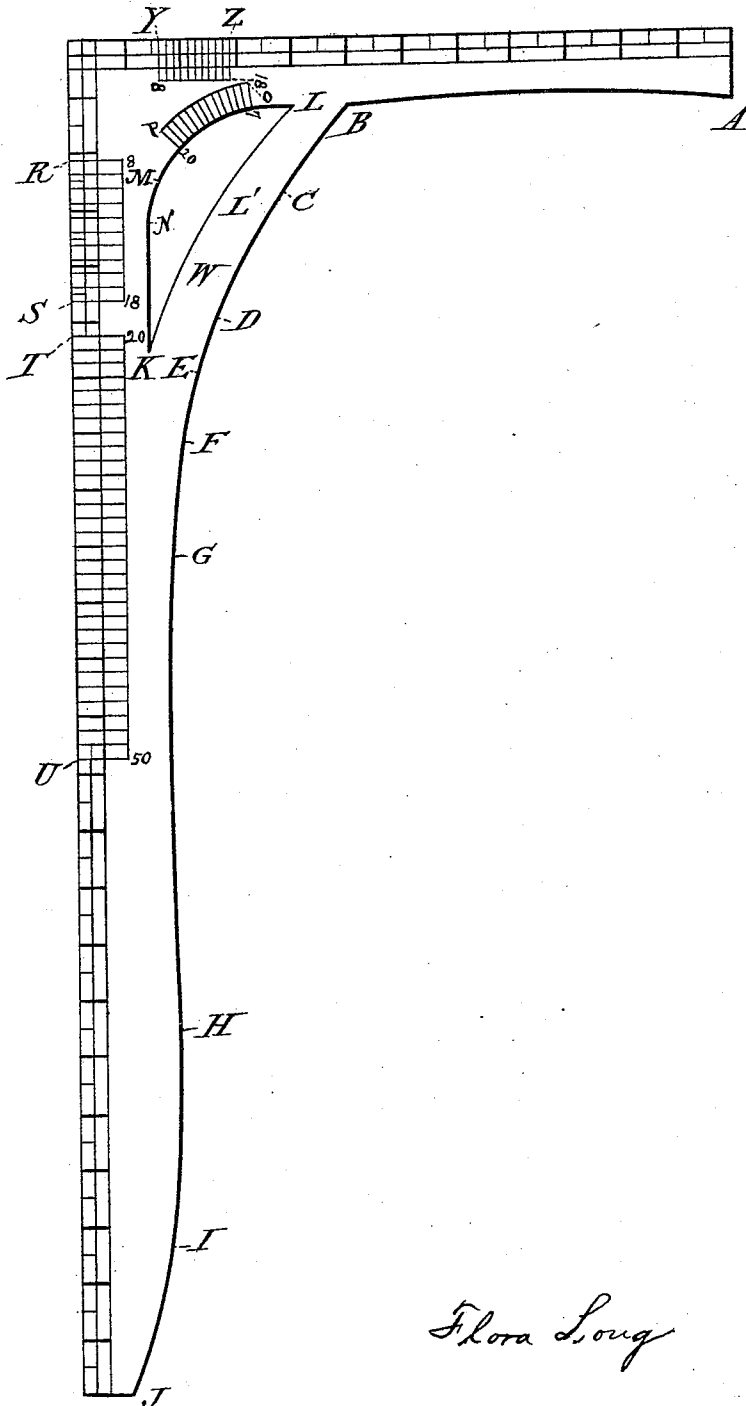


(No Model.)

F. LONG.
DRESS MAKER'S SQUARE AND RULE.

No. 470,809.

Patented Mar. 15, 1892.



Witnesses
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UNITED STATES PATENT OFFICE.

FLORA LONG, OF FORT WAYNE, INDIANA.

DRESS-MAKER'S SQUARE AND RULE.

SPECIFICATION forming part of Letters Patent No. 470,809, dated March 15, 1892.

Application filed April 13, 1891. Serial No. 388,801. (No model.)

To all whom it may concern:

Be it known that I, FLORA LONG, a citizen of the United States, residing at the city of Fort Wayne, in the county of Allen, in the State of Indiana, have invented certain new and useful Improvements in Rules for Cutting Garments; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, which forms part of this specification.

My invention relates to improvements in rules for measuring and cutting out garments and patterns; and its objects are to provide a single instrument which shall combine all of the curves and measurements necessary to lay out the proper pattern, and also to provide improved curves for such work. I accomplish these objects by the mechanism illustrated in the accompanying drawing, in which the figure is a side view of my measuring-rule.

This rule is preferably made of wood of suitable fineness of texture and is in form of a carpenter's square, on its outside lines forming a right angle, the long side being twenty-four inches long and the shorter side twelve inches, and the inches and parts of inches being marked or indicated thereon in the usual manner, but not shown in the drawing to avoid confusing the view. The inner side or edge of the short arm from A to B is cut out to form an arc of a circle whose chord is seven and one-eighth inches long and its radius three feet. This is my "shoulder curve." From B to G, I cut out or form on the outside edge of the brace-piece W another curve or arc of a circle whose chord is eight and eleven-sixteenths inches and its radius eleven inches, the point G being nine and one-half inches from the straight line or outside edge of the short arm of the square. From G to H on the inner edge of the long arm I construct another curve or arc of a circle of lesser curvature, curving outwardly from the straight line of the long arm of the square, its chord being eight and one-fourth inches and its radius ten feet. From H to I, I cut the inner edge of the long arm to form an arc of a circle whose chord is three and seven-eighths

inches and its radius four feet and one-half an inch. From I to J, I cut or construct another curve or arc of a circle whose chord is two and five-eighths inches, with a radius of seven and three-fourths inches. These curves from B to J are constructed so as to form a continuous line. I also construct a curve or arc of a circle L L' K on the inner side of the brace-piece W, whose chord is five and three-sixteenths inches and its radius one foot and three-eighths of an inch. I also construct a curve or arc of a circle L N on the inner corner of the square, whose chord is three and one-half inches and its radius two and five-sixteenths inches, the line N to K being a straight line and parallel with the straight line of the long arm of the square. I also place four different series of measurements upon this square, as follows: Commencing on the short arm one and five-eighths inches from the straight line of the long arm I draw eleven lines at right angles to the short arm one-eighth of an inch distant from each other and number them consecutively, commencing with No. 8 at line Y, to No. 18 at line Z. This is my shoulder measure. Commencing on the curve L N (three-fourths of an inch distant from the point L) at O fourteen lines are similarly marked one-eighth of an inch apart from each other upon the side of the curve and are numbered consecutively, commencing at No. 7 at line O, to No. 20, line P. This measurement is my back neck measure. Commencing on the long arm at R a distance of two and one-eighth inches from the angle of the square I draw eleven lines at right angles to the square one-fourth of an inch distant from each other and number them consecutively, commencing with No. 8 at R, to No. 18 at S. These measurements are for the front neck measure. Commencing on the long arm five and one-fourth inches from the corner I draw thirty-one lines at right angles to the straight line of the long arm of the square one-fourth of an inch distant from each other and number them consecutively, commencing with No. 20 at line T, to No. 50, line V, as shown. These measurements are for my bust measure. In the drawing the first and last lines of these different measures only are numbered, omitting the intermediate numbers to prevent confusion

in the view. I also mark on the curves points to be measured from, as follows: a point at C distant from B one and seven-eighths inches, another point at D distant from C two and one-half inches, and another point at F distant from D two and one-fourth inches. I also mark on the square the points of beginning and commencing of the various curves heretofore described. On the reverse side of the square for convenience I mark the points at B and E thereon, E being distant from the point at D one inch. I also mark on the reverse side of the square the point at M distant from point at N three-fourths of an inch.

The purpose and use of these markings and of the curves and measures will be explained in describing the use of my device. The curve LN is the back-of-the-neck curve. The curve and straight line L N K is the front neck-curve. The curve L L' K is the back arm-curve. Curve A B is the shoulder-curve. B C is the sleeve-curve. The curve C D F to H is the rounding-back curve. The curve D F to H is the inner curve to the second back-piece. The curve F G to H is the under-arm curve. The compound curve J I H is the dart-and-hip curve. On the reverse side of the square the curve E G H is the dolman-curve and L M is the front under-arm-sceye curve. In using all of these curves the point of commencing is at the letter first named in describing them, and the length is determined by the actual measurements of the person to be fitted.

The dart-and-hip-curve line described and the curve L N are not new; but I have never seen or known them combined with a square. The other curves are my own invention. The shoulder measure and back neck measure are my own invention. The combination of the front neck measure and the bust measure as placed on the square are my own invention.

To use my device, for example, in cutting out a waist or pattern therefor—say, for a lady having a thirty-six inch bust and a thirteen-inch neck, as ascertained by actual measurement—I draw with the square on the material or paper lines at right angles, as is commonly done by persons skilled in the art.

The shoulder measure is used to determine the point on the short line of the angle drawn from which I commence to draw on the pattern the front neck-curve, and also the point from which to commence the shoulder curve.

The distance to be measured is determined by the actual size of the neck. In the example such distance is from the corner of the angle to line No. 13, the neck being thirteen inches in circumference. If it were fourteen or sixteen, then the measurement would be to No. 14 or No. 16, as the case might be. The backneck measure is used to determine the distance to draw the back-of-the-neck curve from the center of the back of the neck as usually laid out on the pattern. The line is drawn from L to the number corresponding to the size of the neck. In the example stated it is to No. 13. The front neck measure is used to determine the distance to the point on the long line of the right angle so drawn where the front neck-curve must intersect such line. The bust measure determines the width of the pattern for the left and right front waists, respectively, measuring from the long line of said triangle at right angles to the end of the front arm-sceye curve. The distance corresponds to the measure of the person. In the example it is to No. 36 on the measure, and this point of the front arm-sceye curve is fixed by such measurement. The bust measure may commence five inches from said corner; but this does not give a preferable margin. I therefore prefer to commence five and one-fourth inches, as stated.

I am enabled to fit any person exactly without having to cut and try, as is necessary in using all other kinds of rules.

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

A dress-maker's square consisting of the two arms graduated into inches, having a curved connection at the inner corner and the connecting-brace, the shoulder measure Y Z on the short arm, the bust measure T Z and front neck measure R S on the long arm, and the back neck measure O P on the curve at the corner, and the various curves used in dress-making arranged upon the arm, connecting-brace, and arm connection, substantially as described.

In testimony whereof I hereunto subscribe my name, in the presence of two witnesses, this 6th day of April, A. D. 1891.

FLORA LONG.

Witnesses:

ALBERT BAKER,
H. C. HARTMAN.