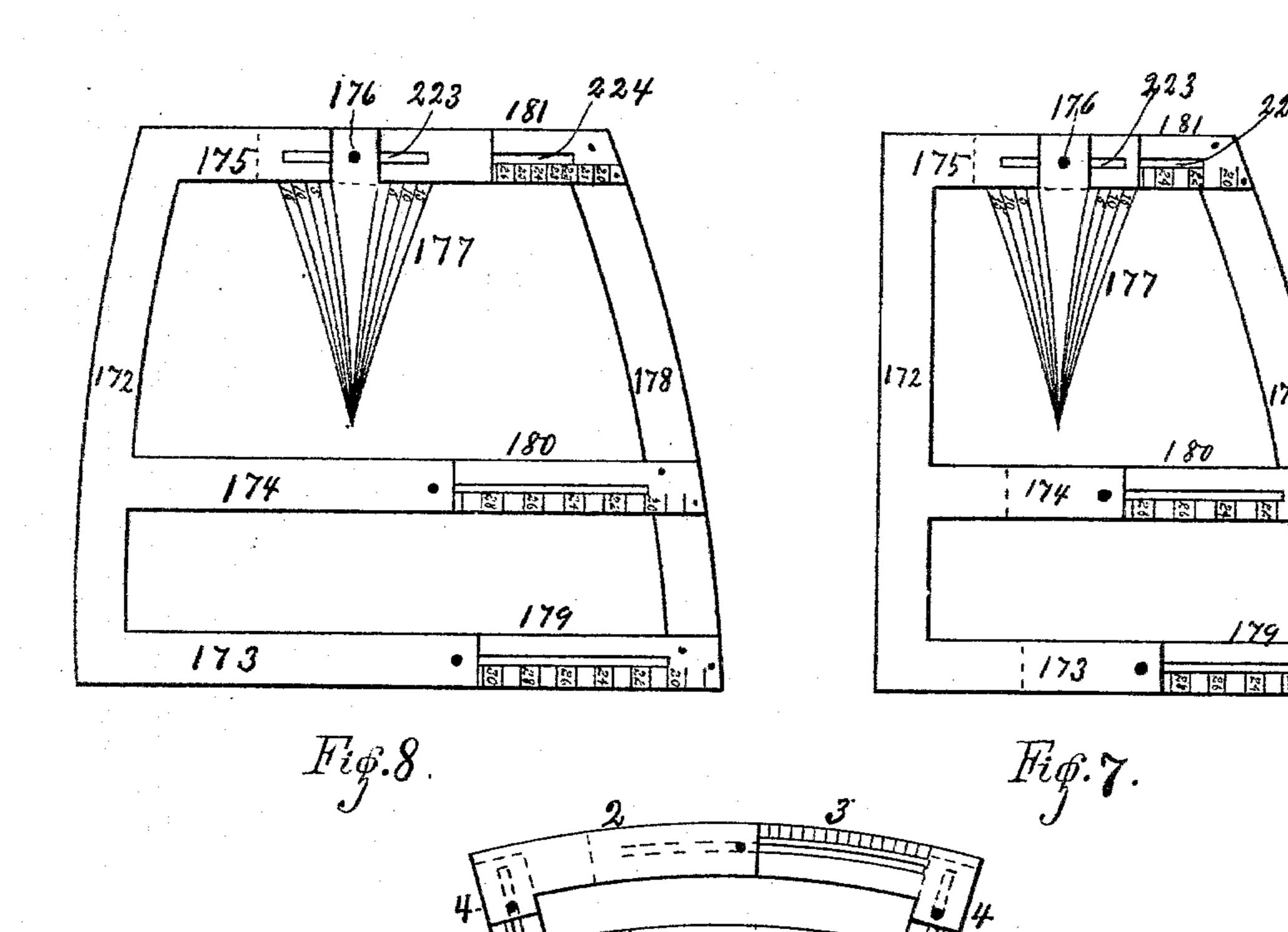
S. S. START, Jr. & M. A. S. JOHNSON.

GARMENT PATTERN.

No. 510,942.

Patented Dec. 19, 1893.

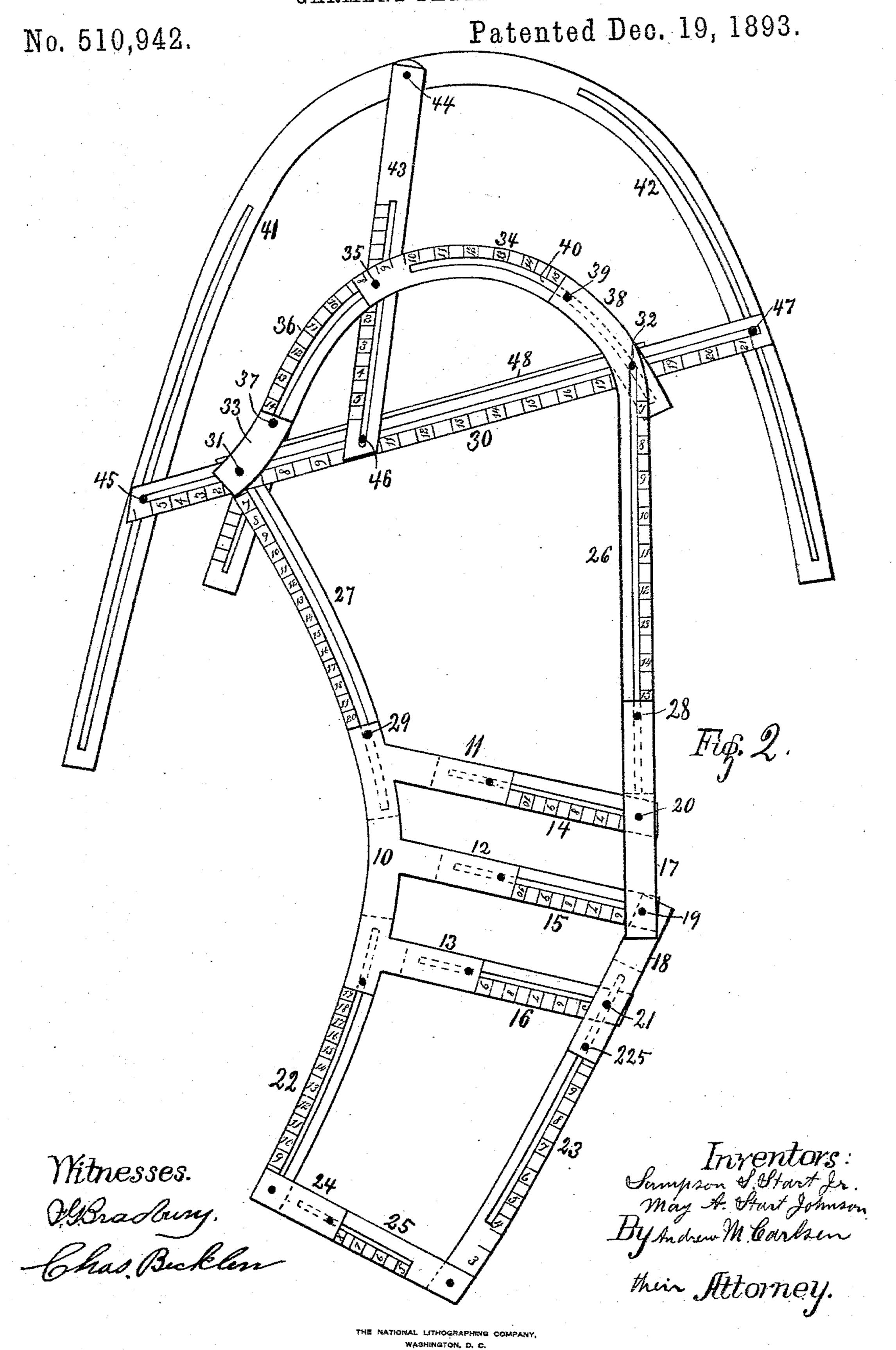


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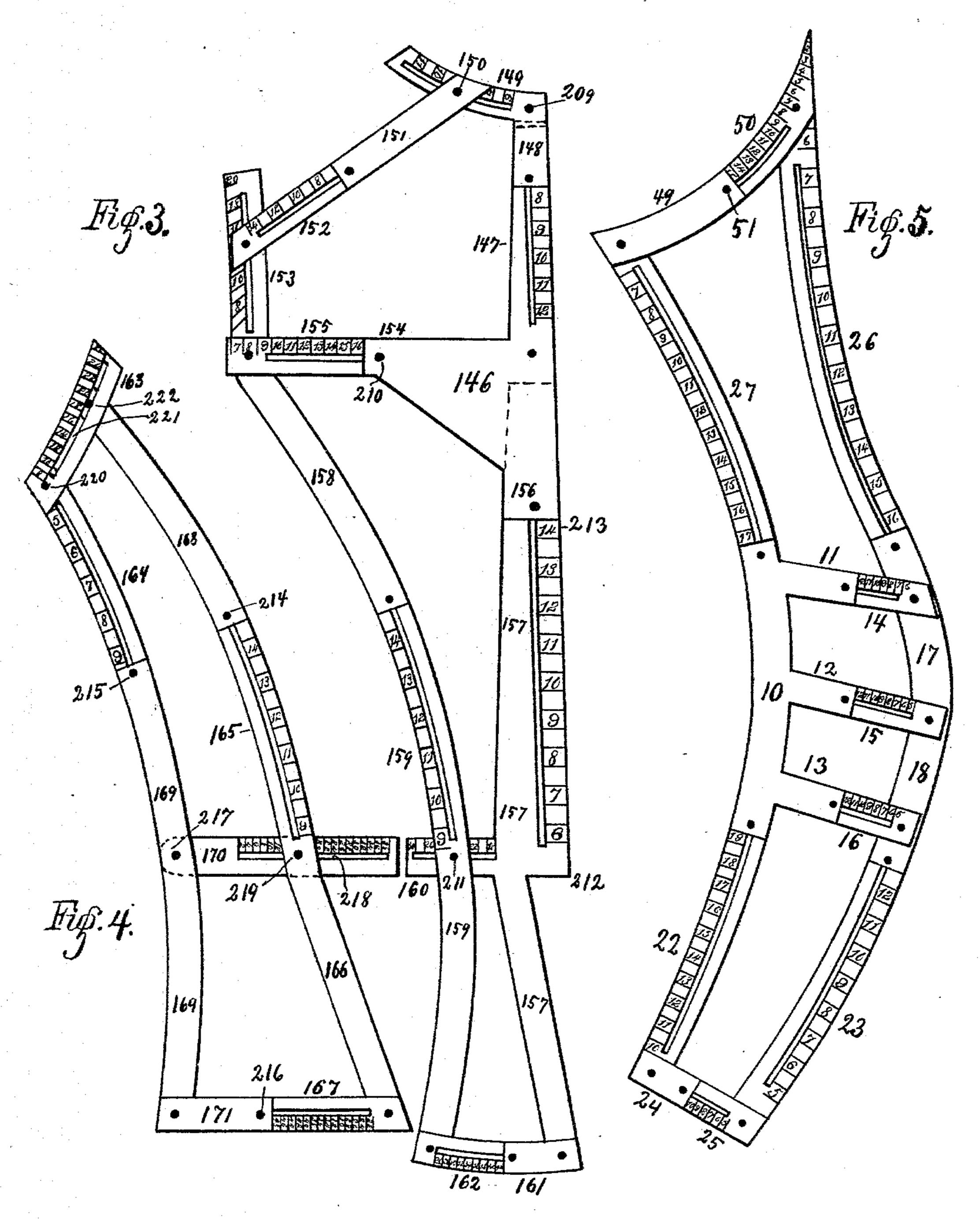
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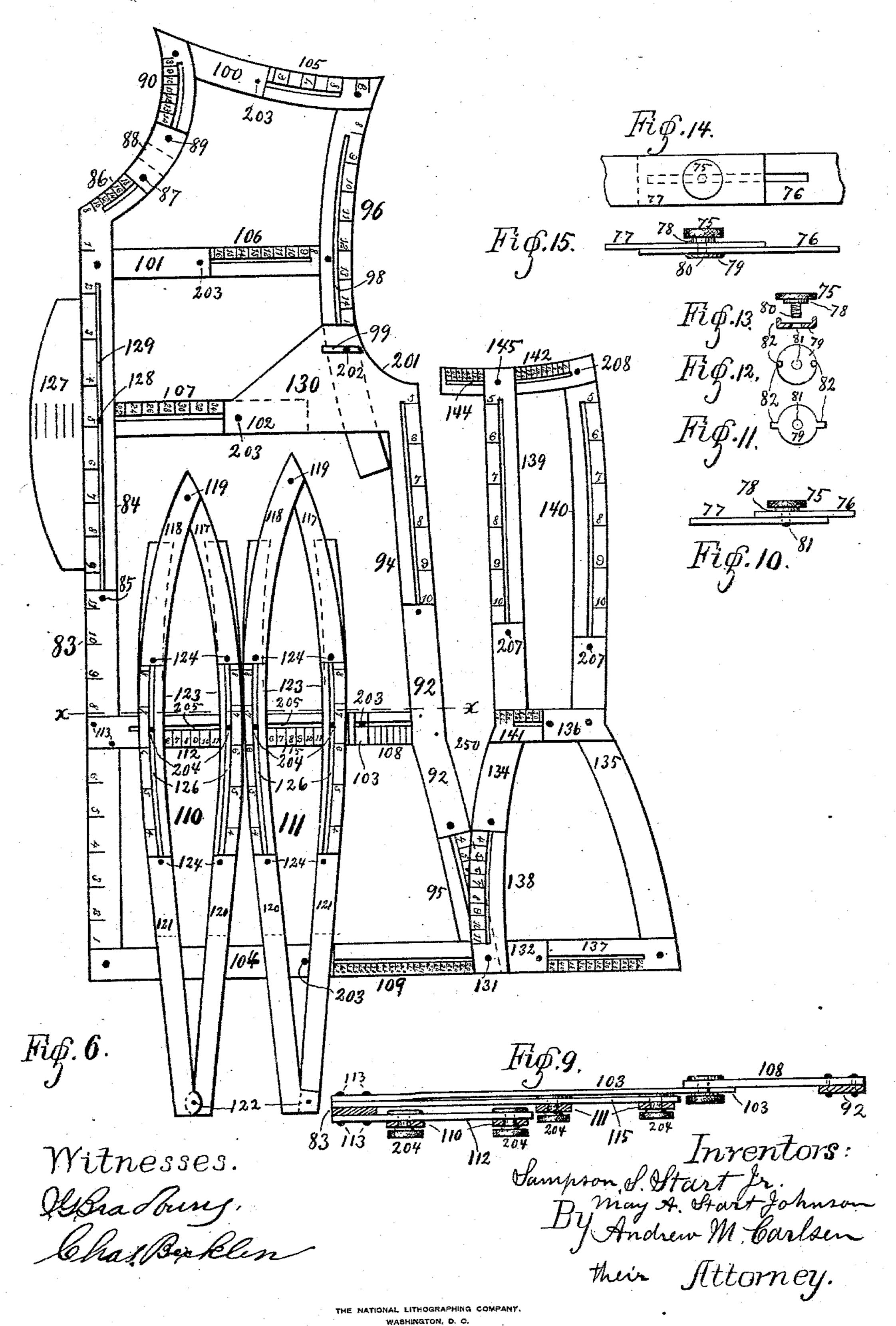


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United States Patent Office.

SAMPSON S. START, JR., AND MAY A. START JOHNSON, OF LUVERNE, MINNESOTA.

GARMENT-PATTERN.

SPECIFICATION forming part of Letters Patent No. 510,942, dated December 19, 1893.

Application filed January 30, 1892. Serial No. 419,843. (No model.)

To all whom it may concern:

Be it known that we, SAMPSON S. START, Jr., and MAY A. START JOHNSON, citizens of the United States, residing at Luverne, in the county of Rock and State of Minnesota, have invented certain new and useful Improvements in Garment-Patterns; and we do declare the following to be a full, clear, and exact description of the invention, such as will enpertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to improvements in garment-patterns, and has for its object to produce an adjustable pattern of such construction that it may readily be adjusted to the size and shape of any garment or wearing-apparel, but is especially adapted for the laying out of dresses and garments for ladies

and children of all ages or sizes.

The invention consists in garment patterns of the construction hereinafter described and

25 claimed.

The metallic bars in each pattern are joined together by thumbscrews passing through slotted holes in one strip and are screw-threaded into the other strip, thus forming an ad-30 justable pivot joint that may be shortened or lengthened as well as swiveled to form different angles or curves, as the case may be. We may also form those joints by passing the thumbscrew through a round hole in the solid 35 strip and then let it enter the screw thread of a burr provided with projections that fit and slide in the slot of the adjacent slotted strip, and in most cases we prefer this method because the shoulder of the screw is apt to wear 40 into the slot while a wide nut will not do so. The thumbscrews are so arranged that when screwed up tightly they hold firmly in position the two or more strips through which they pass. Some of the strips are provided with 45 scales and figures marked upon them in such an order that either the ends or the side edge of the strips sliding thereon, either endwise or sidewise, may readily be adjusted to said figures according to the measurements taken 50 of a person either by a tape-line or any other suitable measuring device.

Further directions for using the patterns will be given farther below.

In this specification the terms "scale bar" and "scaled bar" mean a bar or strip provided 55 with scale marks of inches or other measure used in tailoring. The word "screw" is used for thumbscrew.

Figure 1, in the drawings represents the pattern for the collar. Fig. 2, is the pattern 60 for the upper part of the sleeve. Fig. 3, is the back form; Fig. 4, the side back form. Fig. 5, is the under part of the sleeve. Fig. 6, is the front waist and under-arm pattern, which for better convenience are connected together 65 as shown. Fig. 7, is the pattern for the front gore of the skirt. Fig. 8, is the pattern for the side gore. Fig. 9, is an enlarged sectional top view of Fig. 6, on the line x, x. Figs. 10, 11, 12, 13, 14 and 15, are enlarged detail views of 70 the thumbscrews indicated only by black dots in all the other views of the patterns except in Fig. 9.

Referring to the drawings by reference numerals, we find in Fig. 1, which is the collar 75 pattern, that the same consists of the upper segmental-shaped solid bar 2, adjustably secured to the segmental-shaped slotted scale bar 3, both of said bars having their outer ends L-shaped or with angular extensions 4, 80 to which are adjustably secured the short radial slotted scale bars 5, of which the lower ends are pivoted at 6, to the outer ends of a shorter segmental-shaped solid bar 7, and a segmental-shaped slotted scale bar 8, the in- 85 ner ends of which are adjustably secured together, so that in operation the size of the pattern may be adjusted both horizontally and vertically.

The upper section of the sleeve pattern, 90 which is illustrated in Fig. 2, consists of the outline bar 10, having three rigid and substantially parallel arms 11, 12, 13, to which are adjustably secured the extensible slotted scale bars 14, 15, and 16; 17, and 18, are two 95 solid bars pivoted together and to the bar 15, by a pivot 19, and to the bars 14, and 16, by the pivots 20, and 21. To the lower ends of the longitudinal bars 18, and 10, are adjustably secured the slotted scale bars 22, 23, to the lower ends of which are pivoted the outer ends of a transverse wrist bar consisting of the solid sec-

tion 24, and the slotted and scaled section 25, adjustably secured together. It further consists of the longitudinal slotted scale bars 26, 27, adjustably secured at 28, 29, to the solid 5 bars 10, and 17, and having their upper ends adjustably secured to the slotted and scaled transverse bars 30, and 48, by the thumbscrews 31, 32. Upon the pivot screw 31, is further pivoted the bar 33, and on the pivot screw 32, slides to the slotted and scaled segmental-shaped shoulder bar 34, which is pivotally connected at 35, to the slotted and scaled bar section 36, which is adjustably secured to the upper end of the bar 33, by a thumbscrew 37. The bar 26, has 15 its upper portion 38, bent inward and provided with a pivot or peg 39, guiding in the slot 40, of the bar 34. The two curved and slotted bars 41, 42, the long scale bar 30, and the slotted scale bar 43, constitute an attach-20 ment to this pattern section and is used for the laying out of high shouldered sleeves and is accordingly termed the high-sleeve attachment; the three bars 41, 42, 43 are pivotally secured together at 44, and are adjustably se-25 cured to the long transverse bar 30, by the screws 45, 46, 47, respectively. If high sleeves are out of style for a longer time this attachment may be removed from the pattern in which case a shorter transverse bar 48, (partly 30 shown) takes the place of the long bar 30, which, together with bars 41, 42, 43, are detached and removed.

The construction of the under section of the sleeve pattern shown in Fig. 5, is the same 35 as that of the upper section just described, except that in this under side section the upper ends of the bars 26, 27, are pivotally secured to the outer ends of a curved lowerarmhole gage or bar, consisting of the solid 40 section 49, and a slotted and scaled section 50, adjustably secured together by the screw 51.

Before describing further the patterns we will now explain the thumbscrew and bar in Figs. 10, to 15, inclusive, in which 75, is the 45 thumbscrew. In Fig. 10, this screw is passed through the slotted strip 76, and screw-threaded into the solid strip 77. The screw has a shoulder 78, wide enough to act as a washer upon the slot in the strip 76, for holding said 50 strip firmly into frictional contact with the solid strip 77; this shoulder 78, further serves to keep the head of the screw slightly away from the strips so that it may be more readily taken hold of in turning it.

Fig. 14, is a plan view of a joint with the solid strip 77, nearest to the head of the screw and the slotted strip 76, placed underneath or nearest to the point of the screw.

Fig. 15, is a side view of Fig. 14. Where it 60 is necessary or preferable to place the strips in the position Figs. 14, and 15, we use a nut 79, into which the end 80, of the screw 75, is screw-threaded. Fig. 11, is the blank from which said washer is formed into the shape 65 shown in the plan view Fig. 12, and the diametrical sectional side view in Fig. 13. 81, is the screw-threaded hole, and 82, are the lugs

or lips projecting into the slot of the strip 76, to prevent the washer from turning. The purpose of having these two styles of joints 70 is mainly to be able to turn the heads of the screws in opposite directions where two joints. come in close contact with or even have to pass over each other as in Fig. 9, may be found necessary. It also facilitates the making of 75 the scale bars without a slot in them, the scale being on the solid strips and the measure indicated by the end of the slotted bar or strip.

Referring to Fig. 6, which is the pattern section for drafting the front of the upper 80 garment or waist, the longitudinal outline bar for laying out the front center line of the garment consists of the twelve inch long solid bar 83, with a slotted scale bar 84, adjustably secured to its upper end by the screw 85 85. The number on the scale 84, that comes to the upper end of the twelve inch scale 83, is added to the twelve inches and the sum is the height of the front of the garment. The upper end of the bar 84, has a 90 rigid curved slotted and scaled extension 86, to which is adjustably secured by the screw 87, the solid curved section 88, to the upper end of which is adjustably secured by the screw 89, the curved and slotted scale bar 90, 95 which, together with the section 88, and arm 86, forms an adjustable side of neck pattern. This front of waist pattern further consists of the solid longitudinal side seam bar 92, and the slotted scale bars 95, and 94, adjustably 100 secured to its lower and upper ends respectively.

Rigidly secured at the upper end of the scale bar 94, is a triangularly shaped plate 130. of which the rear edge has a curve 201, serv- 105 ing as an under-arm gage. In the upper corner of the plate is a slot 99. 96, is the front of armhole gage; it is scaled and provided with a slot 98, through which and through the slot 99, in the plate 130, is placed an adjust-110 ment screw 202, making the bar 96, adjustable, both horizontally and vertically. The longitudinally adjustable front and side bars thus described are connected together by the solid transverse bars 100, 101, 102, (the latter 115 being formed of the plate 130,) 103, 104, which have their outer ends secured to one of the longitudinal bars and their inner ends adjustably secured by thumbscrews 203, to the inner ends of slotted and scaled bars or ex- 120 tensions 105, 106, 107, 108, and 109, of which the outer ends are secured to the opposite longitudinal bar. The upper cross bars 100, 105, are slightly curved and serve to give the length of the shoulder seam. The cross bars 125 101, 106, give the measure across the chest; the bars 102, 107, give the bust measure; the bars 103, 108, the waist size, and the bottom bars 104, 109, are for the hip measure. To this pattern is further adjustably attached 130 the adjustable darts 110, 111. In Figs. 6, and 9, it will be seen that the dart gage 110, is secured upon the slotted scale arm 112, which is riveted at 113, to the front outline bar 83.

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The other dart gage 111, is fastened upon the slotted scale arm 115, also extending out from the rivets 113, in the bar 83. Each of said dart gages consists of two curved and slotted 5 scale bars 123; the two solid bars 117, and 118, pivoted together at 119, and having their lower ends adjustably secured to the bars 123, and the bottom bars 120, and 121, pivoted together at 122, and having their upper ends to adjustably secured to the bars 123. By means of the slots in the scale bars 123, and thumbscrews 124, both the upper and lower ends of the darts are adjustable up and down. The width and the location of the darts are also 15 adjustable by means of the slots 205, in the arms 112, and 115, and the thumbscrews 204, passed therethrough and through the slots 126, in the bars 123. The dart or breast piece 127, which is provided near its middle with 20 longitudinal graduation marks is secured to the end of the slotted scale bar 107, and is adjustable both horizontally and vertically by means of the screw 128, in the slot 129, of the bar 84, and the slot of the bar 107. The 25 use of the plate 127, and the triangular plate 130, is so obvious to dressmakers that no further explanation is needed. By a thumbscrew 131, is attached and adjustably secured to this pattern the under-arm pattern consist-30 ing of the solid longitudinal outline bars 134, 135, to the upper ends of which are adjustably secured by thumbscrews 207, the scale bars 139, 140, and to the lower end of the bar 134, is adjustably secured the curved 35 and slotted scale bar 138. The said longitransverse bottom or hip bar 132, and the waist bar section 136, secured with their outer ends to one of the longitudinal bars and 40 having their inner ends provided with the adjustable slotted scale bars 137, 141, of which the outer ends are secured to the opposite longitudinal bars in such a manner that the section 141 forms a transverse rigid arm of 45 the bar 134, while the section 137 may preferably be pivoted to the bar 135. To the upper end of the bar 140, is pivoted at 208, a curved under-arm gage bar 142, which is provided with a scale, and with a slot 144, by 50 which it is adjustably secured upon the thumbscrew 145, in the upper end of the bar 139.

Fig. 3, or the back pattern, consists of a triangular plate 146, having the slotted scale arm 147, with an adjustable extension 148, to 55 which is pivoted at 209, the curved and slotted scale bar 149, in the slot of which a thumbscrew 150, holds adjustably the solid bar 151, to the lower end of which is adjustably secured the extension scale bar 152, the lower 60 end of which is again adjustably secured to the slotted scale bar 153, which is a rigid extension of the longitudinal bar 158. To the arm 154, of the plate 146, is adjustably secured at 210, a slotted scale bar 155, of which 65 the outer end is secured to the upper end of the bar 158. To the lower end of the latter is adjustably secured the partly slotted and I

scaled bar 159, which extends to the bottom end of the pattern and, together with the bar 158, forms a single segmental curve. To the 70 lower arm 156, of the plate 146, is adjustably secured the upper end of the bar 157, which extends to the bottom end of the pattern and is connected to the bottom end of the bar 159, by a segmental-shaped transverse bar consist-75 ing of a slotted scale bar 162, and a solid bar 161, are adjustably secured together and having their outer ends pivoted to the lower ends of the said bars 157, 159. The bar 157, is provided with a vertical slotted and scaled arm 80 160, to which the bar 159, is adjustably secured by the screw 211. It is also provided with rearwardly projecting lateral extension 212, 213, which are provided with a scale as shown. The side gore pattern Fig. 4, con- 85 sists of the longitudinal solid bars 168, 169, and the slotted scale bar 165, adjustably secured at 214, to the bar 168, and having a lower solid extension 166; the slotted scale bar 164, is adjustably secured at 215, to the bar 90 169, and extending upward. These longitudinal bars are connected at their lower ends by the transverse bar consisting of the solid section 171, and the slotted scale bar 167, which are adjustably secured together at 216, and 95 have their outer ends secured to the lower ends of the bars 169, and 166. The side bars are further connected by a slotted scale bar 170, which is pivoted at 217, to the bar 169, and has its slot 218, embracing an adjustment roo screw 219, in the bars 165, 166; to the upper end of the bar 164, is further pivoted at 220, tudinal bars are connected together by the | the segmental-shaped scale bar 163, having a slot 221, engaging an adjustment screw 222, in the upper end of the bar 168.

The small and large skirt patterns Figs. 7, and 8, are so nearly alike of construction that we will use only one description for the two. Each of said patterns consists of a solid outlinebar 172, from which extend vertically three, 110 substantially parallel arms 173, 174, 175, having adjustably secured slotted and scaled extensions 179, 180, 181, secured with their outer ends to another longitudinal outline bar 178. 177, is a graduated hip dart gage adjustably 115 secured by the screw 176, to the upper bar 175, which for that purpose is provided with a slot 223, registering with the slot 224, in the scaled bar 181, so that the same screw may secure the dart gage and the two bars 175, and 120 181, together by passing through the two and engaging a nut on the rear side of bar 181.

The patterns are adjusted as follows: If the neck measure of a person is fourteen inches, the longitudinal bars 2, 3, 7, 8, in Fig. 1, of 125 the patterns are adjusted to 14, and the height of the collar pattern is adjusted to suit the taste or style. The scale 106, in Fig. 6, is adjusted to the number corresponding to the number of inches the person measures across 130 the chest. Scale 107, is adjusted to the number of inches the person measures across the bust directly below the arms. Scale 155, in Fig. 3, is set to the number of inches across

the back between the shoulders. If the tape line or other measuring device shows that from neck to bust down the front is five inches, then the scale 84, in Fig. 6, should be 5 so adjusted on the scale 107, that the number 5, of scale 84, touches the side of scale 107. If from the neck to waist shows twelve inches adjust lower end of scale 84, to 12, on scale 83. The scales 94, 139, and 140, in Fig. 6, are adro justed to the number of inches obtained by the tape from under the arm to the waist. Again, if the tape line shows ten inches from elbow to wrist then the scale 23, in Fig. 2, is to be adjusted to 10, and the thumbserew 225, 15 tightened up; and so on with all the patterns and scales thereon. The size of darts 110 and 111, is found by subtracting the waist measure from the bust measure. If the difference be for instance ten, then the darts are ad-20 justed to the number ten, upon the scales 112, and 115, in Fig. 9. Next, adjust the length of the darts to the number obtained by measuring above the waist line x, x. In making the patterns the scale 112, is provided with a 25 mark for setting the adjacent sides of the two darts by, so as to have them in a certain place for medium measurements. The French dart 250 is obtained by adjusting the parts 92, 95, 134, and 138, to the same figures that gave 30 the length of the darts 110, and 111. The front of skirt pattern, Fig. 7, is adjusted as follows: The scale 181, is adjusted to the same figure as the waist measurement. The scales 180, and 179, are both set by the hip measure-35 ment. This done the length of skirt is taken with tapeline in front and slanting seam. The slanting seam is obtained by laying a straight edge even to the side of the piece that joins the cross bars 179, and 180, together, and by 40 subtracting the waist measure from the hip measure the number is obtained that is the size of the dart in the skirt. The side gore or large skirt pattern Fig. 8, is adjusted in the same manner as already described for 45 Fig. 7. In Fig. 6, the scales 94, 139, and 140, are alike.

> All other matters in this patent system are so obvious to persons skilled in the art of using garment patterns that further details of 50 direction for use are considered superfluous.

> From the above description it will be seen that we produce an entire system of slotted and solid metallic strips or bars connected into sections for the various parts of a gar-55 ment, each section being adjustable both longitudinally and vertically, except the skirt patterns Figs. 7, and 8, which are adjustable only as to their width. It will also be observed that the construction is such that the ends of 60 the adjustable bars are as much as possible turned inward and not projecting out over the outline bars where they would be in the way for the marking or cutting tool as is one of the troubles with the metallic garment pat-65 terns heretofore used.

We are aware that prior to our invention garment patterns have been made with ad-

justable strips or plates combined into sections, so we do not claim such combination broadly, but,

What we do claim, and desire to secure by

Letters Patent, is—

1. The pattern system consisting of a series of slotted and solid curved and straight metallic bars adjustably secured together in sec- 75 tions by thumbscrews passed through holes in the solid bars and being screw-threaded into nuts having projections guiding and sliding in the slots of the slotted bars, substantially as and for the purpose specified. 80

2. In a garment pattern the combination of the slotted and solid bars adjustable upon each other; the slotted bars being provided with nuts having projections engaging the slot to keep the nut from turning; the solid 85 bars having holes and shouldered thumbscrews passing therethrough and engaging the nuts in the slotted bars, substantially as shown and described and for the purpose set forth.

3. In a pattern for the upper side of the sleeve, the combination of the bar 10, having three rigid and substantially parallel arms as 11, 12, and 13, to which are adjustably secured extensible bars as 14, 15, and 16; the bars 17, 95 and 18, pivoted together and to the rear ends of bars 14, 15, and 16; the slotted scale bars 23 and 26, adjustably secured to bars 17, and 18; the slotted longitudinal bars 27, and 22, adjustably secured to bar 10; the transverse 100 wrist bar consisting of the solid section 24, and the slotted section 25, adjustably secured together and having their outer ends pivoted to bars 22, and 23; the bar 48, adjustably secured to the upper ends of bars 26, and 27; 105 and the segmental-shaped shoulder bar consisting of the sections 33, and 38, pivoted to the top ends of bars 26, and 27, and the curved and slotted sections 34, and 36, pivoted together and adjustable upon sections 33, and 110 38, as and for the purpose set forth.

4. The combination with an adjustable sleeve pattern of the high sleeve attachment consisting of the slotted scale bar 30, the slotted scale bar 43 and the curved bars 41, and 115 42, pivoted together at 44, and having their lower ends adjustably secured to the bar 30, substantially as and for the purpose set forth.

5. In a pattern for the under side of a sleeve, the combination of the bar 10, having 120 three rigid and substantially parallelarms as 11, 12, and 13, to which are adjustably secured extensible bars as 14, 15, and 16; the bars 17, and 18, pivoted together and to the rearends of bars 14, 15, and 16; the slotted longitudi- 125 nal bars 26, and 23, adjustably secured to bars 17, and 18; the slotted longitudinal bars 27, and 22, adjustably secured to bar 10; the transverse wrist bar consisting of the solid section 24, and the slotted section 25, adjust-130 ably secured together and having their outer ends pivoted to bars 22, and 23; the curved bar sections 49, and 50, adjustably secured together and having their outer ends pivotally

secured to the upper ends of bars 26, and 27, as shown and described.

6. In an adjustable front of waist pattern, the combination of the longitudinal front bar 5 83, having the scale bar 84, adjustably secured to it, said bar 84, having at its upper end a curved, rigid extension 86, to which is adjustably secured the curved section 88, having an adjustable scaled extension 90; the longitudire nal extension bar 92, having the adjustably secured lower extension 95, and the upper adjustable extension 94, provided at its upper end with the plate 130, having the slot 99, and the curve 201; the bar 96, vertically 15 and horizontally adjustable on the plate 130; the curved transverse shoulder bar consisting of the sections 100, and 105, adjustably secured together and having their outer ends secured to the upper ends of the bars 20 90, and 96; the transverse breast bar consisting of the sections 101, and 106, adjustably secured together and having their outer ends secured to the bars 96, and 84; the bar 107, adjustably secured to the plate 130, and 25 to the bar 84; the transverse bar consisting of the sections 103, and 108, adjustably secured together and having their outer ends secured. to the bars 83, and 92; the transverse hip bar consisting of the sections 104, and 109, adjust-30 ably secured together and having their outer ends secured to the lower ends of the bars 83, and 95, substantially as shown and described.

7. In a front of waist pattern the combination of the plate 130, the slotted bust bar 107, 35 adjustably secured to said plate; the scale bar 84, having the slot 129, crossing the slot in the bar 107, the shouldered thumb-screw 128, passed through the slots of the said crossing bars 84, and 107, and being provided at its end 40 with a screw-threaded nut between which and the shoulder of the screw the bars may be clamped together; the breast plate 127, having the longitudinal graduation marks shown, and being secured at the front end of the bar 45 107, is adjustable both longitudinally and vertically by means of the screw 128, and the crossing slotted bars 84 and 107, substantially

as set forth.

8. In a front of waist pattern, the combina-50 tion of the longitudinal bar 83, having the rigid slotted and scaled transverse arms 112, and 115; the dart gages 110, and 111, adjustably secured one upon each of said arms, and consisting of the slotted scale bars 123, the 55 solid top bars 117, and 118, pivotally secured together at their upper ends, and having their lower ends adjustably secured to the bars 123; the lower solid bars 120, and 121, pivoted together at their lower ends, and having their 60 upper ends adjustably secured to the bars 123, substantially as and for the purpose set forth.

9. The combination with the herein described front of waist pattern section having 65 the arm-hole gage 201, the bars 94, 92, and 95, of the under-arm pattern section consisting of the longitudinal bar 134, adjustably se-

cured to the curved scale bar 138, the lower end of which is secured to the lower end of bar 95, the bar 139, adjustably secured to the 7° upper end of bar 134, and having the thumbscrew 145; the longitudinal bar 135, adjustably secured to the scale bar 140, having pivotally secured to its upper end the curved and slotted scale bar 142, adjustably secured 75 to the upper end of the bar 139; the transverse bar consisting of the sections 136, and 141, adjustably secured together and having their outer ends secured to the bars 135, and 134, and the transverse bar consisting of the 80 sections 132, and 137, adjustably secured together and having their outer ends secured to the bars 135, and 138, as shown and described.

10. The back body pattern consisting of the 85 plate 146, having the three arms 154, 156, and 147; the extension 148, adjustably secured to the arm 147, and having pivotally secured to its upper end the curved and slotted scale bar 149; the bar 157, adjustably secured to 90 the arm 156, and having the lateral scaled extensions 212, 213, and the transverse arm 160; the segmental-shaped longitudinal bar, adjustably secured to said arm 160, and consisting of the sections 158, and 159, adjust- 95 ably secured together and having their lower ends connected to the lower ends of bar 157, by a segmental shaped transverse bar consisting of the sections 161, and 162, adjustably secured together and having their outer ends 100 pivotally secured to the bars 157 and 159, the transverse bar 155, pivotally secured to bar 158, and adjustably secured to the arm 154, of the plate 146; said bar 158, having the rigid extension 153, provided with a slot and 105 with slanting scale marks; the oblique bar consisting of the sections 152, and 151, adjustably secured together and having their outer ends adjustably secured to the arm 153, and to the pivoted curved bar 149, substan- 110 tially as shown and described.

11. In a side gore pattern the combination of the longitudinal segmental-shaped bar consisting of the solid section 169, and the slotted and scaled section 164, adjustably secured 115 together; the straight longitudinal bar 166, having a curved and scaled extension 165, adjustably secured to the curved section 168; the segmental-shaped arm 163, pivoted to the bar 164, and being adjustably secured to the 120 upper end of the bar 168; the transverse bottom bar consisting of the sections 167, and 171, adjustably secured together and having their outer ends secured to the bars 169, and 166; and the slotted scale bar 170, pivoted at 125 one end to the bar 169, and adjustably secured to the bar 166, substantially as shown

and described.

12. In a pattern for laying outgarment collars, the combination of the large segmental- 130 shaped bar consisting of the sections 2, and 3, adjustably secured together and having the outer L-shaped ends 4; the smaller segmental-shaped bar consisting of the sections 7,

and 8, adjustably secured together; the transverse or radial scale bars 5, adjustably secured to the L-shaped ends 4, and having their opposite ends pivotally secured to the 5 outer ends of the sections 7, and 8, substantially as shown and described.

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13. In a skirt pattern the combination of the longitudinal bar 172, having the three rigid and substantially parallel arms 173, 174, to and 175, to which are adjustably secured the extensible bars 179, 180, and 181, of which the outer ends are secured to the longitudinal bar 178; the bar 178, and the graduated dart gage 177, adjustably secured to bar 175, sub-15 stantially as and for the purpose set forth.

14. In a garment pattern having slotted and In testimony whereof we affix our signatures solid strips or bars adjustably secured to in presence of two witnesses. gether, the locking means consisting of a shouldered thumb screw, as 75, engaging the 20 screw-threaded hole in a nut as 79, consisting of a round plate stamped out with two arms as 82, projecting beyond its periphery; said arms being further bent over toward one l

side of the plate where they form guiding lugs engaging the slots in the slotted bars of 25 the patterns to prevent the nutfrom turning, substantially as and for the purpose set forth.

15. In a garment pattern the adjustable dart gage consisting of the two slotted longitudinal bars 123, adjustably secured to a trans- 30 verse slotted bar as 112, so that each bar may be adjusted in any direction desired; the bars 117, and 118, pivoted together at their upper ends and having their lower ends adjustably secured to the bars 123; and the bars 120, and 35 121, pivoted together at their lower ends and having their upper ends adjustably secured to the bars 123, as shown and described.

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