PATENTED JUNE 16, 1908.

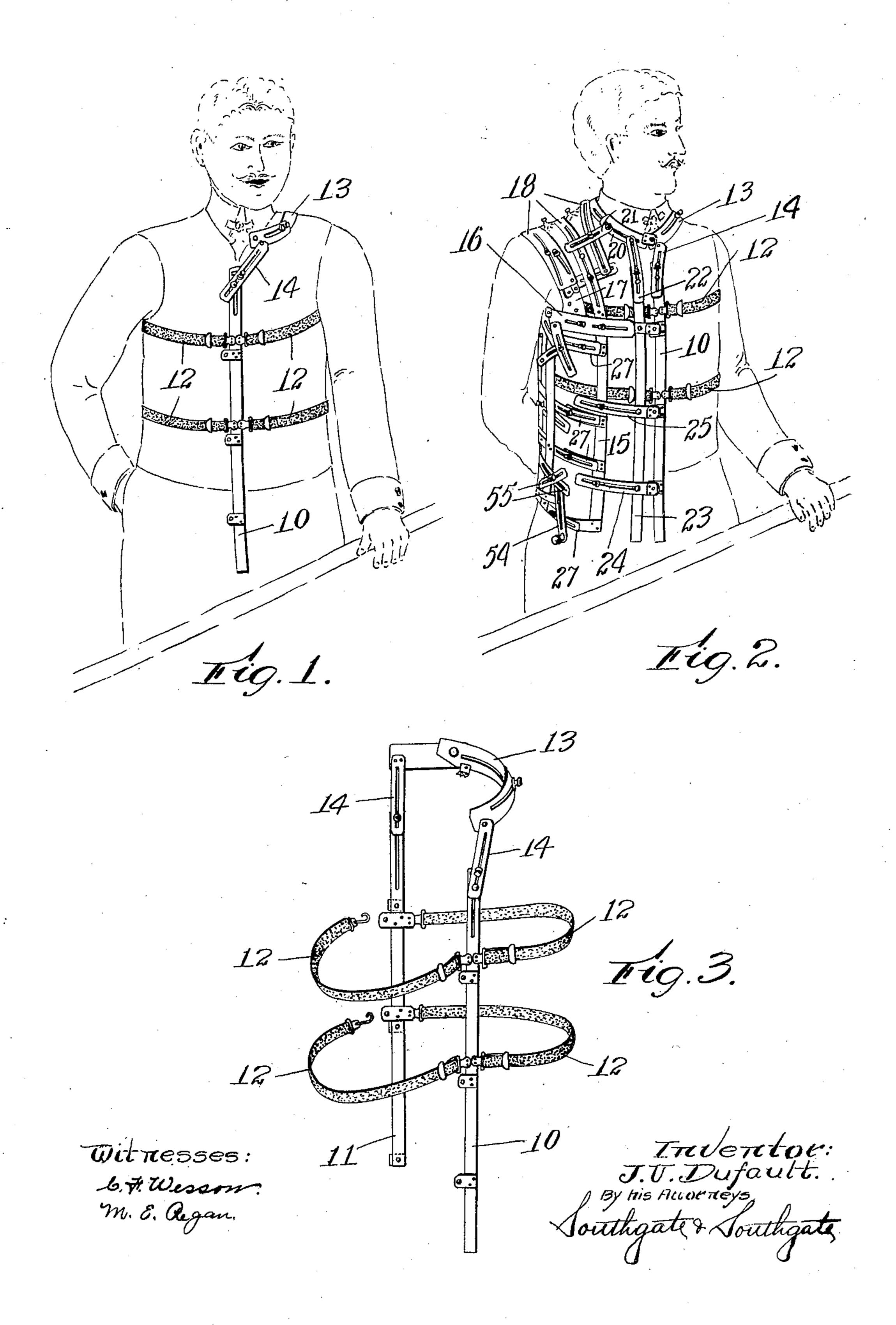
No. 890,969.

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ADJUSTABLE PATTERN FOR GARMENTS.

APPLICATION FILED MAR. 19, 1903. RENEWED OCT. 21, 1907.

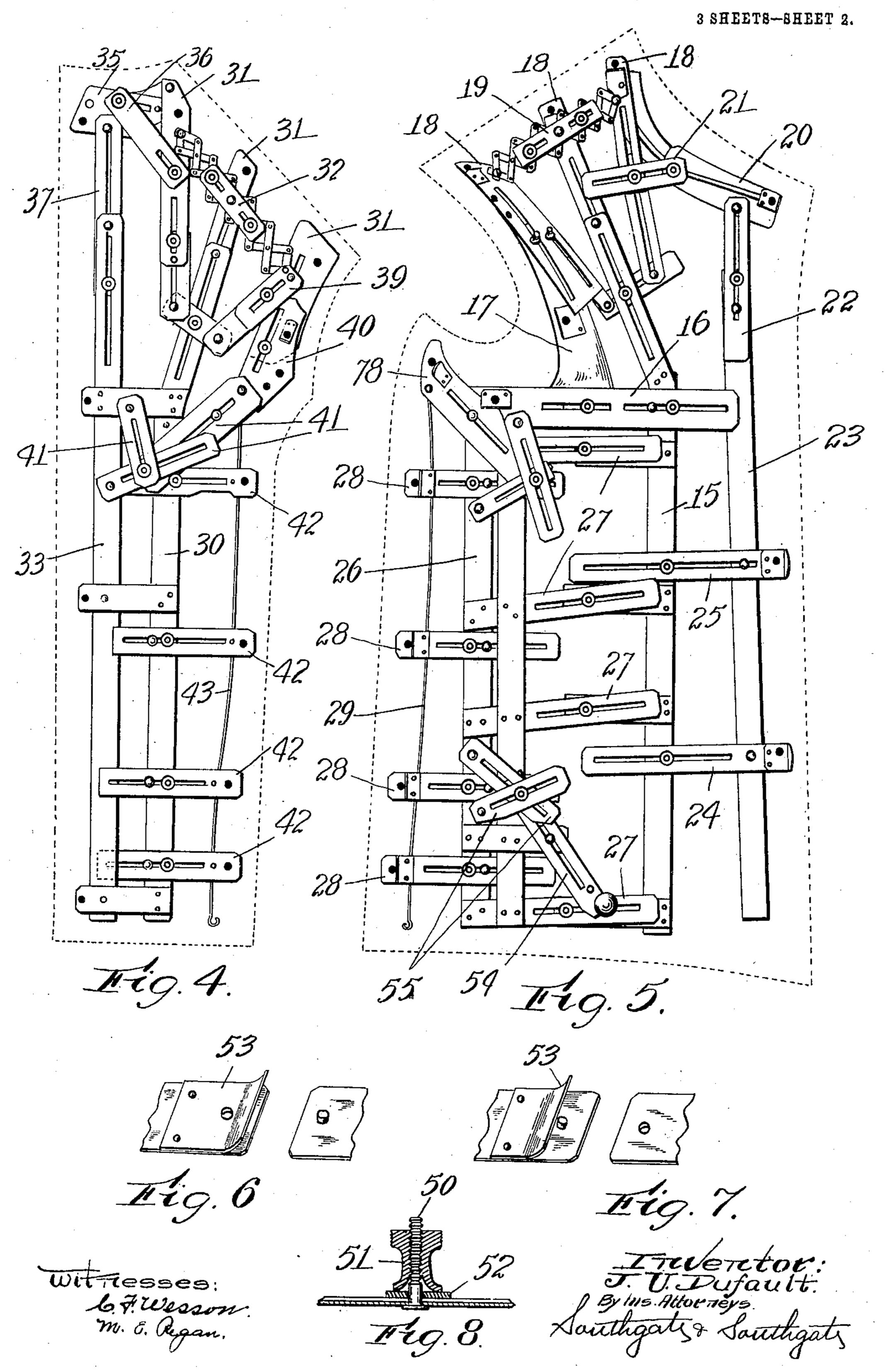
3 SHEETS-SHEET 1.



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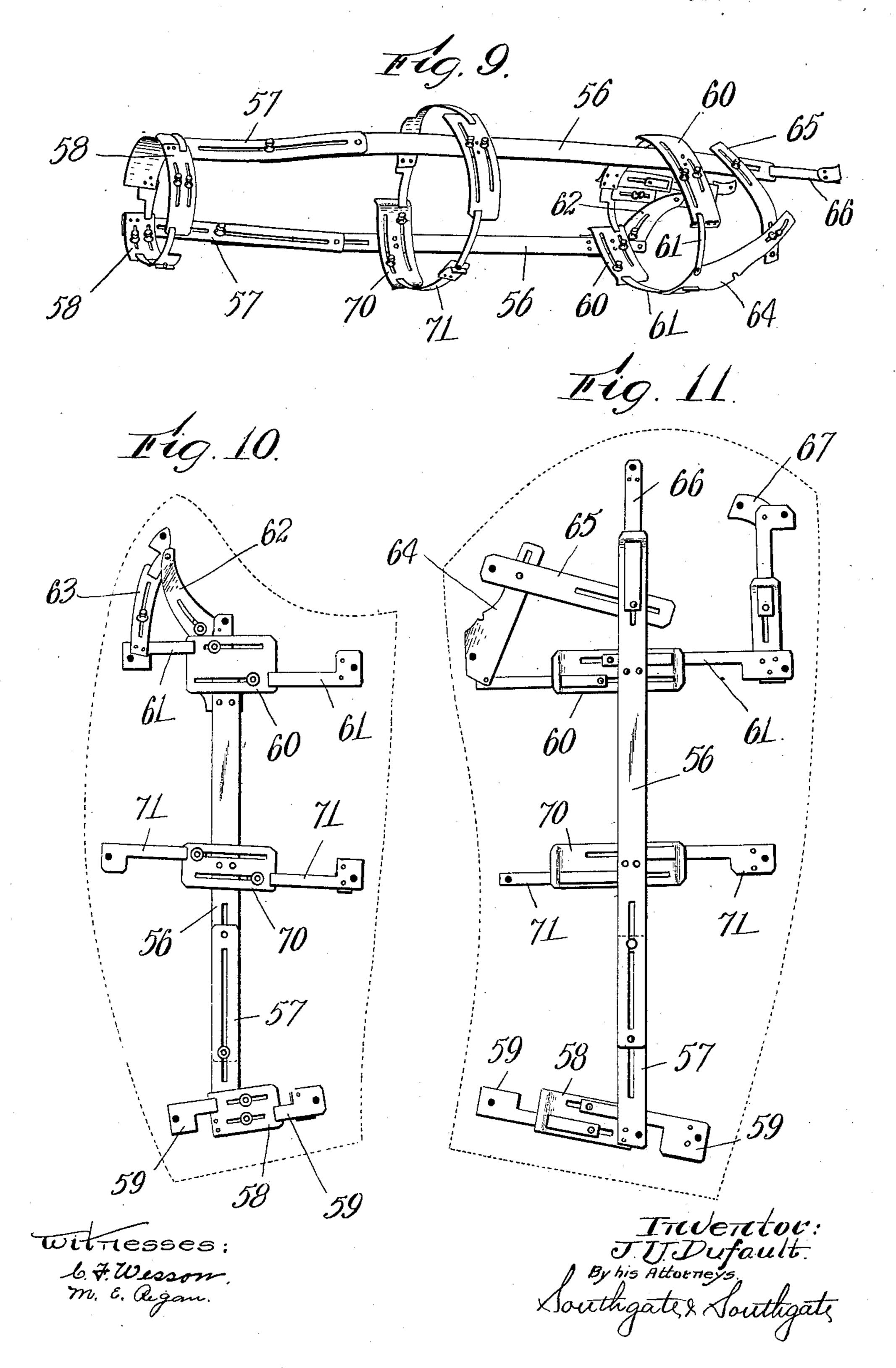
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3 SHEETS-SHEET 3.



UNITED STATES PATENT OFFICE.

JOHN U. DUFAULT, OF SPENCER, MASSACHUSETTS.

ADJUSTABLE PATTERN FOR GARMENTS.

No. 890,969.

Specification of Letters Patent.

Patented June 16, 1908.

Application filed March 19, 1903, Serial No. 148,648. Renewed October 21, 1907. Serial No. 398,506.

To all whom it may concern:

Be it known that I, John U. Dufault, a citizen of the United States, residing at Spencer, in the county of Worcester and State of Massachusetts, have invented a new and useful Adjustable Pattern for Garments, of which the following is a specification.

This invention relates to a construction which has been designed to serve as a pattern for cutting cloth to form an accurately fitting

coat or garment.

The especial object of this invention is to provide a construction capable of all necessary adjustments required for determining a number of points sufficient for outlining the several pieces of cloth required to make up a coat or other garment.

To these ends, this invention consists of the coat pattern and of the combination of parts therewith as hereinafter described and more particularly pointed out in the claims at the

end of this specification.

In the accompanying three sheets of drawings, Figure 1 is a diagrammatic view illus-25 trating a centering harness for supporting the coat pattern. Fig. 2 is a similar view showing the coat pattern adjusted in place. Fig. 3 is a perspective view of the centering-harness. Fig. 4 is a plan view of the frame for 30 outlining the back pieces. Fig. 5 is a plan view of the frame for outlining one-half of a coat front. Fig. 6 is an enlarged view of an adjustable joint for connecting the frames together and for connecting the frames to the 35 centering harness. Fig. 7 is a similar view illustrating a slightly modified form of joint. Fig. 8 is an enlarged detail view of a thumbscrew joint. Fig. 9 is a perspective view of a sleeve pattern. Fig. 10 is a plan view of 40 the frame for cutting out the inside pieces of a sleeve, and Fig. 11 is a plan view of the frame for connecting the outside piece of a sieeve.

In Figs. 4, 5, 10 and 11, the outlines of pieces to be cut by the aid of flexible frames are indicated in dotted lines, with the allowance for seams considerably exaggerated for the sake of clearness.

In that class of constructions to which this invention relates it has already been proposed to provide adjustable metallic patterns which can be taken up and fitted to the person for whom a garment is to be cut. In prior constructions of this class the frames of parts have been outlined by curved strips of metal or other flexible material. That is

to say, in adjustable patterns which have heretofore been employed, certain definite curves have been retained in the outlines, and on this account adjustable patterns of this 60 nature have had comparatively small ranges of utility, since in order to make a perfectly fitting garment, a change from one size and one shape ought to require corresponding changes in all curves. A coat pattern con- 65 structed according to my invention is designed to work upon an essentially different principle. That is to say, a coat pattern constructed according to my invention is intended to definitely fix a sufficient number 70 of points rather than attempting a complete outline, the range of adjustment being sufficient to secure definite and accurate locations of such points required for outlining any possible variations of curves for different 75 sizes of coats. To these ends, a coat pattern constructed according to my invention comprises one-half the number of flexible frames that there are separate pieces in a coat. For example, the accompanying drawings illus- 80 trate a pattern for cutting the body and sleeves for an ordinary sack-coat. Four pieces are employed for the body of an ordinary sack-coat, and the pattern in the present instance comprises two flexible frames, one 85 for the front pieces and the other for the back pieces. The sleeve pattern comprises a frame for the inside section of a sleeve, and a frame for the outside section of a sleeve.

In fitting the pattern to a person I preferably employ a centering-harness which serves as a primary support. The frames for the front and back sections of the coat are first connected together, and are buckled on to the centering-harness, after which they are fitted and adjusted to secure absolutely correct locations of such points as ought to be accurately determined for fitting a garment. In the body of the coat, the points to which greatest attention is given are the location of the shoulder seam, the side seam, the front of the coat, and the back seam.

The front frame of the pattern is also preferably provided with an attachment for determining the length and hang of the sleeve. 105

The shape of the sleeve is preferably determined by fitting the sleeve pattern to the body frames rather than applying the sleeve pattern to the person. This is done to save time, although the sleeve pattern may be 110 applied to the arm of the person if desired.

As illustrated most clearly in Fig. 3, the

centering-harness which forms the primary support consists of a front strip 10 preferably of flexible metal, and a corresponding back strip 11. The front strip 10 and back strip 5 11 are connected by body straps 12, the bodystraps 12 have ordinary take-up devices, and are provided at their ends with hooks to permit the centering harness to be applied to the person. Extending up from the front and 10 back strips 10 and 11 are slotted strips 14 carrying adjustable collar sections 13 which aid in holding the harness in proper position.

In applying the harness to the person, the upper one of the body straps is carried well 15 up under the arm-pits, and care is taken to have the front and back strips occupy central positions and the collar piece fit accurately around the neck. The two flexible frames for the body portion are next fastened

20 together and adjusted to position.

Referring to Fig. 5, the adjustable frame for the front pieces of a coat comprises a flexible strip or support 15. Extending at right angles to the strip or support 15 is a 25 horizontal gage piece 16, and the curved armpit piece 17. In the adjustment of the flexible frame, the strip or support 15 forms the base from which adjustments are made. Extending to the upper part of the frame are 30 three slotted strips 18, which are connected by lazy-tong link-work, the extent to which said arms may be opened to vary the length of the shoulder seam being limited by clamping plates 19, while the raising and tipping of 35 the arms 18 to locate the position and incli-

nation of the shoulder seam is regulated by

screw-and-slot joints, the thumb screws employed for fastening the parts in desired position being preferably of a special construc-40 tion hereinafter referred to. Extending down from the front one of the slotted arms 18 are adjusted neck pieces 20 which may be clamped in place by slotted strips 21 and 22, the slotted strip 22 being connected to a strip

45 23 secured rigidly to the horizontal gagepiece 16. Carried by the strip 23 are the arms 24 and 25, which serve to locate points for the front edge of the coat. The strips 24 and 25 are adjustably connected to the main 50 support 15.

The construction thus far described will | serve to locate points for fixing the shoulder | required for a seam. In practice, this disseam, the neck curve, and the front edge of

the coat.

65

The side seam or rear edge of the piece forming a coat front is determined by an adjusted slotted piece 78 which may be swung up close under the arm-pit, and clamped in adjusted position by a single clamping-nut 60 connecting the two slotted strips shown, and by sliding pieces 28 which may be adjustably clamped on a strip 26 extending down from the horizontal gage piece 16 and connected with the main support 15 by slotted strips 27. The ends of the strips 28 serve to locate

sufficient points to fix the side seam, and in order that the side seam or rear edge of the coat front piece may be substantially straight, the pieces 28 are connected by a flexible wire 29, so that while the said pieces 70 28 may be independently adjusted sufficiently to allow any desired variation in fullness along the straight seam, the guide wire 29 will serve to keep the ends of said pieces substantially in line.

The frame serving as a pattern for one of the rear pieces of the coat is most clearly illustrated in Fig. 4. As shown in this figure, this frame comprises a main strip or support 30. At the upper end of the frame 30 are the 80 arms 31 which are connected by lazy-tong link-work, the opening of said arms to vary the length of the shoulder seam being limited by clamp plates 32. Extending back from the rear arm 31 is a back collar piece 35 85 which may be fastened in position by clamp strips 36 and 37, the clamp strip 37 extending up from an arm 33 connected rigidly with the main support 30. Connected with the arm 31 is a shoulder piece 40 which may 90 be held in adjusted position by clamp plates 39 and 41. Extending from the main support 30 are laterally adjusted arms 42 which may be held substantially in alinement by the flexible wire 43.

In the frames for the front piece and for the back piece of a coat it will be seen that the arms 31 of the back piece correspond with the arms 18 of the front piece, and that the arms 42 of the back piece correspond 100 with the arms 28 of the front piece, the said two sets of parts being capable of being buckled together while the pattern is being fitted. The form of joint preferably used for this purpose is shown in Fig. 6, and is formed 105 by providing one of the arms with a guide piece 53 for receiving the end of the other arm, said guide piece being perforated to receive a stud which may be snapped into place when the backs are buckled together, or if 110 preferred, as shown in Fig. 7, the stud may be located upon the same arm as the guide piece 53.

In either form of joint, the pin or its socket is located far enough from the extreme end of 115 the arm to allow exactly the amount of cloth tance is usually about one-half inch, so that the outline of the piece of cloth to be cut, as determined by the ends of the arms, will al- 120 low exactly the right amount of cloth for the seams, without the exaggerated allowance indicated by dotted lines in the drawings for the sake of clearness.

One of the thumb-screw joints for holding 125 the slotted strips in adjusted position is illustrated in Fig. 8. As shown in this figure, the lower strip is provided with a screw 50 extending up through the slot in the strip which is to be fastened thereto, and threaded on to 130

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the screw 50 is a knurled thumb-nut 51. its lower end the thumb-nut 51 is countersunk and engages a washer 52. In practice I have made the washer 52 preferably thin 5 and flexible, and I have found that by countersinking the nuts in this manner that they will tend to have sufficiently firm clamping action to permit the parts from readily sliding upon each other.

Considering now the fitting of the body portion of a coat according to my invention, when the centering harness has been fastened upon the person, as illustrated in Fig. 1, the two frames illustrated in Figs. 4 and 5 are 15 first buckled together, and then placed upon

the person and buckled to the back and front strips of the centering harness as illustrated in Fig. 2.

In applying the pattern it is only essential 20 that the gage strip 16 should be carried up well under the arm-pit and should be kept substantially horizontal, only sufficient numbers of the joints need then be loosened to first fix the length, position and inclination of the 25 shoulder seam, and the pattern be then set up with sufficient tightness to locate the point of the collar, the line of the coat front

and the side and rear seams.

In locating the seams, if it were not for the 30 flexible wires 29 and 43 before referred to, fitting coat might be secured even if the side seams were not straight, but by use of these wires the points which determine the side 35 seams are kept nearly enough in line to insure

substantially straight work.

To determine the length of sleeve, and the natural hang of the person's arm, the front frame, as shown in Fig. 2, may, if desired, be 40 provided with a slotted swinging strip 54 having a button at its lower end which may be moved to different positions and clamped in place by clamp plates 55. After a pattern has been fitted in this manner to cut the body 45 of a coat, it is simply necessary to unbuckle the parts of the pattern and lay the frames upon the cloth, as illustrated in Figs. 4 and 5.

To fit the sleeve, the pattern may be applied before the pattern for the body portion 50 of the coat is removed from the person, but in practice I have found that this can be done equally well after the body portion of the pattern has been taken from the person.

The pattern for cutting the sleeve which 55 I employ is illustrated in the third sheet of

drawings.

As shown in Figs. 9, 10, and 11, a coat sleeve pattern constructed according to my invention comprises two frames, each of 60 which consists of a central strip or support 56 adjustably connected by a slotted piece 57, with a cuff section 58 having adjustable sections 59. Near their centers the supports 56 are provided with slotted pieces 70 having

the supports 56 are preferably provided with slotted pieces 60 having adjustable arms 61. The arms 59, 61 and 71 may be buckled together by the same form of joints as the frames before described.

The frame forming the pattern for the inside sleeve section may be provided with an arm piece 62 which may be clamped in place by a slotted strip 63, and the frame which forms the pattern for the outside piece of the 75

sleeve may be provided with a shoulder piece 64 clamped in place by a slotted piece 65.

To fit a sleeve pattern as thus constructed to the arm-hole outlined by the frame pieces or pattern for the body portion of the coat, 80 the arms 66 and 67 and the arms 63 and 65 referred to may be buckled on to such frames when they have once more been put together after having been taken off the person. That is to say, the coat sleeve pattern illustrated 85 in Fig. 9 may be fitted to the body portion pattern when it is substantially the shape illustrated in Fig. 2, except that a person need not be wearing the same, although, as before explained, this sleeve pattern can be 90 applied directly to the arm of the person, if desired, and in either case, the hang of the sleeve and the length thereof may be regulated by the gage 54 before referred to.

In cutting the several different sections of 95 and illustrated in Figs. 4 and 5, a perfectly | cloth by means of patterns constructed according to my invention, instead of relying upon curves, any portions of which are necessarily fixed or determined, I rely upon a number of joints which permit me to scribe and 100 outline exactly proper curves to secure perfectly fitting garments of any desired size or shape within the range of adjustment furnished by the length of slots by which adjustments are obtained.

I am aware that changes may be made in practicing my invention by those who are skilled in the art without departing from the

scope thereof as expressed in the claims. I do not wish, therefore, to be limited to the 110 details I have herein shown and described, but

What I do claim and desire to secure by Letters Patent of the United States is:

1. In a construction of the class described, 115 the combination of a centering harness to be secured to a person, a coat pattern comprising flexible frames, a sleeve pattern comprising flexible frames, means for securing the coat pattern to the centering harness, 120 and for securing the sleeve pattern to the coat pattern.

2. As an article of manufacture, a coat pattern comprising flexible frames each consisting of a support, slotted arms extending 125 from the support for determining a number of points in a pattern outline, a countersunk thumb-nut for fastening each of the slotted arms in adjusted position, and means for de-65 adjustable arms 71. At their upper ends I tachably connecting the frames together.

3. As an article of manufacture, a coat pattern comprising a flexible front frame having a horizontal gage strip to be located under the arm-pit of the person, a supporting strip, arms extending from the supporting strip, means for clamping the arms in position to determine a number of points in the pattern outlined, a back piece, frame, and means for adjustably connecting the frames together.

4. As an article of manufacture, a coat pattern comprising flexible frames, each consisting of a support with slotted arms ex-

tending therefrom, means for clamping the arms in position to locate points in a coat side 15 seam, flexible wires connecting said arms to keep the ends of said arms substantially in line to insure straight work, and means for connecting the frames together.

In testimony whereof I have hereunto set 20 my hand, in the presence of two subscribing

witnesses.

JOHN U. DUFAULT.

Witnesses:

Louis W. Southgate, Philip W. Southgate.