

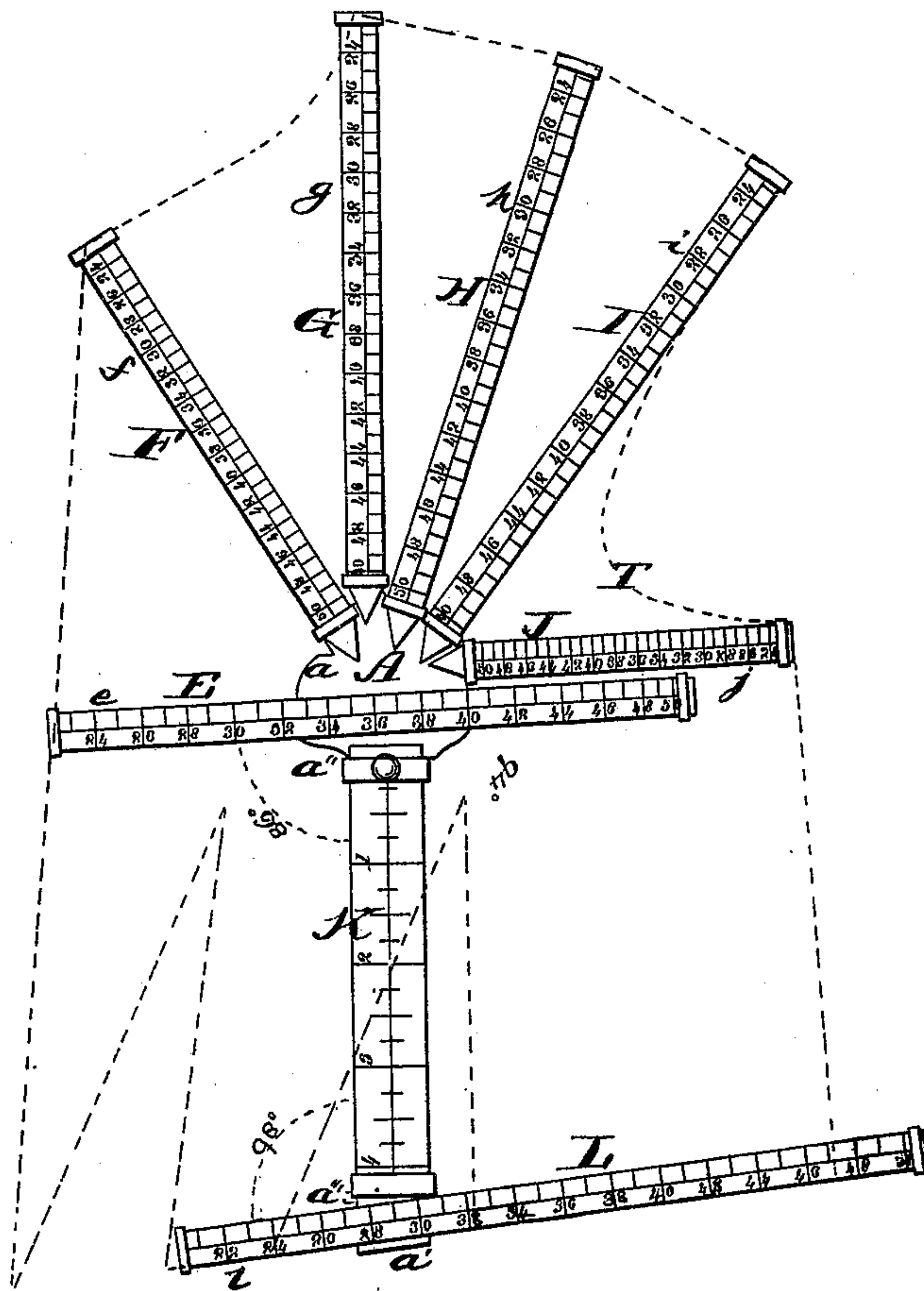
Z. BAUER.

APPARATUS FOR DRAFTING PATTERNS FOR DRESSES AND COATS.

No. 195,332.

Patented Sept. 18, 1877.

FIG. 1.



ATTEST.

*J. Hornsby*  
*Paul Barwell*

INVENTOR.

*Zacharius Bauer.*  
*by Chas. S. Moody,*  
*att'y.*

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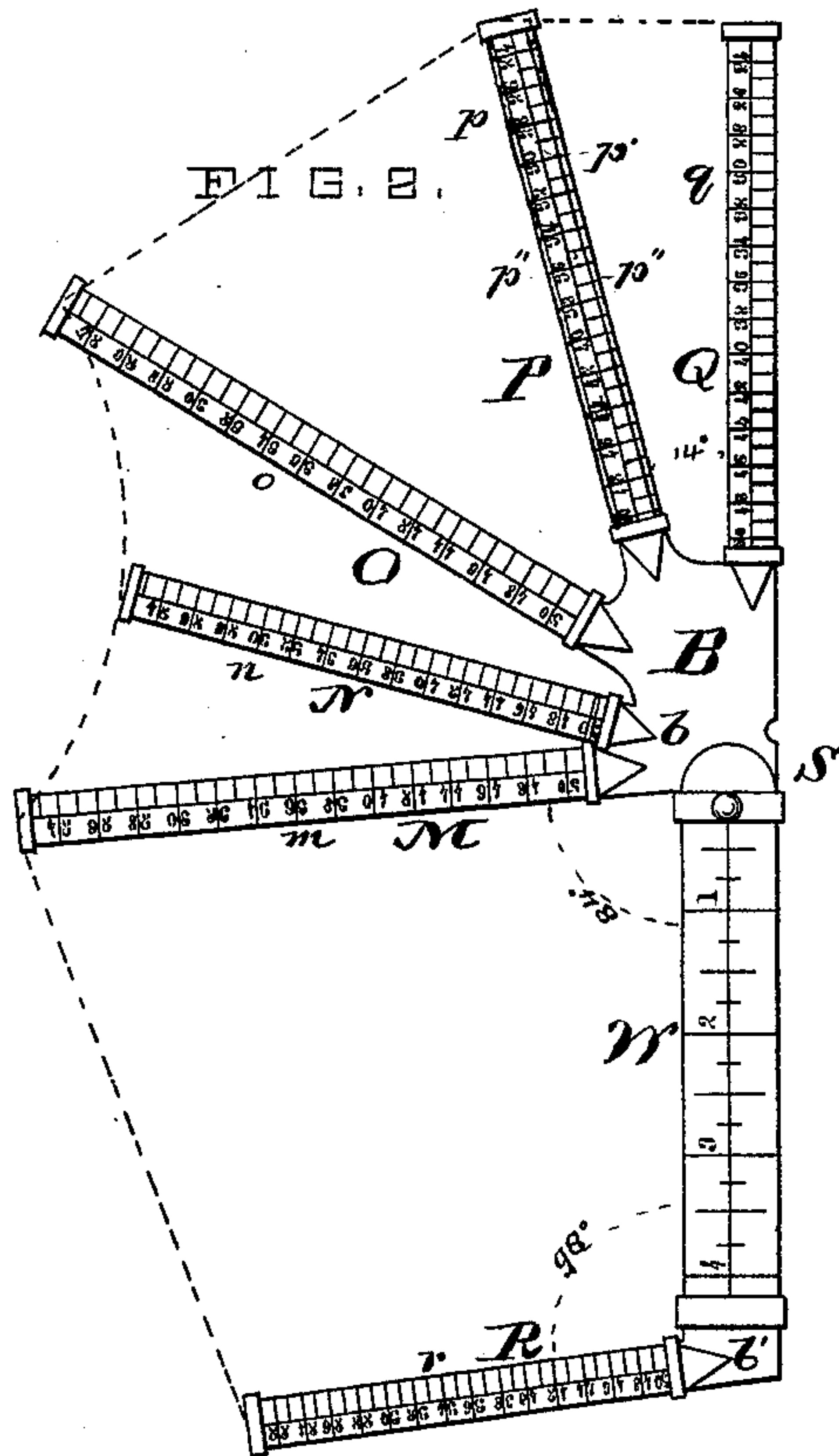
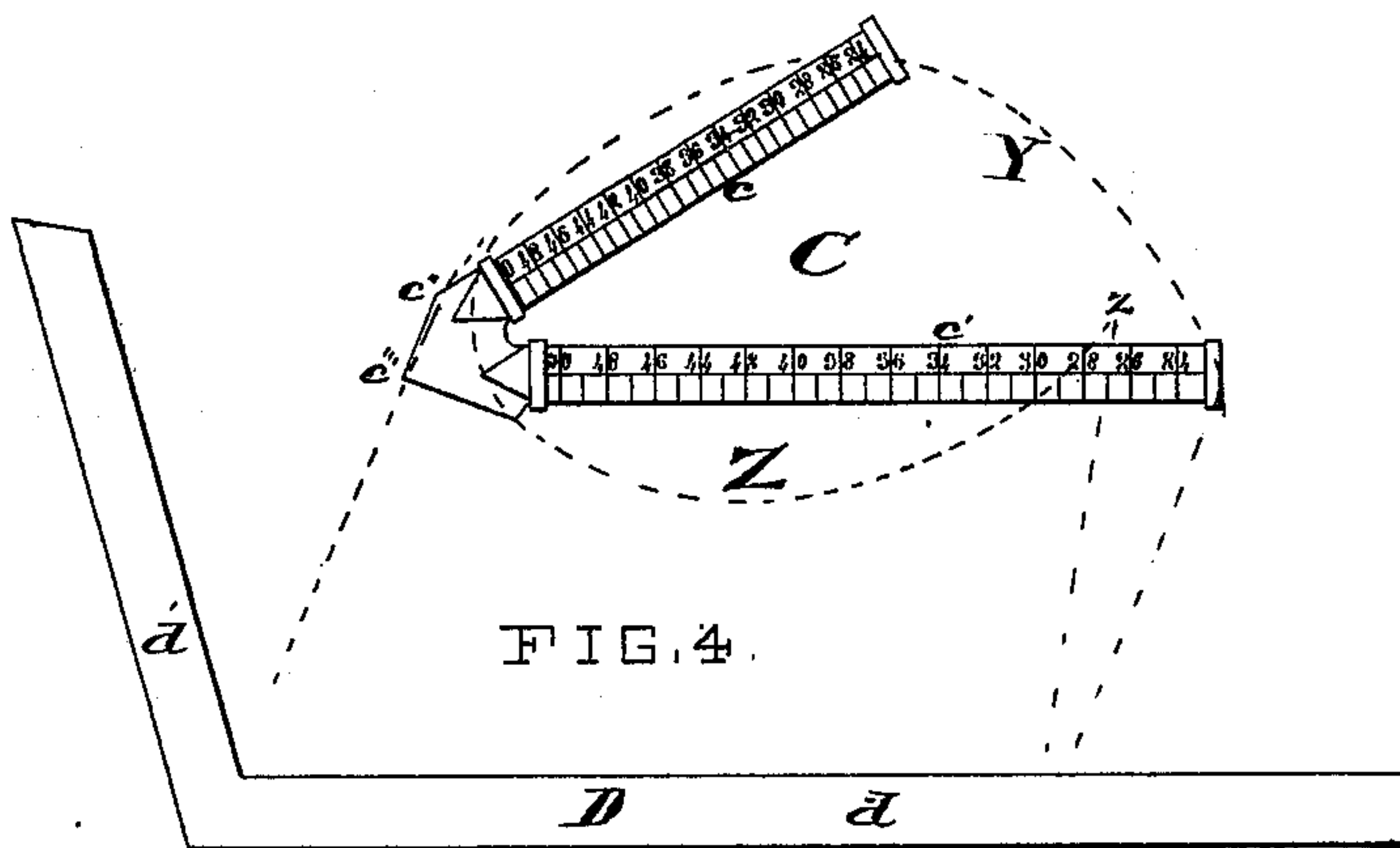


FIG. 3.



ATTEST,  
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Paul Bakerwell

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# UNITED STATES PATENT OFFICE.

ZACHAEUS BAUER, OF ST. LOUIS, MISSOURI.

## IMPROVEMENT IN APPARATUS FOR DRAFTING PATTERNS FOR DRESSES AND COATS.

Specification forming part of Letters Patent No. 195,332, dated September 18, 1877; application filed June 22, 1877.

### *To all whom it may concern:*

Be it known that I, ZACHAEUS BAUER, of St. Louis, Missouri, have made a new and useful Improvement in Apparatus for Laying Out Dress and Coat Patterns, of which the following is a full, clear, and exact description, reference being had to the annexed drawing, making part of this specification, where—

Figure 1 shows that part of the apparatus used in laying out the front of the garment; Fig. 2, that part used in laying out the back of the garment; Fig. 3, that part used in laying out the sleeve; and Fig. 4, that part used in laying out the skirt. The dotted lines indicate the outlines of the several portions of the pattern.

Similar letters refer to similar parts.

I have heretofore invented a device for laying out coats, patented June 1, 1875.

The present device is intended more especially for laying out dresses and other garments of ladies' wear, and it is a modification of the construction referred to, in that the arrangement of several of the arms of the device is changed to conform to the female figure.

As the present arrangement of the arms in question is essential to the present purpose, the precise inclinations of the arms will be hereinafter particularly described.

As in the former construction, the device is composed of two parts, mainly, A and B, shown, respectively, in Figs. 1 and 2, and which, respectively, are used in laying out the front and back of the garment. There are also two other parts, C and D, shown, respectively, in Figs. 3 and 4, and employed, respectively, in laying out the sleeve and the skirt.

Each of the parts A and B, considered generally, is further composed of an upper and lower part, sliding vertically upon each other, and designated, respectively, *a* and *a'* and *b* and *b'*. The upper part, *a*, is constructed as follows: The arm E extends in the direction of the breast-measurement; the arm F in the direction of the neck in front; the arm G in the direction of the shoulder-point of the neck; the arm H in the direction of the top of the shoulder; the arm I in the direction of the shoulder-point, and the arm J in the direction opposite to that of the arm E.

The upper and lower parts *a* and *a'* of the

part A are adjusted vertically to each other at K by sliding the part *a''* upon *a'''*, and fastening them at the desired point. The lower frame, *a'*, is provided with an arm, L, arranged in the line of the slope of the waist from the side of the body to its front, and as shown in Fig. 1.

Instead, however, of arranging the arms E, J, and L as shown in the patent referred to, viz., the arms E and J at right angles to the part K, and the arm L at an angle of one hundred and three degrees therewith, they are arranged at the particular angles designated on the drawing, viz., the arm E at an angle of eighty-six degrees, the arm J at an angle of ninety-four degrees, and the arm L at an angle of ninety-eight degrees with the part K.

The upper part, *b*, of the part B is, as previously, provided with five projecting arms, M, N, O, P, and Q. The lines of their projections are, respectively, as follows: The arm M in the line of the breast-measurement; the arm N in the direction of the arm-hole; the arm O in the direction of the shoulder-point; the arm P in the direction of the shoulder-point of the neck; the arm Q in the direction of the center of the back of the neck. The upper and lower portions, *b* and *b'*, of the part B slide upon each other in a manner similar to the parts of the frame A. The lower portion, *b'*, is provided with an arm, R. Now, of these last-named arms three (N, O, and Q) are arranged as heretofore. The remaining three, (M, P, and R,) however, are changed, and as follows: The arms M and R, instead of being at right angles with the part lettered W, as hitherto, are arranged therewith at the angles designated, viz., the arm M at an angle of eighty-four degrees, and the arm R at an angle of ninety-eight degrees. The arm P, in place of being parallel with the arm Q, is arranged at an angle of fourteen degrees therewith.

All of the above-described changes, saving that of the arm P, are to provide for ladies' garments exclusively. The change in the position of the arm P facilitates the laying out of coat-patterns as well as dresses. In consequence of its inclination to the arm Q, as described, the distance between the ends of the slides *p* and *q* is increased as the latter



are moved outward, and the pattern at this point is thus made to conform more accurately to the enlarged size.

The operation of the invention is similar to that of my aforesaid patented device—that is, six measurements of the person are taken. First, from the center of the back of the neck straight down to the breast-line; second, from the same point to the line of the waist; third, from the same initial point down over the shoulder to the front of the arm at the breast-line; fourth, the full length of the garment, according to its style; fifth, from the center of the back to the arm, thence to the elbow, and then the full length of the arm; sixth, the breast and waist measurements in the ordinary way. The slides of all the arms of both parts of the device (saving those relating to the waist) are then set out to the number on the scale corresponding to the breast-measurement. The positions of the slides of the arms P and Q of the part B are then tested and corrected by laying off the extent of the first measurement above named upon the device—that is, from the point S toward the end of the slide of the arm Q—and adjusting the slide accordingly. The position of the slide of the arm P is then corrected by that of the arm Q. The slides of the remaining arms of the part *b* are not altered. The parts *b* and *b'* are then opened out, according to the second measurement above named. The parts *a* and *a'* of the part A are similarly opened out. Then, by means of the third measurement above named, adjust the position of the slide of the arm G relating to the position of the shoulder-point of the neck. In making this adjustment, first measure on the part *b* the distance from the end of the slide *g* to the end of the slide *p*, deduct this from said third measurement, and lay the remainder off from the point T (or position of the front muscle of the arm) toward the end of the slide *g*, adjusting the latter accordingly. The remaining slides of the frame *a* are not moved.

If a very accurate measure is desired, the position of the slide *n* (or the one relating to the end of the arm) is corrected by the fifth measurement above named. The slides on the arms L and R are then set out to the size of the waist.

To lay out the sleeve, the part C, Fig. 3, is used. This consists of two arms, *c* and *c'*, joined at the angle shown, and suitably provided with extension-slides. The latter (and from the side *c'' c'''* as a base) are set out according the breast-measurement above named. The curved dotted line Y is then drawn from the point *c''* to the center of the end of the slide of the arm *c*, and thence to the center of the end of the slide of the arm *c'*. This is for

the upper side of the sleeve. For the under side, draw another curve, Z, as shown, and terminating at a point, *z*, one inch inside the end of the line of the upper side of the sleeve and above the arm *c'*.

To lay out the skirt, the part D, Fig. 4, is used. This part consists of two arms, *d* and *d'*, joined at the angle shown. By laying either arm against the arm R the other arm indicates the outline of the skirt.

The position of the arm L of the part A may be varied slightly, according to the position of the dress; but the position of the arms M and R of the part B remains the same in all cases.

At P, Fig. 2, a further improvement is shown. Instead of making the slide *p* entirely of a metal strip, and engraving the scale directly upon it, the slide is grooved longitudinally from end to end, and in this groove a paper strip, *p'*, having the scale printed thereon, is attached, and so that the scale occupies the same relative position as when it is graven on the slide.

The side edges *p'' p'''* of the slide protect the sides of the strip *p'* from wear, and, by making the edges *p'' p'''* slightly higher (as is preferable) than the surface of the strip *p'*, the latter is still further shielded.

This last-named improvement not only cheapens the construction of the device, but also enables the scales to be readily changed, at will, without necessitating the abandonment of the entire apparatus.

I claim—

1. The herein-described device for laying out dress-patterns, consisting of the parts A and B, and having the arms E, L, M, and R, arranged as described, substantially as and for the purpose set forth.
2. In the part B, the arrangement of the arms M and R, substantially as and for the purpose described.
3. The part B, having the arm P arranged at the inclination shown, for the purpose described.
4. The combination of the parts A, B, and C, constructed and arranged to operate substantially as described.
5. The combination of the parts B and D, substantially as described.
6. The grooved slide *p*, having the strip *p'*, substantially as described.
7. The combination of the grooved slide *p*, having the edges *p'' p'''* and the strip *p'*, substantially as described.

ZACHAEUS BAUER.

Witnesses:

CHAS. D. MOODY,  
GEO. H. KOHN.