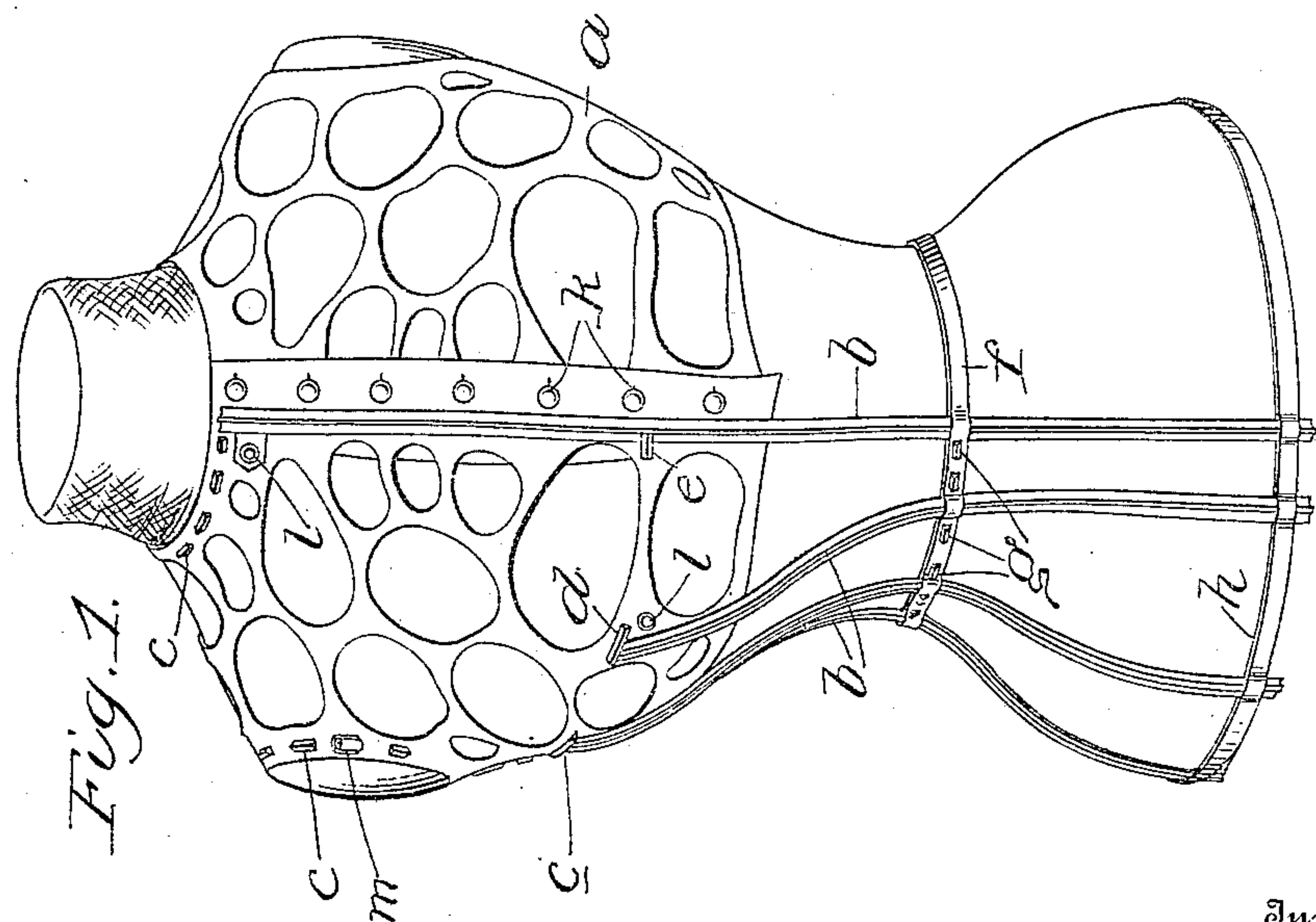
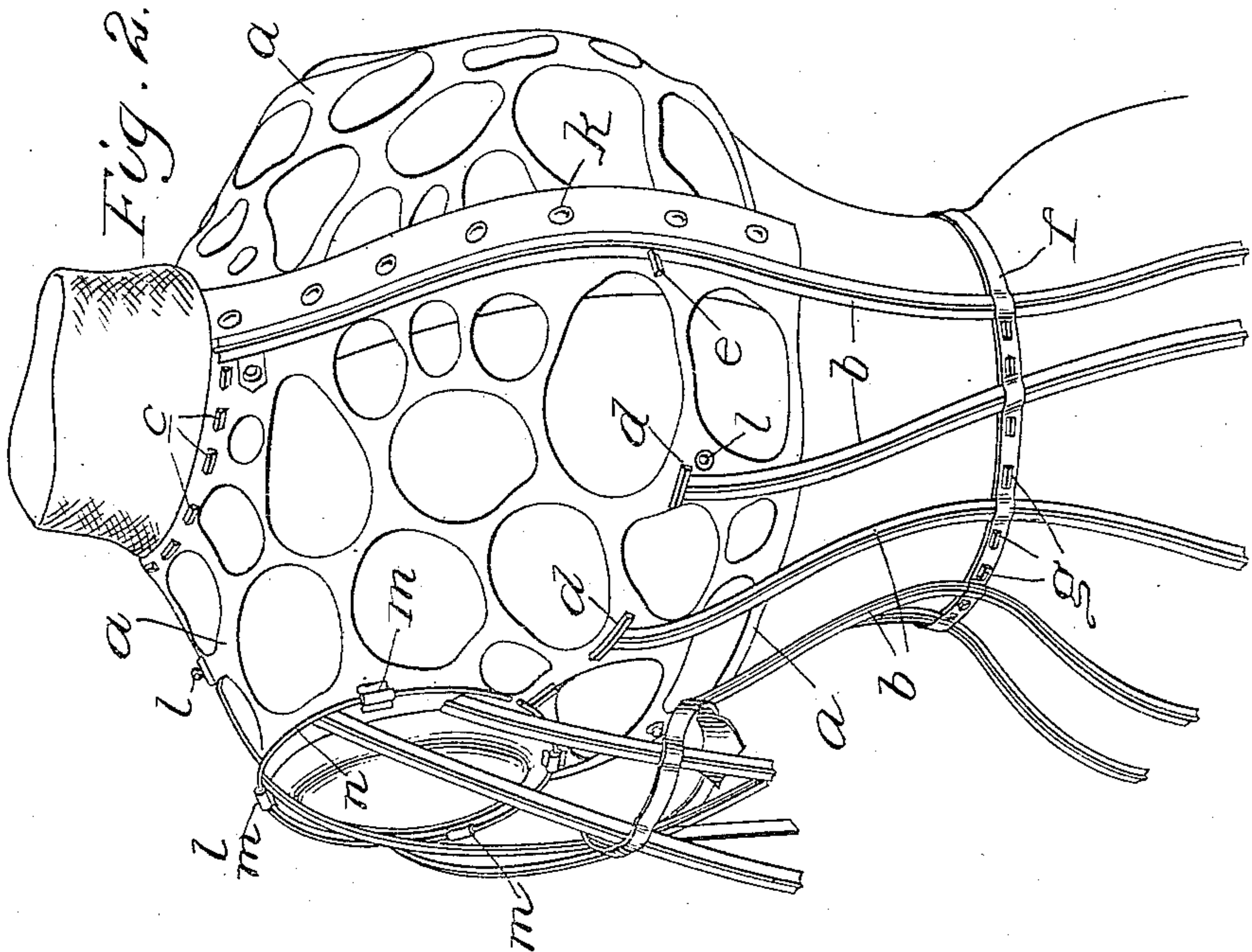


E. J. CURRAN.
 APPARATUS FOR DRAFTING GARMENT PATTERNS.
 APPLICATION FILED JAN. 26, 1907. RENEWED OCT. 9, 1909.

943,770. Patented Dec. 21, 1909.
2 SHEETS—SHEET 1.



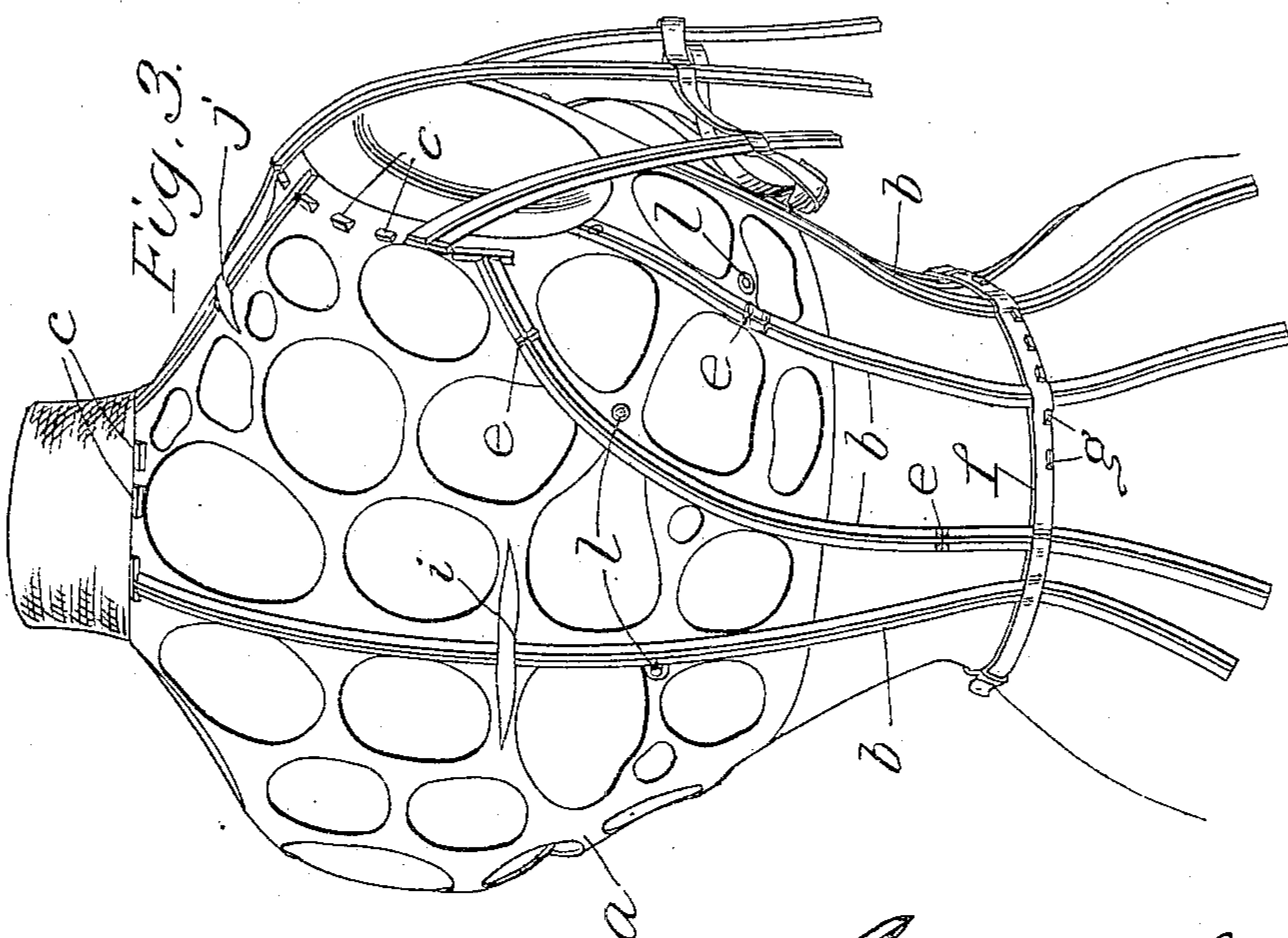
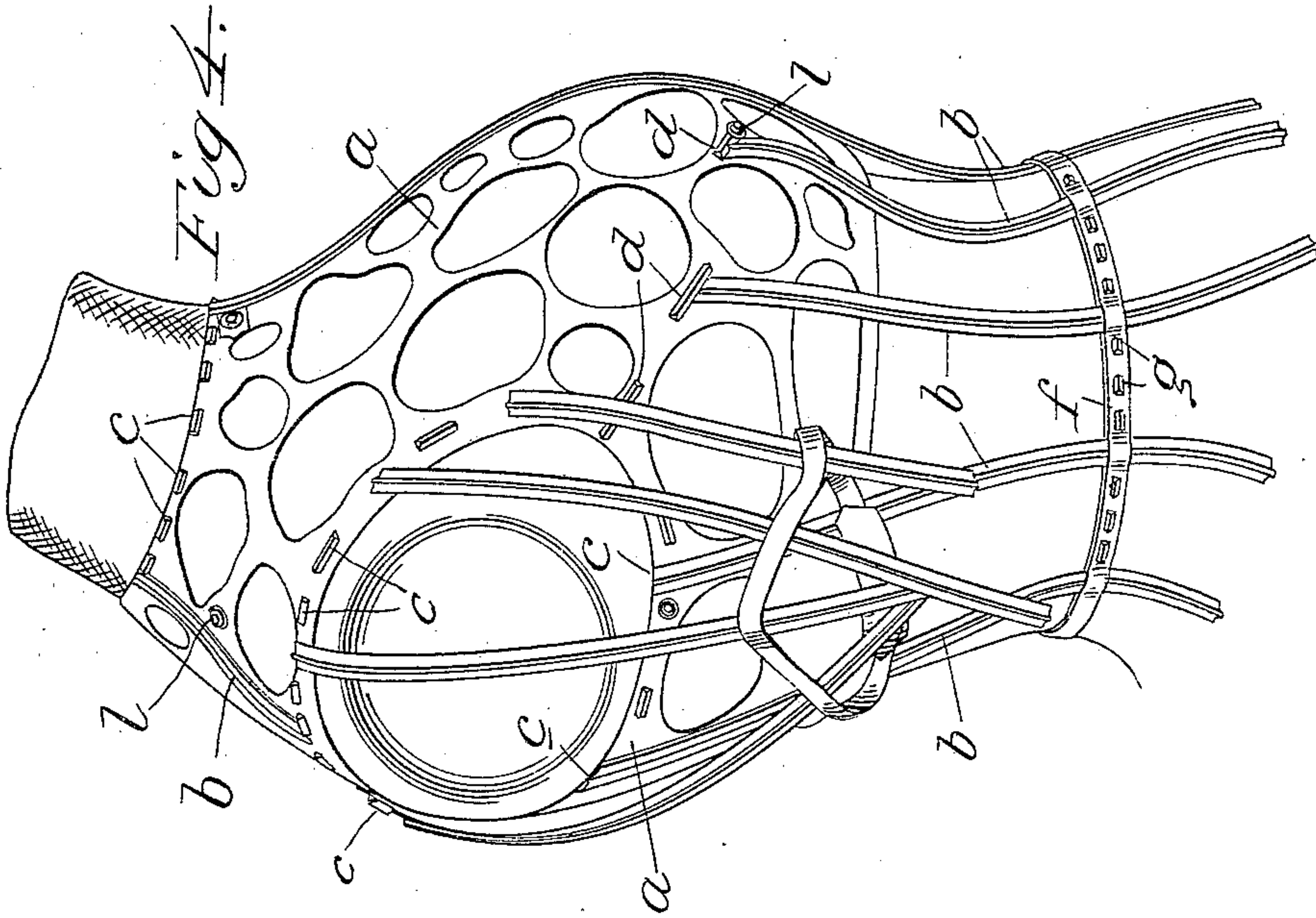
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UNITED STATES PATENT OFFICE.

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ONE-HALF TO DAVID H. ACKERMAN, OF NEW YORK, N. Y.

APPARATUS FOR DRAFTING GARMENT-PATTERNS.

943,770.

Specification of Letters Patent.

Patented Dec. 21, 1909.

Application filed January 26, 1907, Serial No. 354,293. Renewed October 9, 1909. Serial No. 521,952.

To all whom it may concern:

Be it known that I, EDWARD J. CURRAN, a citizen of New South Wales, Australia, residing at Sydney, New South Wales, Australia, have invented certain new and useful Improvements in Apparatus for Drafting Garment-Patterns; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to the art of drafting garment-patterns by marking on paper or other pattern-material, placed on or around the person or figure to be fitted, certain contour-lines of the figure or the intended seam-lines of the garment, or the outlines of those portions of the figure that are to be covered by the single pieces of the garment.

The principal objects of the invention are to simplify, expedite and facilitate the drafting of patterns in this manner, as well as to obtain accurate and satisfactory results thereby; for which purposes my invention provides a convenient and practicable device, in the nature of an elastic coat or garment, having certain pronounced contour-lines or seam-like projections for reproduction on the pattern-material while the device is on the figure to be fitted, and which device can be stretched over or fitted to different figures of varying sizes and forms, so as to delineate the patterns for any figure on which the same is applied.

In the accompanying drawings, which form a part of this specification, I have illustrated one preferred form of apparatus embodying my invention; it being understood, however, that the same is susceptible of modifications and embodiment in other forms, so that the scope of my invention is not to be restricted to the specific illustrated details.

The several figures of the drawings show the apparatus fitted on or applied to a dummy figure. It will be understood, however, that the same is more particularly intended to be fitted directly on the human figure or on the person for whom a garment is to be prepared. In this connection, it may be mentioned also that the apparatus is made to fit only a certain style or genus of figure, such as a male or a female figure; but it will fit figures of different sizes and shapes

of the same genus. The invention is, however, more especially useful in connection with the drafting of patterns for women's garments, and is shown in the accompanying drawings applied to that purpose; the dummy figure illustrated being like that of a woman.

Figure 1 of said drawings is a front view of the apparatus, without the arm attachment. Fig. 2 is a front perspective view with the arm attachment. Fig. 3 is a back perspective view. Fig. 4 is a side view.

As shown in the drawings, the apparatus comprises an elastic jacket, designated as a whole by the letter *a*. It is similar in general form and construction to a vest or waistcoat, and is adapted to be placed in like manner upon the figure or person to be fitted or measured for a garment. Said elastic jacket *a*, being designed to fit closely and conform to the size and shape of the figure, is made in any suitable way and of any appropriate material for that purpose. Rubber is, of course, the preferred substance, or some compound of rubber, though I do not restrict myself thereto, since any elastic material may be employed that may be found suitable in points of strength, durability, non-adhesiveness and wearing qualities, &c. The material of said jacket is not left whole, but large spaces or perforations are cut or provided therein, leaving such a connecting net-work as is essential to maintain the requisite shape of the article; the chief purpose of which is to allow a greater range of stretching or elasticity without injuring the rubber, and to adapt the jacket to more readily conform to the size and shape of the particular figure on which it may be fitted, while also lightening the weight of the article and saving material in its production. In the form thus described, and as shown in the accompanying illustrations, the said elastic jacket may be made either by forming, molding or otherwise producing the same from a rubber or elastic sheet or sheets, in proper shape to fit the human figure, and then cutting the aforesaid holes or perforations therein; or the jacket may be formed by suitably joining together a net-work of elastic strips or pieces.

The jacket is exteriorly provided with certain outstanding, pronounced or main lines *b*, appearing like the seam-lines of a woman's garment, and arranged at or to con-

form to certain contour lines or curves of the figure, or along those lines of the jacket which coincide with the usual seam-lines of the garment or with the outlines of those portions of the figure that are covered by the single or separate pieces of the garment. These may be termed "delineating-lines", since they are intended to allow tracing or drafting of the several sections or templates of the garment pattern by placing the paper or other material over the jacket while it is fitted on the figure and then marking the same on or over such delineating-lines. The said delineating-lines *b* are relatively stiff, but plastic, and are made preferably as hard strips, projections, or the like, and for this purpose I find that the best mode of producing them is to use a well vulcanized or well hardened rubber just along the seam-lines, making the same so as to project outwardly as sharp ridges. However, the broad scope of my invention contemplates any equivalent means; for example, wires or other strips of hard substance, preferably flexible or plastic, may be fixedly arranged along the seam-lines; or the several delineating-lines may be composed of a plurality of wires or metallic sections, or sections of other hard substance, arranged end to end along the seam-lines and respectively secured to the material of the jacket, so that the jacket may stretch while yet the seam-lines as a whole, each composed of several short sections, will assume the general form desired. However, it is preferable to make the seam-lines as vulcanized or hardened ridges on rubber strip foundations, in the manner shown in the drawings, inasmuch as this mode of construction provides the necessary stiffness, and makes the seam-lines or delineating-lines stand out prominently, while yet allowing a certain range of flexibility in the jacket as a whole.

It will be observed that the delineating-lines *b* are the salient or distinguishing lines of the jacket, which might obviously be constructed by first arranging suitably formed plastic strips and then connecting the same by an elastic web or net-work. Said delineating-lines *b* are, moreover, respectively continuous along the contour-lines of the figure, excepting around the arm-hole and neck where they are broken, as indicated at *c*, to allow the elastic material to stretch in these places. The seam-lines *b* at the back and side of the jacket, as well as the central seam-lines, are shown extending continuously from the neck and shoulder downwardly; while the front seam-lines at the sides of the center are shown extending from a position below the breast, in conformity with the usual seam-lines of a woman's garment. At the upper extremities of the several seam-lines, small cross lines or ridges *d* are provided on the outer sur-

face of the material, to denote the terminals of the lines on which the garment-patterns are to be cut. Similar cross lines, as indicated at *e* should also be provided at intermediate positions, on every seam if needed, to show how the pattern is put together after it has been printed or marked from the person, since these lines *e* show as well as the seam-lines *b* themselves when the marking substance is pressed over the pattern sheet attached to the rubber apparatus on the person.

It is not necessary that the seam-lines should be provided at each side of the jacket, but it is sufficient, and in fact preferable, to equip only one half or side of the jacket with the seam-lines, as shown in the drawings. This will give the proper outlines for the garment patterns for the half section of the figure extending from the middle vertical line at the back to the middle vertical line at the front; and the pattern sections or templates for the opposite half of the figure will, of course, be duplicates of the former ones.

In the case of drafting women's garment-patterns, it is preferable that the web portion or net-like body of the jacket shall cover only the bust portion of the figure, and the several vertical strips carrying the delineating-lines *b* are arranged to depend or hang loosely from this bust portion of the jacket, and are connected and drawn in by a waistband *f*. Said waistband is slidably arranged on said strips, to allow for adjustment at the waist, and the said waistband *f* is also provided with a series of projecting hardened ridges or a broken delineating-line *g*, to permit the marking of the waistline and allow stretching of the material at this point, the same as at the neckband and arm-hole. The lower ends of the strips carrying the seam-lines *b* may be connected by a similar band *h* to go around the hips.

At those places where variations may be needed in the lengths of the delineating-lines, to conform to different sizes of figures, I provide for adjustment. This may be obtained by breaking or separating the seam-line, as indicated at *i* in Fig. 3, in respect to the middle vertical seam-line, to allow the upper portion of the seam-line to go high up to the neck. There may be a similar break in the shoulder seam-line, as indicated at *j* in Fig. 3, to allow the upper portion of said seam-line to go high up to the neck.

The rubber coat or jacket *a* preferably opens at the front, and the opposite sides thereof are joined by suitable fastening devices, as indicated at *k*. These may be buttons, hooks and eyes, fastening studs and sockets, or the like.

Studs *l*, similar to ordinary dress fastenings, are distributed at suitable intervals

as desired over the exterior surface of the rubber jacket. These are for the purpose of fastening the paper or pattern-material on the jacket, which is done after the jacket is put on the figure, which the operator is fitting.

To use the apparatus, the person to be fitted puts on the rubber jacket *a* in the same manner as a waist-coat. The figure is now similar to a rubber type, which is to print separate sections of the garment. The operator places paper or pattern-material on the rubber jacket, and fastens the same by means of the studs or otherwise. Then with a marking substance, such as pencil or compressed chalk, the operator passes over the outside of the paper or pattern-material, over the delineating-lines, which produces a mark at the same. Thus a print of each section or templet of the pattern between adjacent delineating-lines will be obtained. The other sections are obtained in the same manner until all are done.

In Fig. 2, I show small holders *m* for a plastic wire *n*. This wire is to be used only when the person is soft and fat and offers no resistance to the slight pressure which is necessary in passing the pencil or marking device over the paper or pattern-material. Similar holders for plastic wires may be distributed over the apparatus according to requirements. Thus in place of the construction of the seam-lines as shown, consisting of hardened rubber ridges on rubber strip foundations, the several strips may be provided with such holders for plastic wires.

A sleeve marking attachment, as shown in Figs. 2, 3 and 4, constructed on the principles of the body jacket, may be provided, though this is not usually desired.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent of the United States, is:—

1. An apparatus for the purpose described comprising an elastic jacket having comparatively large openings distributed over its surface for augmenting its elasticity, and relatively hard though pliable delineating ribs disposed wholly upon and attached to the external surface of the jacket and arranged in lines corresponding to the intended seam lines of the garment, said ribs providing continuous smooth lines on which pattern-material can be marked by passing a marking substance over said material on said lines.

2. An apparatus for the purpose described comprising an elastic jacket, rubber strips applied to the external face of the latter and having projecting vulcanized rib portions forming relatively hard though pliable delineating lines arranged in lines corresponding to the intended seam lines of the garment.

3. An apparatus of the type described comprising a jacket composed of open work elastic webbing, pliable rubber strips attached to and wholly upon the external face of the jacket and having projecting vulcanized portions forming comparatively hard though pliable delineating lines corresponding to the intended seam lines of a garment.

4. An elastic jacket formed to fit the bust portion of a female figure and having flexible or pliable delineating strips corresponding to the seam lines of a garment, said strips of a length to project below and depend loosely from said jacket, and a vertically sliding waist-band connected and arranged for movement on the depending portions of said strips.

5. An apparatus of the type described comprising an elastic jacket formed to fit the bust portion of the human figure, relatively hard though pliable delineating strips attached to said jacket along lines corresponding to the intended seam lines of the garment, said strips being of a length to project below and depend loosely from said jacket, and waist and hip bands slidably connected with the depending portions of the strips for movement upward or downward thereon.

6. A jacket of elastic material for fitting a person's bust and externally provided with flexible marking ribs corresponding to intended seam lines of a garment and with cross ridges at the terminals of such ribs.

7. A jacket of elastic material for fitting a person's bust and externally provided with flexible marking ribs corresponding to intended seam lines of a garment, and the material having splits or breaks across those marking ribs, such as the rear middle seam line and the shoulder line, which require varying in length when fitting the jacket on persons of different shapes or sizes.

In testimony whereof I affix my signature, in presence of two witnesses.

EDWARD JAMES CURRAN.

Witnesses:

WILLIAM McCLEAN,
JOHN TURNER.