E. M. DE GIRARD.

DRESS CUTTING SQUARE.

APPLICATION FILED NOV. 30, 1914.

1,160,863. Patented Nov. 16, 1915.

Fig. 1.

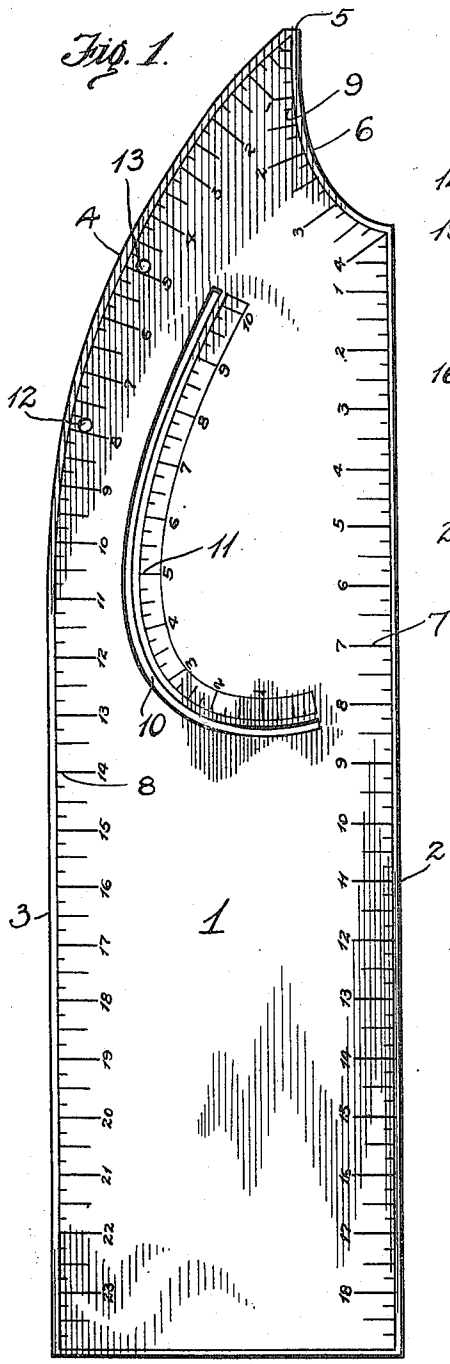


Fig. 2.

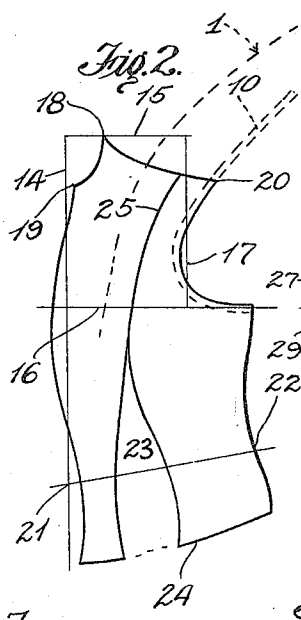


Fig. 3.

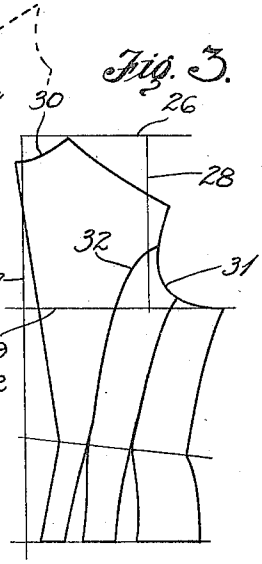


Fig. 4.

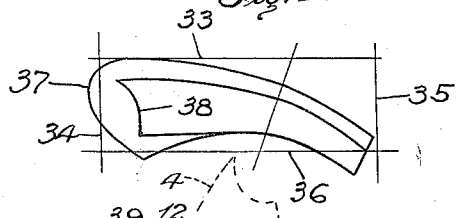
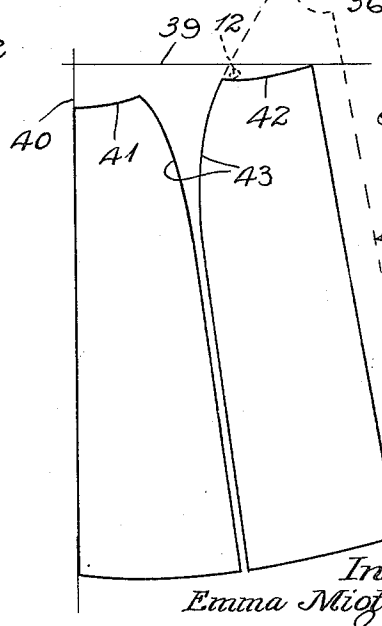


Fig. 5.



Witnesses.

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DRESS-CUTTING SQUARE.

1,160,863. Specification of Letters Patent. Patented Nov. 16, 1915.

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To all whom it may concern:

Be it known that I, EMMA MIOT DE GIRARD, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented certain new and useful Improvements in Dress-Cutting Squares, of which the following is a specification.

This invention relates to improvements in charts for facilitating the cutting of dresses of any kind and belongs to that class of devices commonly known in the dress-making art as dress cutting squares.

It is an object of the invention to provide a simple dress cutting square or chart so formed that all of the curves and curved and straight measurements necessary for laying out and cutting patterns or dresses, may be obtained by the use of the article forming the subject matter of this invention.

It is also an object of the invention to provide a dress cutting square which is formed with approximately the average curved shapes needed for the neck and arm hole cuts.

It is a still further object of the invention to provide a dress cutting square with straight and curved edges having measuring scales adjacent thereto, starting points for progressively greater curves required for fuller waists and skirts being indicated on the chart for facilitating the proper curves in making dresses for small and slender persons or large and corpulent ones.

With these and other objects in view the invention comprises certain novel constructions, combinations and arrangements of parts as will be hereinafter more fully described and claimed.

In the accompanying drawing forming a part of this specification: Figure 1 is a top plan view of a dress cutting square or chart made in accordance with this invention. Fig. 2 is a diagrammatic view showing one way of laying off the measurements and lines for the front of a waist, using the improved dress cutting square. Fig. 3 is a similar diagrammatic view for the back portion of a waist. Fig. 4 is a diagrammatic view indicating how the lines for the sleeve may be obtained from the use of the chart or square. Fig. 5 is a similar diagrammatic view for a skirt.

The device of the present invention is designed to produce a dress cutting square or chart of simple form and yet so shaped that all of the curves and measurements necessary for producing a pattern or cutting lining or dress goods, may be had therefrom, the device also giving the average shapes for cutting neck openings and arm holes, whereby well fitted dresses may be readily obtained, the device being admirably adapted for teaching dress cutting, or for home use as well as being adapted for professional use.

The details and features of the invention will now be more specifically described, reference being had to the drawing in which—

1 indicates a card or sheet of any suitable material. Generally ordinary card board is sufficiently thick and stiff to permit the square to be used for guiding a pencil or other marking device along its edges. The body portion of the square or card is usually formed with parallel straight edges 2 and 3 which extend the greater portion of the length of the device. The edge 3 joins a curved edge portion 4 which is more or less progressively increased in its curvature toward a pointed end portion 5 formed on the card. At one end of the straight edge 2, an inwardly extending curved edge 6 is formed which springs from the straight edge 2 at a suitable angle for giving the right curvature to the neck of a garment and especially in relation to the front and approximately straight edge of said garment. The said curved edge 6 extends from the end of the straight edge 2 to the point 5.

Along the card adjacent to the edge 2 is arranged a scale 7, usually marked in inches and fractions thereof and numbered as to the inches, usually from the curved edge 6 to the other end of the card. Adjacent to the edges 3 and 4 of the card a scale 8 is marked in inches and fractions thereof, the said numbers generally running from the point 5 to the other end of the card. Adjacent to the curved edge 6 is a similar scale 9 which is usually numbered from the point 5, to the straight edge 2.

Within the body portion of the card a curved slot 10 is cut or formed, it being shaped to give the proper curve for the arm hole of a garment. Adjacent to said curved slot is a curved scale 11 marked on the card and having its inches or other division points marked from the end farthest from the point 5 to the end nearest to said point 5.

By means of the scales any of the meas-

urements found in measuring a person for the dimensions of a garment may be marked off along the scales upon the edges required for giving the desired shape and length to any particular line of the garment.

An important feature of the invention also is the provision of starting points upon one of the curved edges for producing various degrees of fullness in certain portions of a garment. This is needed in laying off curves for the bust portions of a waist and also for the hip portions of a waist or a skirt. Such starting points may be indicated in various ways but are preferably indicated as shown in Fig. 1 of the drawing by holes 12 and 13 properly spaced and positioned adjacent to the curved edge 4 of the card 1.

A device of the simple formation described is admirably adapted for producing the necessary lines and measurements for garments of various styles and dimensions. It is especially suited for cutting dresses or garments according to what is known as the square cutting system, according to which the various lines for a pattern or garment are started from lines making a square corner or a square figure as a basis, all other measurements and lines being built up thereon. Thus as shown in Fig. 2, starting with lines 14 and 15 at right angles to each other and measuring down from line 15 the distance from a person's neck to the bust line, the said bust line may be indicated at 16, and measuring to one side of the line 14 the distance from the arm hole to the middle of the bust or chest at the front, a line 17 may be obtained for completing a rectangular figure commonly termed a square. From this square the front of a waist may be drafted and the waist line and the hip lines may be developed therefrom. By measuring off an average neck width on line 15 from the corner of the square, say one and one half inches from the line 14 the shoulder point 18 is obtained. By measuring down from the line 15 an average neck depth, along the line 14, say two and one-fourth inches, the neck front point 19 may be obtained. By applying the square or chart with the straight edge 2 approximately co-inciding with the line 14, and with the angle between said edge 2 and the curved edge 6 approximately at the point 19, the curved edge 6 will direct a mark which may be drafted from 19 to 18 along said edge, the right curvature for producing a well shaped neck opening.

In a similar manner the outer shoulder point at 20 may be had by using well known measurements from the line 15 to meet a line measured from the point 18 the length of a person's shoulder and extended to a position opposite the point 19. By applying the square or chart again so that the curved slot 10 will extend across the point 20 and over the adjacent side of the square and down to the bust line, a line may be drawn through said slot for giving a properly shaped armhole in the front section of the waist.

The waist line may be had by measuring on the line 14 the length from the bust line to the waist at the front, to the point 21, and then by measuring from the arm pit to the waist line, the point 22 may be obtained and a line drawn through points 21 and 22 will give the waist line. By measuring inwardly from the ends of the waist line points may be obtained on the waist line for one or more darts, for instance as at 23. The hip line 24 may be obtained by making measurements down from the waist line in accordance with the desired length of the waist and applying the edge 4 of the card or square for giving the proper curves to the lines running up and down and beginning at the points 5, 13, or 12 according to the fullness desired.

In forming the curved lines for the bust and the hips, the curved edge 4 running into the straight edge 3 is very useful. The proper curves at the waist both above and below the waist line are secured by commencing the curves from the holes 12 and 13. In the case of slender persons these curves are produced approximately right by making the greatest curvature beginning with the hole 12 and shading off into a straight line along the edge 3. Thus with most of the curved lines in the lower part of the bust the hole 12 is applied nearest to the bust line and the curve shades off into a straight line toward the waist. For the hip portions of the waist the square is applied to the pattern beginning with the hole 12 arranged near the waist line and the lines are run along the curved edge of the square and continued upon the straight edge 3 in approaching the lower edge of the waist. Of course it will be understood that the square or chart 1 is turned either side up in order to apply the curves and straight edges for either side of the waist or other garment. When the pattern or dress is to be cut for larger and more corpulent persons, the curves are started from the hole 13 so as to obtain the desired fullness in the parts. Where seams are to be run upon the shoulder as at 25 the curved lines are produced starting at the point 5. The front edge of the waist is generally curved outwardly near the bust line beyond the line 14 and inwardly at the waist line as shown in Fig. 2 for producing a better fitting garment, the curves for such variations being obtained by beginning at the hole 12 or the hole 13 according to the fullness desired and drawing the lines along the edges 3 and 4.

In drafting the back of a waist such for instance as indicated in Fig. 3, a square or

rectangular figure is constructed beginning with lines 26 and 27 and getting the width and depth for the lines 28 and 29 as set forth with respect to the front part of the waist. The neck hole at 30 is shallower but is obtained by applying the curved edge 6 of the square or chart. The arm hole at 31 is also obtained by applying the curved slot 10 in proper relation to the square of the diaphragm. The waist and hip lines are measured from the bust line so as to correspond with the waist and hip lines of the front. Where seams run from the arm hole as at 32, the curved edge 4 is used beginning at the point 5 and the lesser curves beneath the arm hole are obtained by using the same edge 4 beginning successively at the holes 13 and 12. The hip line curves are also obtained beginning at the holes 12 and 13 in a manner similar to that described with reference to the drafting of the front of the waist. The chart or square 1 is also used on the same general principle for drafting sleeves, a square or rectangular figure having lines 33, 34, 35 and 36 is usually first obtained from the straight edges of the chart and the scales thereon and the curved ends are measured the distances from said rectangular figure indicated by the measurements as to length and size of the arm of the person to be fitted., the curves 37 and 38 being obtained from the curved edge 4. Cross measurements of the sleeve are laid off at the elbow and the slightly curved lines above and below are secured by applying the square, using the straight edge 3 and portions of the curved edge 4 beginning at such distances from the point 5 as will give the desired fullness. Likewise the square or chart is useful in drafting a skirt, squared or perpendicular lines 39 and 40 being used as the basis for the same. The curved waist line at 41 and 42 is secured from the curved edge 4 beginning at approximately the point where the said curved edge begins to bend from the straight edge 3 and allowing the fuller parts of the curved edge to meet the lines 43, and the curved hip lines at 43 are secured by applying the curved edge 4 and the straight edge 3, beginning at the hole 12 applied at the waist line, for small or slender persons and at the hole 13 for larger or more corpulent persons.

It will thus be evident that the square or chart is admirably adapted for use in drafting patterns or cutting dresses, the best curves for the neck, armhole and other portions of garments being given by the chart or square for producing properly fitted garments or dresses.

What is claimed is:

1. A dress cutting square having opposite parallel straight edges, one end of the square having a progressive curve extending from one of said straight edges and a neck curve extending from the other straight edge, the said curves meeting at a point, from which various curves may be measured, according to the fullness desired in the various parts of the garment drafted, and scales extending along said straight and curved edges.

2. An integral single piece cutting square comprising an elongated card having its opposite side edges straight and parallel for the greater portion of the length of the card and having one end formed with curves meeting at a point and edges for drafting all of the curved portions necessary in producing a garment, except the arm holes, and an insert slot in the said card for drafting arm holes.

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

EMMA MIOT DE GIRARD.

Witnesses:

CASSELL SEVERANCE,

EARLE R. POLLARD.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."