inner secured to the lower end of one side-plate section and the outer adjustable on the inner section laterally with

relation to the side plate, an extension-plate
vertically adjustable on the upper section of
the side plate, a bust-plate composed of two
sections, the inner secured to the extension-
5 plate and the outer section adjustable on the
inner, and a side-seam plate composed of two
slotted sections, the upper hinged to the outer
bust-plate section and having an upper ex-
tension, and the lower curving outwardly at

its lower end and hinged to the outer bottom-
plate section.

In testimony whereof I have hereunto signed
my name.

TERENCE J. GOODWIN. [L. s.]

Witnesses:

M. T. BROWNELL,

C. C. SCHOENECK.