

(No Model.)

4 Sheets—Sheet 1.

E. A. BERRY.

APPARATUS FOR MARKING PATTERNS FOR DRESS WAISTS.

No. 433,711.

Patented Aug. 5, 1890.

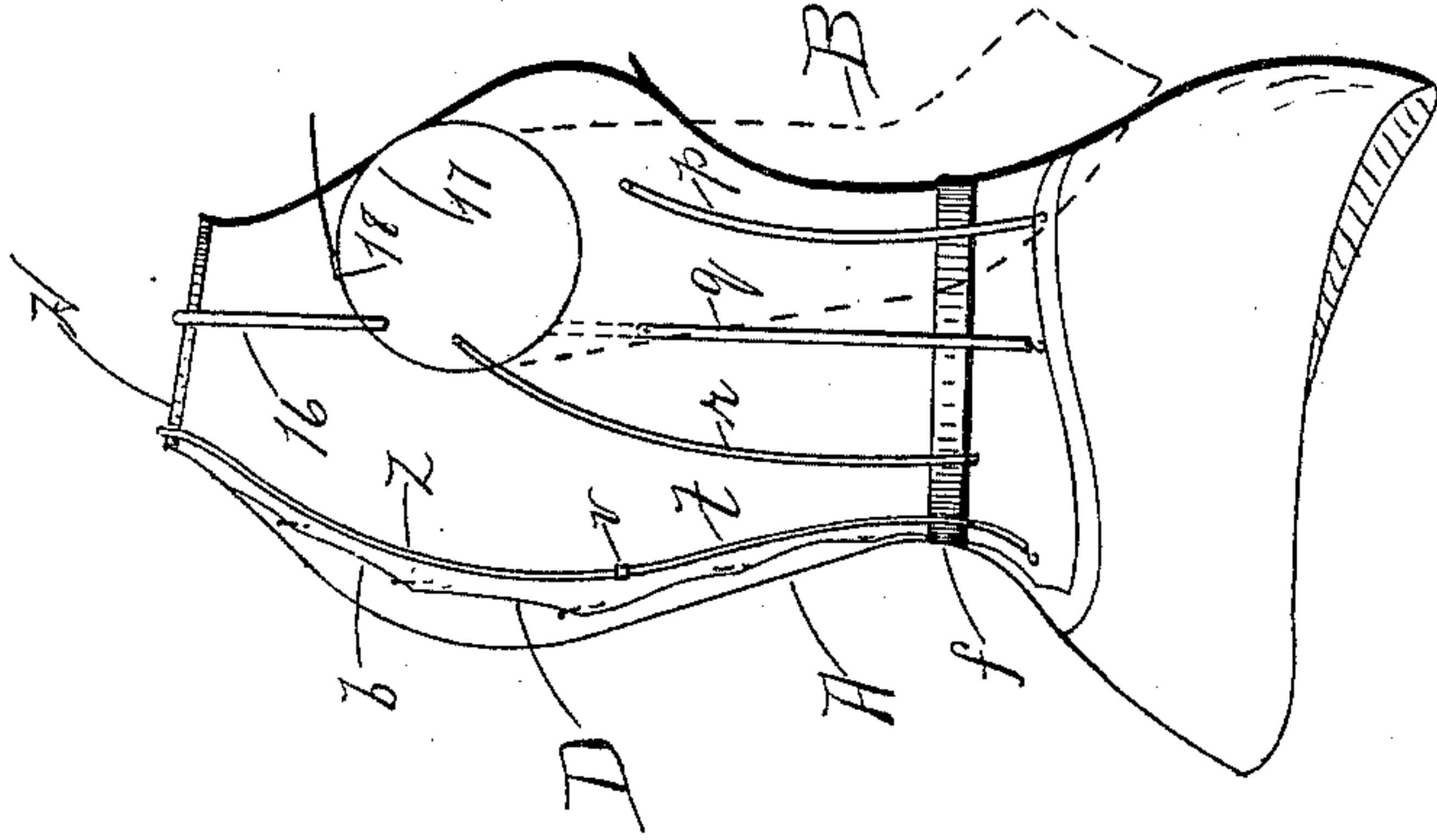


Fig. 3.

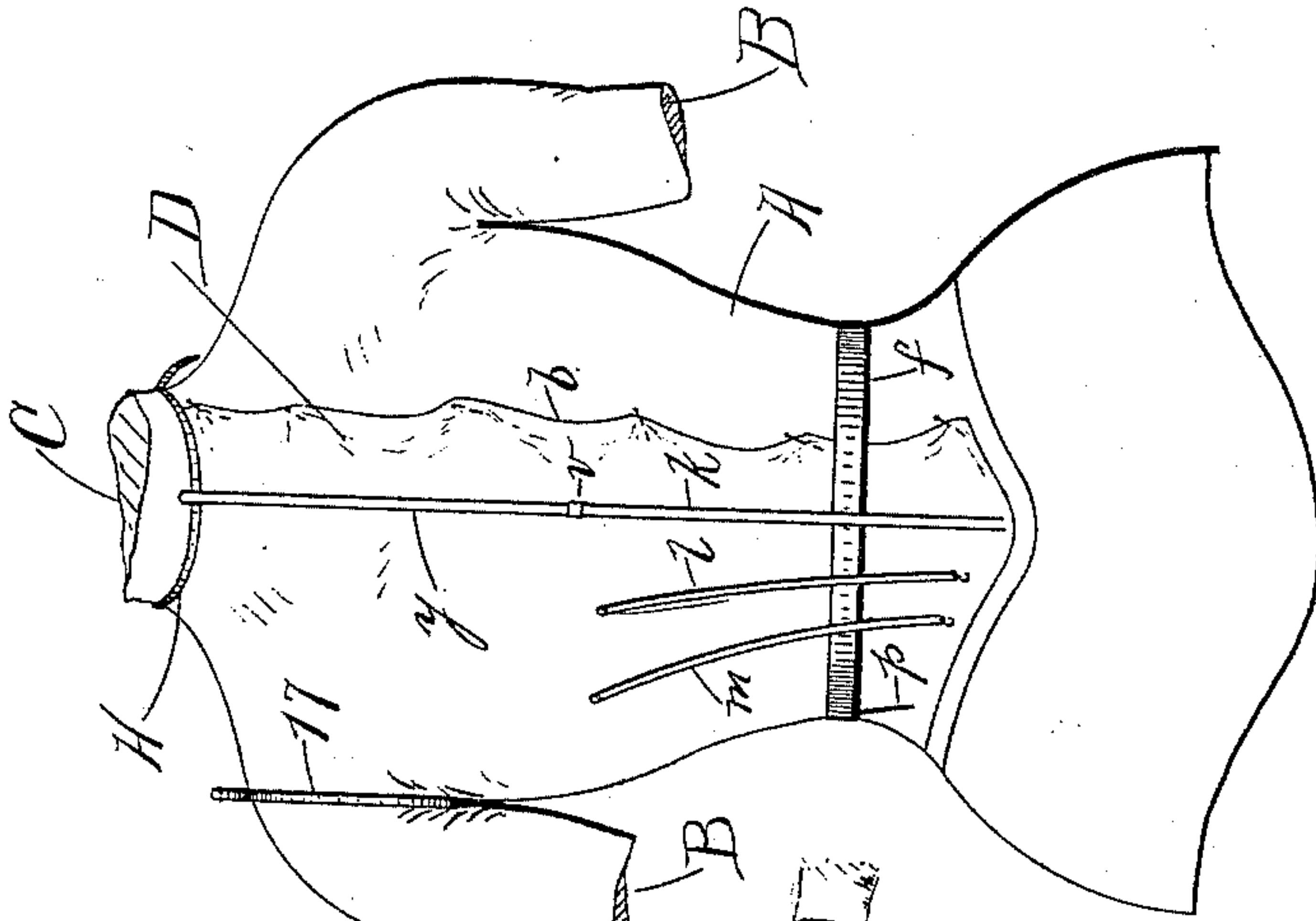


Fig. 2.

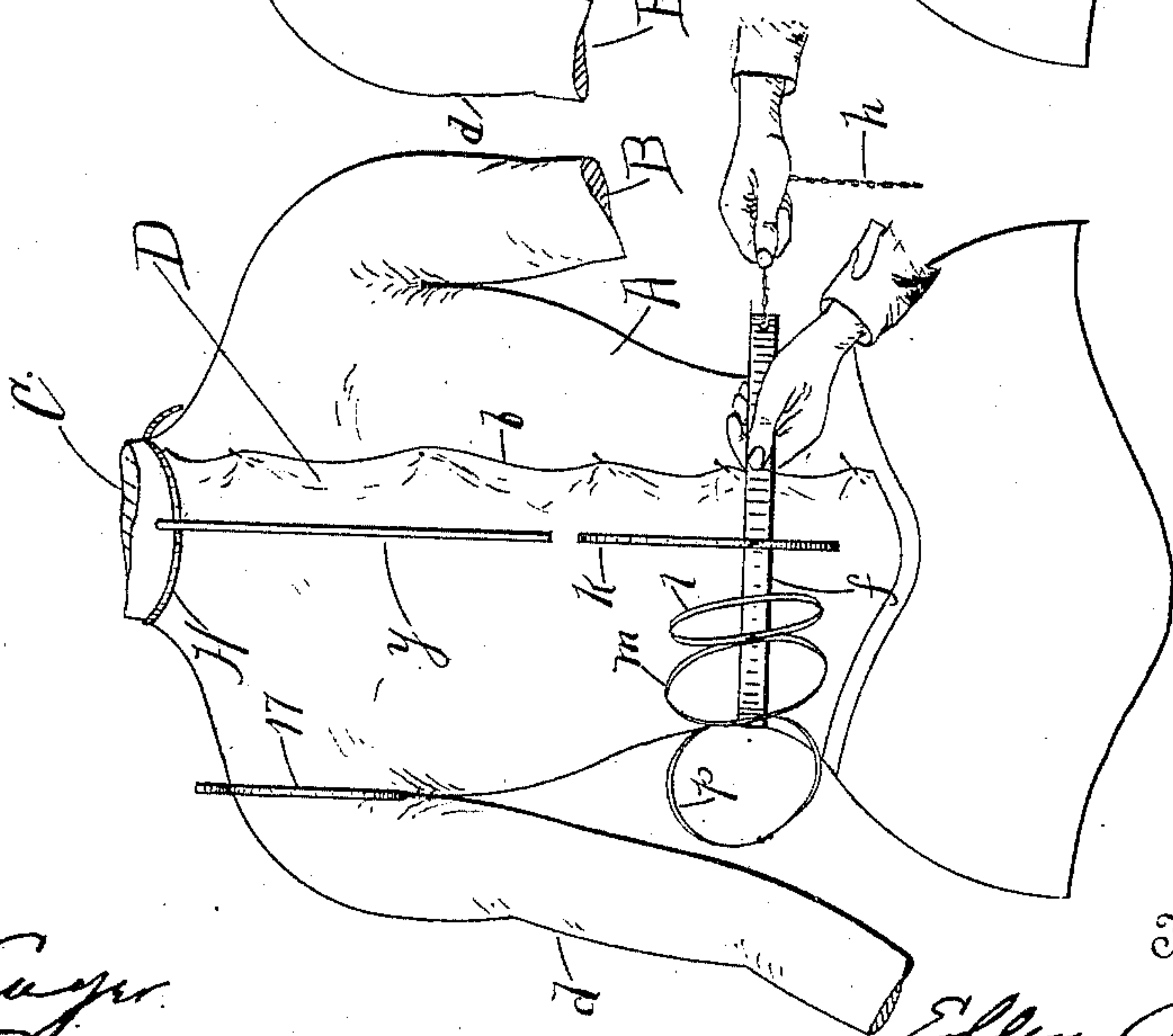


Fig. 1.

Witnesses

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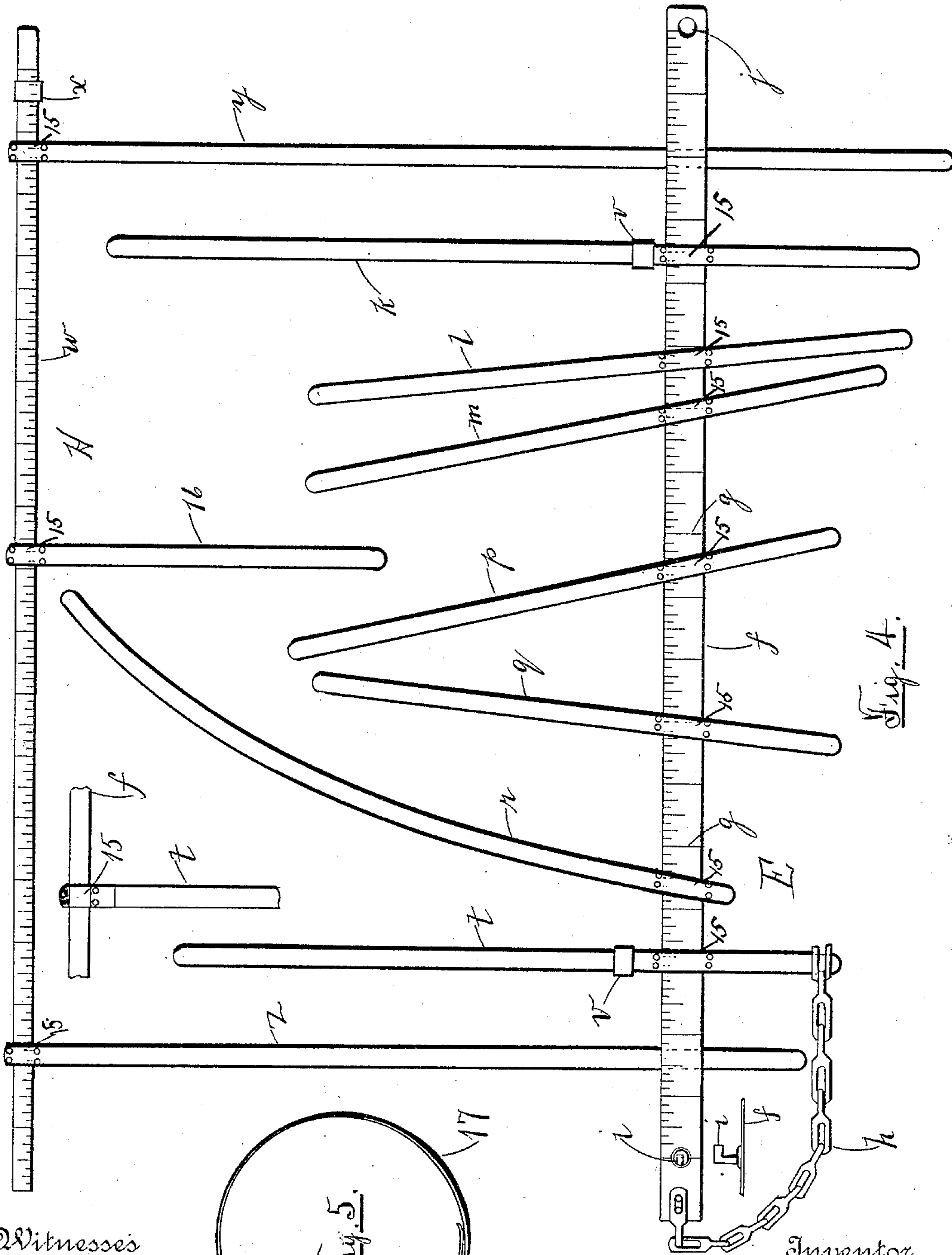
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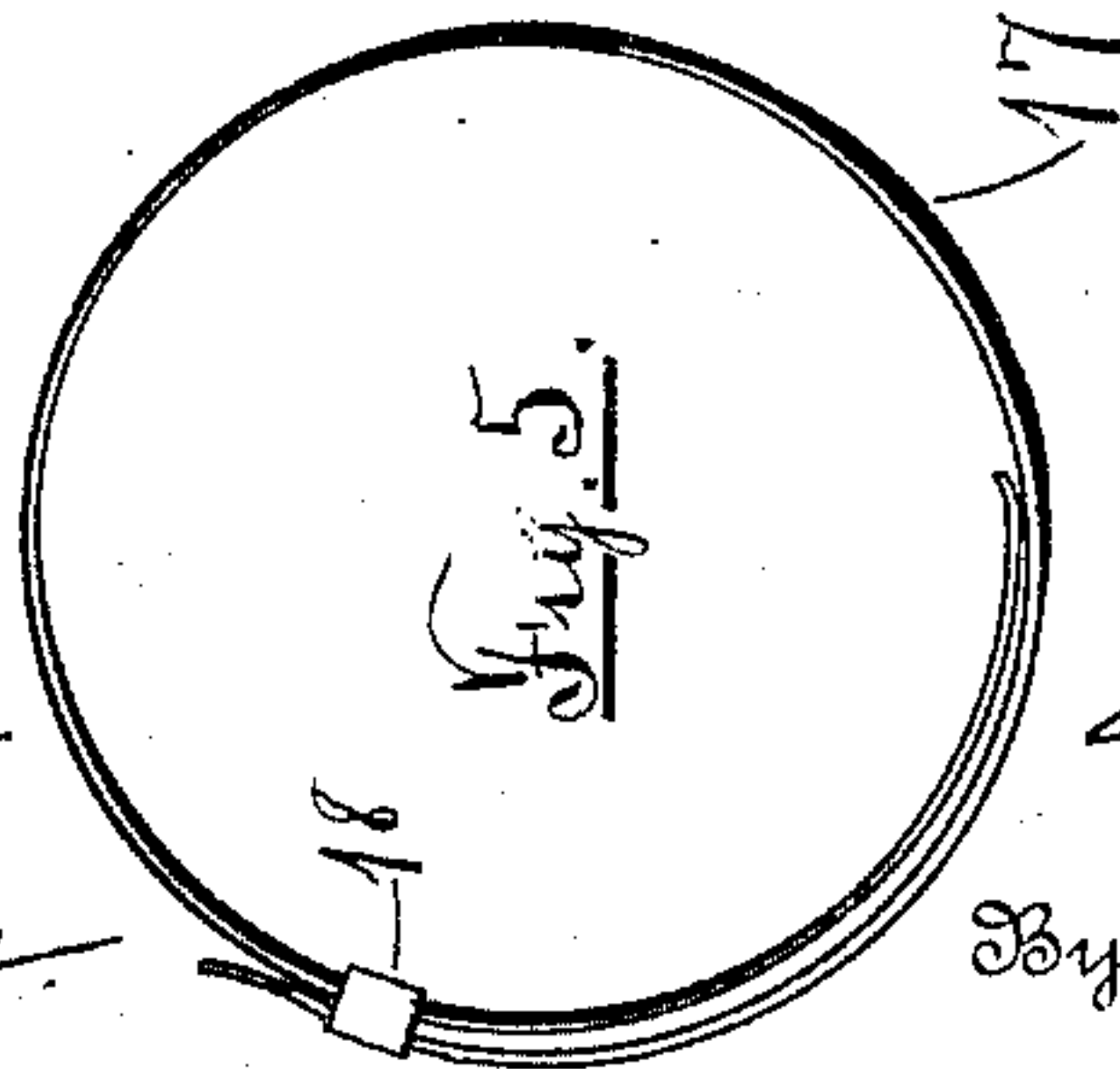
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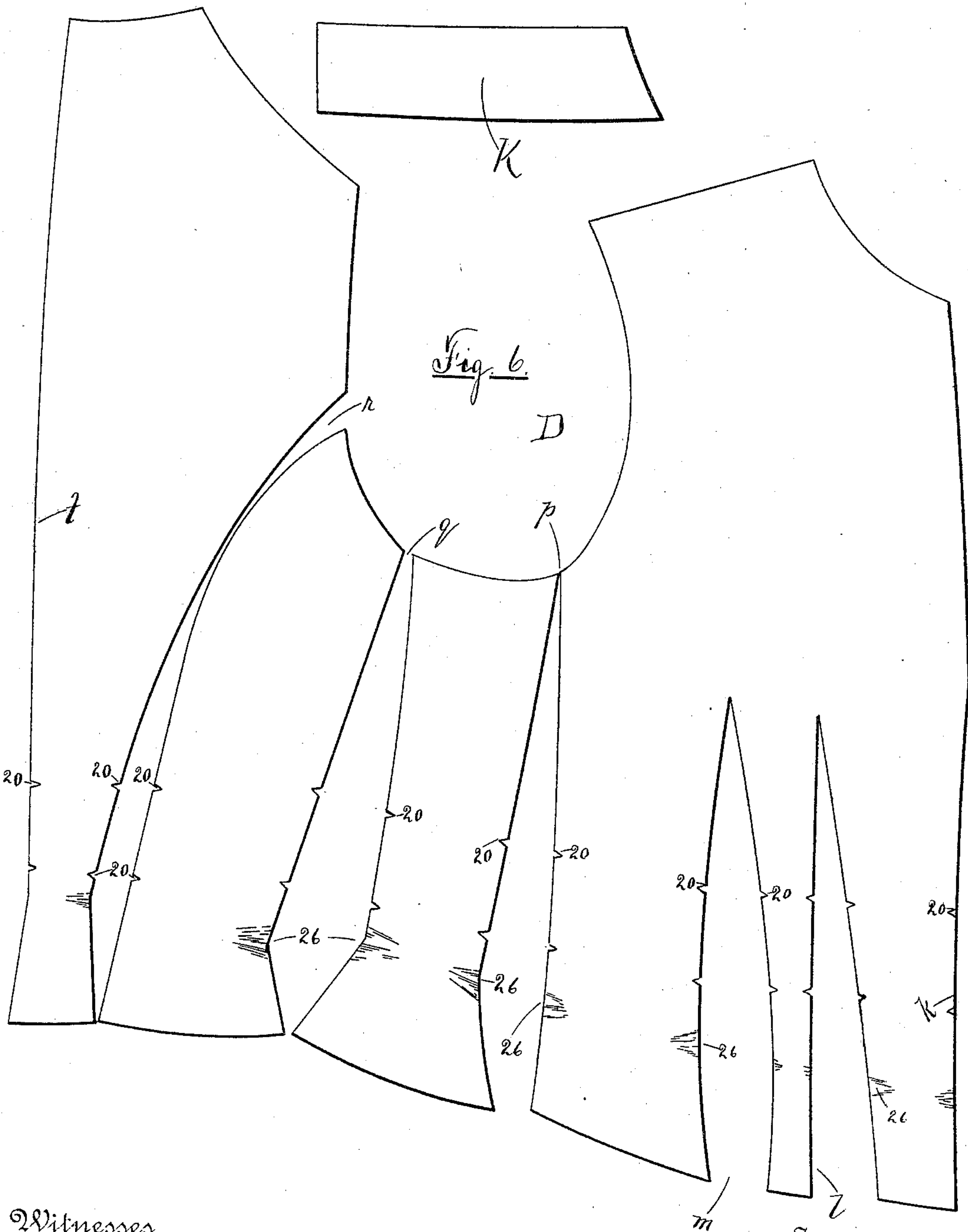
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APPARATUS FOR MARKING PATTERNS FOR DRESS WAISTS.

No. 433,711.

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4 Sheets—Sheet 4.

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APPARATUS FOR MARKING PATTERNS FOR DRESS WAISTS.

No. 433,711.

Patented Aug. 5, 1890.

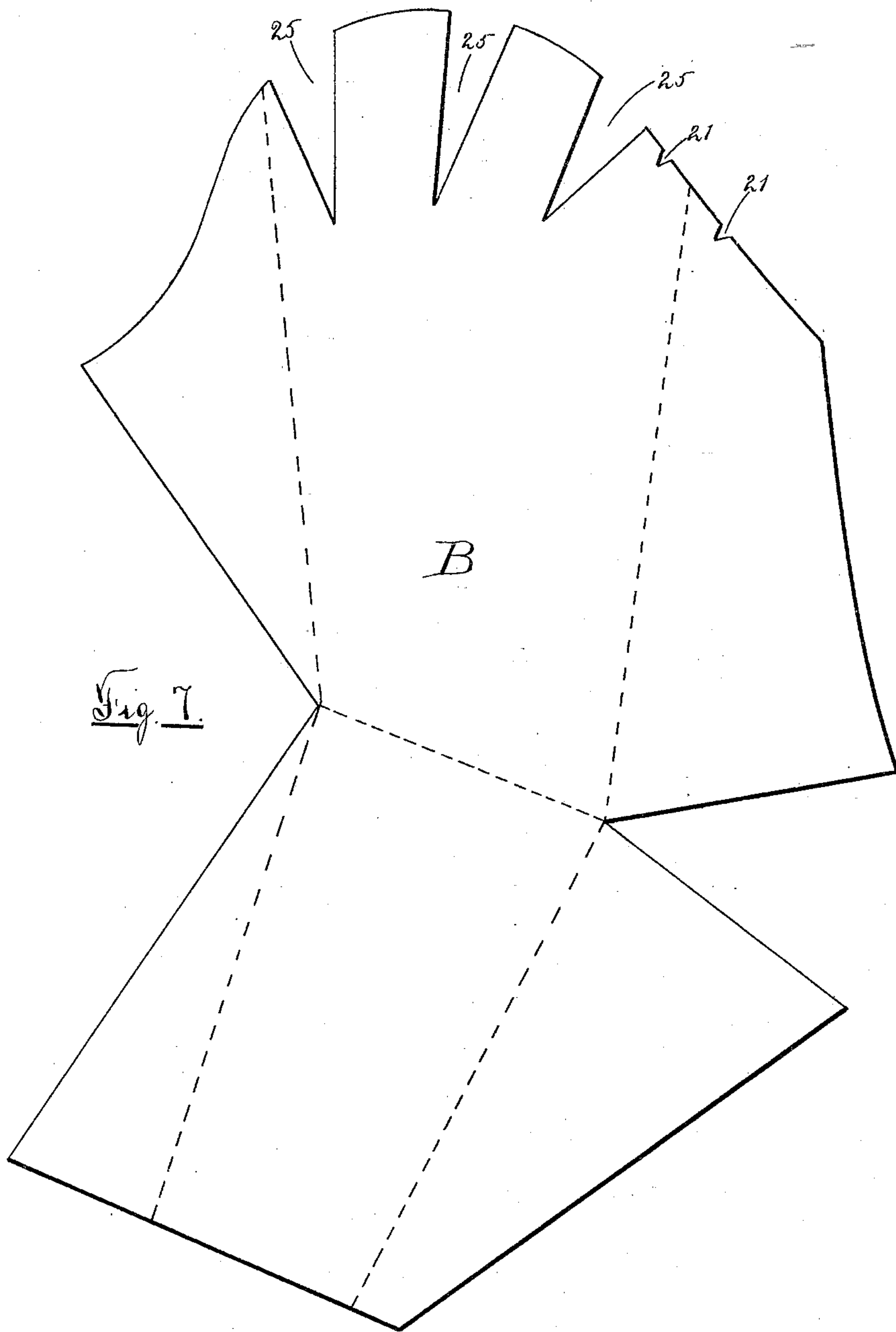


Fig. 7.

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UNITED STATES PATENT OFFICE.

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APPARATUS FOR MARKING PATTERNS FOR DRESS-WAISTS.

SPECIFICATION forming part of Letters Patent No. 433,711, dated August 5, 1890.

Application filed November 13, 1889. Serial No. 330,115. (No model.)

To all whom it may concern:

Be it known that I, ELLEN A. BERRY, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Pattern-Marking Apparatus, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front elevation showing the manner of applying my improvement to a form; Fig. 2, a front elevation of a form, showing the device in position; Fig. 3, a side elevation of the same; Fig. 4, a plan view, enlarged, of the pattern-marking device detached; Fig. 5, a like view of the arm-scyce marker; Fig. 6, a plan view of the sections of the waist-pattern when completed, and Fig. 7 a like view of the sleeve-pattern.

Like letters and figures of reference indicate corresponding parts in the different figures of the drawings.

My invention relates, especially, to means for marking patterns for dress-waists which shall conform accurately to the curves of the figure and avoid the necessity of refitting and making alterations in the completed garment to accomplish such conformation; and it consists in certain novel features hereinafter fully set forth and claimed, the object being to produce a more accurate and effective device of this character than is now in ordinary use.

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following explanation.

In the drawings, A represents the body or waist of the person, B B the arms, and C the neck. A semi-garment or waist D with sleeves detached is employed, said garment being constructed of a flexible closely woven or knitted fabric, preferably of the character known in the trade as "jersey-cloth." This semi-garment and sleeve is saturated with melted paraffine or similar substance, which will render it plastic. While still slightly warm and in such plastic condition it is applied to the form of the wearer and bent or

molded against the figure to conform closely to all curves thereof. The edges *b* of the semi-garment are then secured by pins to the corset-cover or such under-garment as the dress-waist is to be worn over. The plastic garment rapidly cools and stiffens sufficiently to prevent it from becoming disarranged or misshapen while on the figure. The arm is held slightly bent at the elbow. A metallic seam and waist guide E (shown in Fig. 4) is now applied to the figure over the plastic garment, said guide being constructed and operated as follows:

A flat band or belt *f*, of spring-steel, of sufficient length to encompass the waist, is divided by section-lines *g* into equal spaces in the same manner as a measuring rule or tape. At one end of said belt a chain *h* is secured, and near said chain on the body of the belt a hook *i* is disposed. In the opposite end thereof an opening *j* is formed, through which the chain is adapted to pass, said chain being turned back on the belt-body and a link disposed over the hook *i*, securing the belt in position on the figure, as shown in Fig. 1. A series of flat flexible bars *k l m p q r t* are fitted to slide laterally on the belt *f* by means of loops 15 formed thereon, as shown in the detail view in Fig. 4, said bars serving as seam and dart guides. The bars *k t* are arranged at right angles to the belt, and respectively serve as guides for the main front and back waist seam. Each of said bars is provided with a sliding loop *v*. The bar *r*, which serves as a guide for marking the rounding back seam is disposed on the belt adjacent to the bar *t* and is bent or curved away from said bar *t* in the vertical plane of the belt, as best shown in Fig. 4. The bar *q*, which forms the side back-seam guide, is straight and inclined at a slight angle in the same direction as the curved bar *r*. The bar *p*, forming the under-arm-seam guide, inclines toward the bar *q* at a slightly-sharper angle, and the bars *l m*, arranged consecutively on the belt, are inclined in the same direction at slightly-varying angles, said bars forming, respectively, guides for the second and first darts. Each guide-bar is provided with a hook in one end and an eye in the opposite end to enable them to be bowed or curved

outward and secured, as shown in Fig. 1, while the belt is being adjusted at the waist. A semi-garment D only is employed, as the pattern cut therefrom will serve equally well for the opposite side unless the form is misshapen on one side, in which event a whole plastic garment is used and a separate pattern cut for each side. The measure of the waist is then taken and the front-seam guide k adjusted in the proper position on the belt for said seam. The back-seam guide t is then adjusted on the belt with an edge at a division-line g , indicating one-half of said waist-measure. The whole waist-measure is then divided into ninths and the second dart-guide m adjusted with an edge at a division-line on the belt, indicating a distance from the front seam equal to one-ninth of the waist-measure. As some of the seam-guides are inclined at an angle to the belt, all measurements should be made on the upper edge of said belt. The under-arm-seam guide p is adjusted in like manner at a one-ninth distance from the second dart-guide m , and the side back-seam guide q at an equal distance from the under-arm-seam guide p , and the rounding-seam guide r at a corresponding distance from said side seam. This leaves the distance from the rounding-seam guide r to the center back-seam guide t equal to one-eighteenth of the waist, the whole back of which said back seam is the center being equal to one-ninth of said waist.

The front-dart guard l is arranged on the belt at a distance from the second dart m equal to one-third the distance from said second dart to the front-seam guide k . The plastic semi-garment being adjusted on the figure, as described, the belt is then secured around the waist over the garment by means of its chain and hook at the end.

The division of the waist-measure into ninths is arbitrary, but is found to be much more effective than when another basis is used, excepting when said waist-measure is very large. It then may be divided into elevenths and an additional seam-guide employed on the belt.

A neck-guide H (see Fig. 4) comprises a flat steel band w , adapted to encircle the neck of the figure at the point where the collar joins the body of the waist. Said guide has a loop x at one end to receive its opposite end, and may have its surface divided into measuring-spaces, if desired.

A front-seam-guide bar y and back-seam-guide bar z are fitted to slide on the neck-guide in the same manner as the belt-guides, and are arranged at right angles to said neck-guide, said guides y z being adapted to register, respectively, with the front and back seam guides k t , to which they are secured when in use by the sliding loops v , as shown in Figs. 1, 2, and 3, forming straight lines from the belt to the collar for the front and back seams.

A shoulder-seam-guide bar 16 is disposed

on the neck-guide between the guides y z , said guide 16 being adjusted at the distance of one-third of the neck-measure from guide y and its lower end placed in alignment with the side back-seam guide q , as shown in Fig. 3.

The arm-scy guide 17 (shown in Fig. 5) consists of a flat flexible band having a loop 18 at one end, through which its opposite end may be passed, said guide encircling the arm at the shoulder (see Figs. 1, 2, and 3) in a plane parallel with that of the main front and back seam guides when in position.

The dart and seam guides which were folded while being adjusted, as described, are released and permitted to spring outward against the figure, their flexible quality allowing them to be readily bent to conform to the curves thereof.

The guides being in position, the operator marks or indents the plastic garment with any suitable implement, following the edges of said guides, which register with the divisions described on the belt. The inside edge of the arm-scy guide and the lower edge of the neck-guide are followed in like manner.

A line is indented in the garment, following the lower edge of the belt f , and a similar line parallel therewith is formed a short distance above said belt, said waist-lines serving to indicate the position of the edges of the different portions of the pattern where notches 20 (shown in Fig. 6) are to be formed to act as guides in fitting together the different sections of cloth material employed in constructing the waist.

The rounding-seam guide r and shoulder-seam guide 16 are of sufficient length to overlap the arm-scy 17, and at the points of intersection of their respective guide-lines, notches 21 (shown in Fig. 7) are formed in the sleeve to indicate its position when inserted in the arm-scy in forming the completed waist. The curved guide r should intersect the arm-scy guide at two-fifths of the distance measured on said scye from the side back-seam guide q to the shoulder-seam guide 16. The curved guide slides loosely on the belt, permitting it to be tipped to different angles. The arm-scy guide may be spaced in like manner with the belt to enable this point to be more readily ascertained.

While the plastic garment is on the body the sleeve B is cut at the wrist at any desired length, and is also marked at the shoulder by the arm-scy guide, as described. The arm is then raised into a horizontal position and the plastic sleeve marked from the under side at the wrist diagonally in a straight line to the inside bend of the arm at the elbow. From thence it is marked in a straight line to the arm-scy at a point between the under-arm seam and side back seam. Said sleeve is also marked laterally across the under portion of the arm from the inside bend to the elbow. The sleeve is now removed from the arm of the figure and cut by the seam-lines which

have been drawn, as specified. By slashing or notching its curved-shoulder portion at 25 it may now be smoothed out into a flat pattern (shown in Fig. 7) from which to cut the cloth dress-sleeve. The cloth is cut, following the outline of the pattern B, regardless of the notches 25, which serve to give sufficient fullness to impart a perfectly-smooth fit thereto in the completed dress. The metallic guides 10 and the body of the plastic garment are now removed, and said body is cut on the seam-lines which have been drawn thereon, as specified.

The collar K (see Fig. 6) is cut from the 15 body and flattened, forming a pattern for one-half the cloth collar. The result of thus cutting the now hardened plastic garment is the waist-body pattern shown in Fig. 6, the seam-guide reference-letters being herein used to 20 indicate the cuts made on the lines of said guides. The cloth for the garment may readily be cut from the pattern thus formed, sufficient allowance being made on the cloth for the amount taken up in forming the seams in the 25 usual manner.

The vertical and lateral curves of the body, which it is impossible to form on the flat paper patterns in ordinary use, are absolute in the pattern described. Shade lines 26 in Fig. 30 6 indicate the bends or curves in said pattern caused thereby at the waist and hip portions, forming definite guides, showing exactly where and how much stretching or shrinking may be required in the cloth-sections cut by 35 the patterns from which the completed garment is to be formed.

Patterns thus made are exceedingly durable and readily preserved for future use.

The cloth-sections cut by my improved 40 terns are readily united in their proper position, the guide-notches 20 and 21 greatly lessening the danger of mistakes in this particular.

The hardened plastic garment being an exact reproduction of the figure to which it was

applied, and the seam-lines thereon being de- 45 termined with mathematical exactness, the necessity of trying on and refitting the completed garment is avoided.

Having thus explained my invention, what I claim is—

1. A belt or band having pattern-marking guide-bars extending therefrom and adjustable horizontally thereon, said guide-bars being free at their outer ends. 50

2. The combination of a waist-belt, pattern-marking guide-bars adjustable thereon and extending upward therefrom, a neckband and dependent pattern-marking guide-bars adjustable on said neckband, the upper and lower ends of said guide-bars, respectively, 60 being free, substantially as described.

3. The combination of a waist-belt, two straight upright pattern-marking guide-bars, as *k* and *t*, disposed on said belt for indicating the main front and back waist seams, a 65 curved pattern-marking guide-bar, as *r*, disposed on said belt adjacent to the bar *t* for indicating the rounding back seam, a straight inclined pattern-marking guide-bar, as *q*, disposed on said belt next to said curved bar 70 for indicating the side back seam, a straight pattern-marking guide-bar, as *p*, disposed on said belt next to the bar *o* and inclined in a direction opposite thereto for indicating the under-arm seam, and two straight inclined 75 pattern-marking guide-bars, as *l* and *m*, disposed on said belt between said bars *p* and *k* for indicating the darts, the upper ends of said guide-bars being free, substantially as described. 80

4. The measuring-belt *f*, combined with the sliding guides *k l m p q r t*, respectively, provided with a hook and eye in opposite ends, substantially as and for the purpose set forth.

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