

(No Model.)

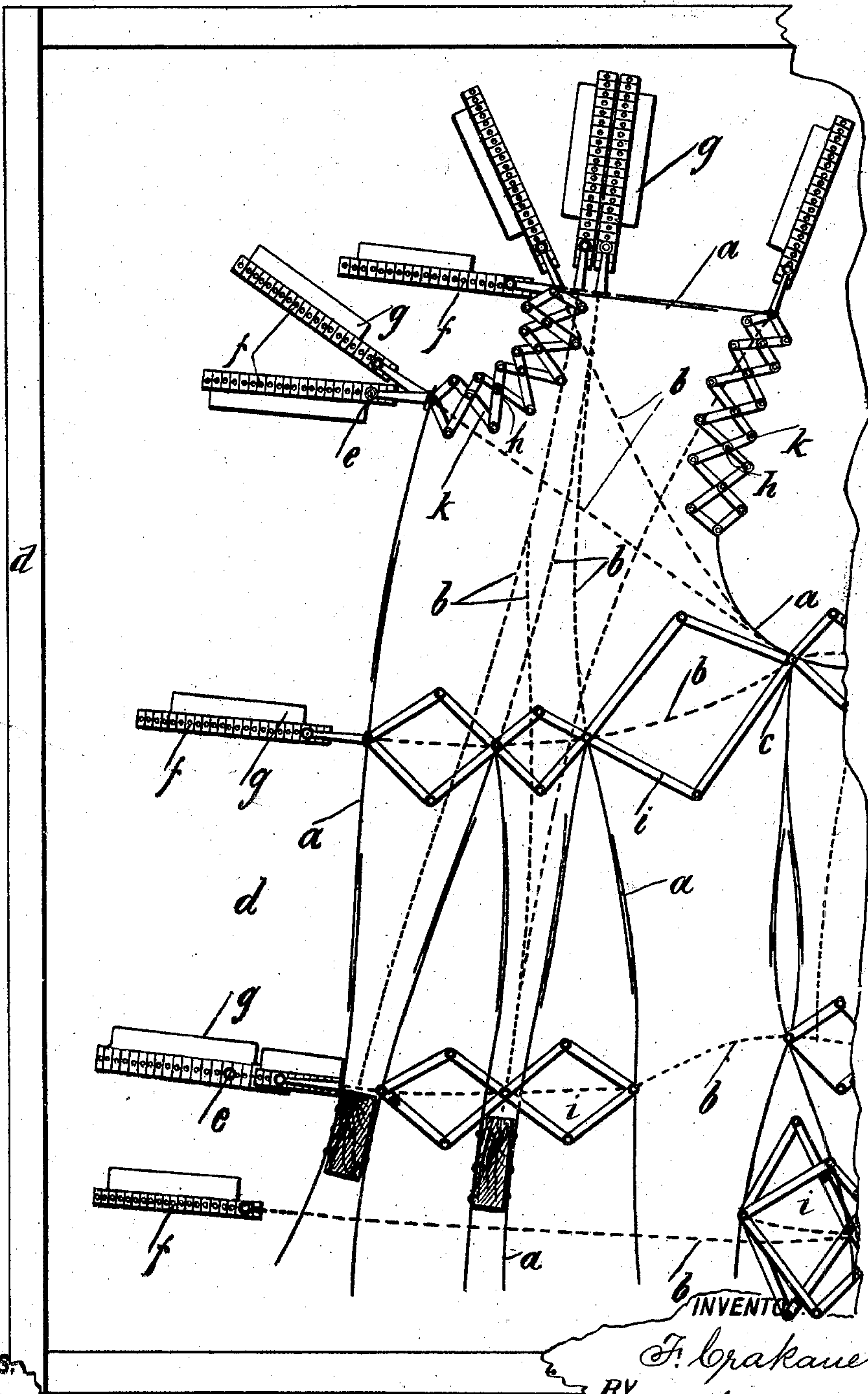
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F. CRAKAUER.  
APPARATUS FOR PRODUCING PATTERNS.

No. 558,780.

Patented Apr. 21, 1896.

Fig. 1



WITNESSES

John Lotka  
S. Sedgwick

BY *F. Crakauer*  
*Munn & Co*  
ATTORNEYS

(No Model.)

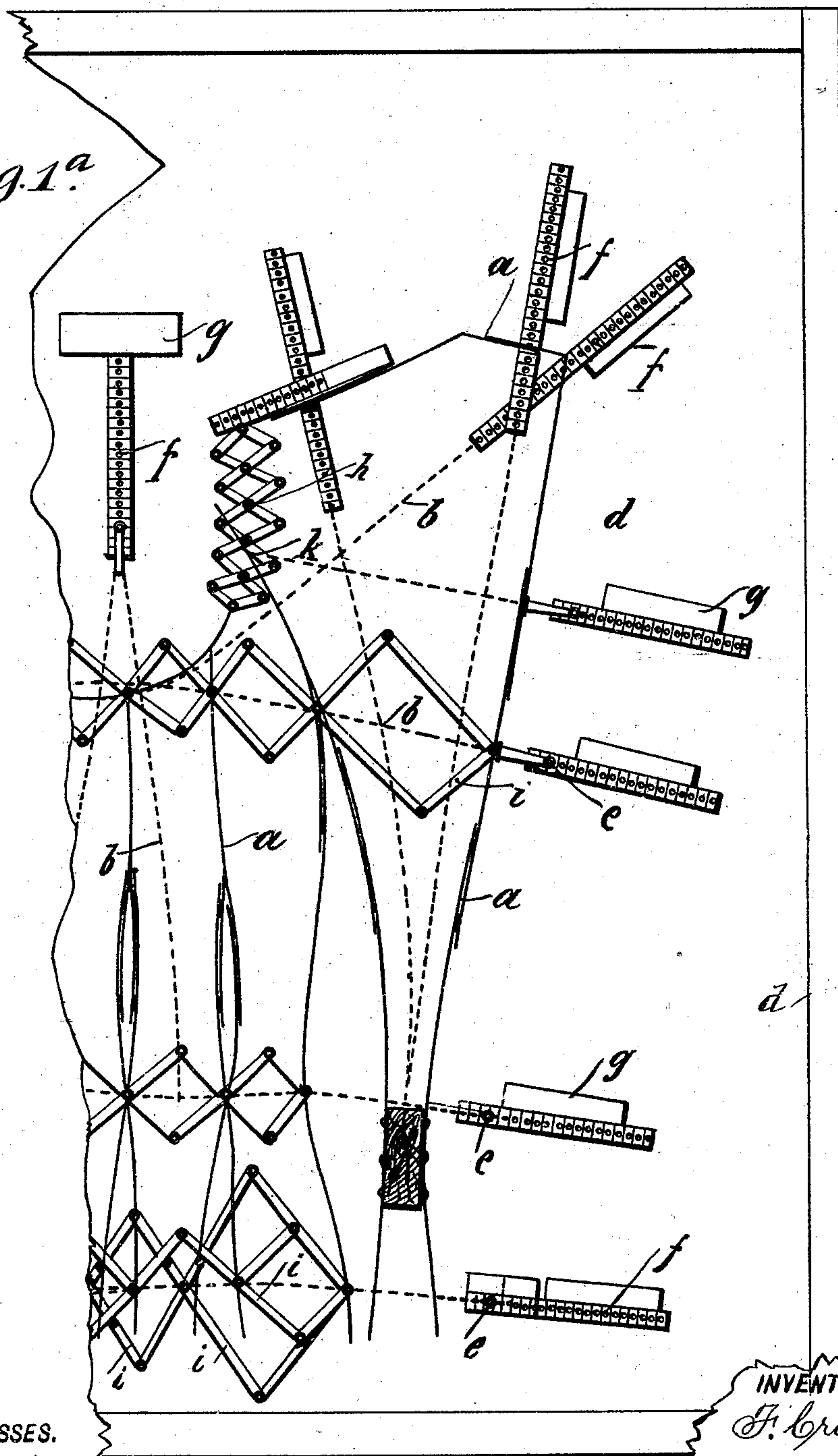
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Fig. 1<sup>a</sup>



WITNESSES.

John Lottka  
C. Sedgwick

BY

INVENTOR:

F. Crakauer

Munn & Co

ATTORNEYS



# UNITED STATES PATENT OFFICE.

FELIX CRAKAUER, OF WIESBADEN, GERMANY.

## APPARATUS FOR PRODUCING PATTERNS.

SPECIFICATION forming part of Letters Patent No. 558,780, dated April 21, 1896.

Application filed August 31, 1895. Serial No. 561,173. (No model.)

*To all whom it may concern:*

Be it known that I, FELIX CRAKAUER, of Wiesbaden, Prussia, Germany, have invented a new and Improved Apparatus for Producing Patterns, of which the following is a full, clear, and exact description.

My invention relates to a device for producing patterns for garments. According to the usual practice the patterns are first drafted and then cut out, and this procedure is both tedious and complicated, so that it requires a considerable degree of skill to produce satisfactory results by this method.

The object of my invention is to dispense with the drafting or laying out of the pattern and to provide an apparatus which when adjusted according to a series of predetermined measurements will automatically form the required outline of the pattern, and which will be so constructed that said outline can be transferred directly to the paper on which it is desired to produce the pattern.

The improved apparatus comprises a series of extensible outline-strips, provided with teeth or the like to produce an impression upon the paper, and adjusting devices for the said outline-strips. The apparatus also comprises a casing containing the said strips and adjusting devices, the lid or cover of the casing serving as a means for pressing the paper onto the outline-strips.

The invention will be fully disclosed hereinafter, and the features of novelty pointed out in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both the figures.

Figure 1 is a plan of the left-hand portion of the apparatus; and Fig. 1<sup>a</sup> is the complement of Fig. 1, showing the right-hand portion of the apparatus.

The apparatus comprises a series of outline-strips *a*, sundry of which consist of elastic bands, which are made in sections, so as to be extensible, and the said bands *a* are connected and held in their relative positions by means of wires *b* and lazy-tongs *i*.

The apparatus is located within a box *d* and is preferably pivoted to the bottom of the said box, as shown at *c*. The outline-bands *a* and lazy-tongs *i*, and also the lazy-tongs *k*, to be

more particularly referred to hereinafter, are provided with adjusting devices at one of their ends, as shown at *e*, the said adjusting devices consisting of hooks or the like adapted to engage holes *f* in the graduated end pieces *g*. Where the curvature of the lines is such as to exclude the employment of the elastic bands *a*, the outline of the pattern is formed by the axes or central lines of lazy-tongs *k*, provided at their points of intersection—that is, on their axes—with points or teeth *h*. The upper edges of the outline-bands *a* are likewise provided with prongs or teeth. It will be understood that the adjusting devices *e* are to be shifted in each individual case according to the relative measurements taken from the body of the person.

The apparatus shown in the drawings is employed for producing patterns for ladies' waists, and may be also employed for producing patterns for ladies' jackets by simply adding to the bands *a* and the lazy-tongs *k* shown other bands and lazy-tongs, located exteriorly thereof and parallel thereto, so as to give an outline of similar shape and of correspondingly-increased dimensions.

In operation, after the several adjusting devices have been shifted according to the measurements, a sheet of paper or the like is placed on top of the apparatus, so as to lie on the points or teeth of the bands *a* and on the points *h*, and then the lid of the box or casing is pressed down upon the said sheet of paper, so that the teeth or prongs will produce in the paper a series of impressions, constituting together the complete outline of the pattern.

It will be understood that any number of duplicates may be produced in this manner, and I desire it to be understood that the bands *a* and lazy-tongs *i* *k* all constitute part of the outline, and therefore may be included under the generic term of "extensible outline-strips."

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

1. An apparatus for producing patterns, comprising flexible bands arranged to stand approximately perpendicular to the plane of the pattern and made in sections connected to slide longitudinally upon each other, said



flexible bands forming part of the outline of the pattern, and lazy-tongs having their ends connected to the free ends of the flexible bands and completing the outline of the pattern, said lazy-tongs being provided at their points of intersection with pins or teeth projecting approximately flush with one edge of the flexible bands, substantially as described.

2. An apparatus for producing patterns, comprising extensible outline-strips movably connected to each other, flexible connections, such as wires, having one end secured to the outline-strips and extending across the apparatus, the other ends of said connections being free and adjusting devices adapted to be engaged by the free ends of the said flexible connections, substantially as described.

3. An apparatus for producing patterns, comprising a casing, and a marking appa-

tus proper pivoted thereto, said marking apparatus consisting of flexible outline-bands placed edgewise on said casing and connected to slide longitudinally upon each other, lazy-tongs having their ends connected to the ends of sundry of the flexible bands and provided at their points of intersection with pins or teeth projecting approximately flush with one edge of the flexible bands to complete the outline of the pattern, and adjusting devices for the said outline-bands and lazy-tongs, substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

FELIX CRAKAUER.

Witnesses:

ALVESTO S. HOGUE,  
JEAN GRUND.