

UNITED STATES PATENT OFFICE.

LIBBIE A. CALL, OF OSHKOSH, WISCONSIN.

DRESS-CHART.

SPECIFICATION forming part of Letters Patent No. 281,666, dated July 24, 1883.

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To all whom it may concern:

Be it known that I, LIBBIE A. CALL, a citizen of the United States, residing at Oshkosh, in the county of Winnebago and State of Wisconsin, have invented a new and useful Dress-Chart, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to dress-charts; and it consists in the peculiar construction of patterns or charts for facilitating the drafting, cutting, and fitting of ladies' and children's garments, as will be hereinafter more fully set forth.

In the accompanying drawings, Figure 1 represents a plan view of the material marked out and ready to be cut according to my improved system. Fig. 2 represents a front elevation of the rule and form combined. Fig. 3 represents a detail view of the scale formed in strips, and Fig. 4 represents a modified form of the scale.

Like letters refer to corresponding parts in all the figures.

Referring to the drawings, A designates the form or pattern-chart, having on its straight edge *a* a series of graduations in inches and fractions thereof. One end, B, of the chart or form is rounded, and is larger than the other end, B', which is cut square. The rounded edge *a'* of the form curves from the large end B gradually to the square end B', where it forms an obtuse angle. This angle *b* is the point from which all measurements and curves at that end are drawn. At the end B' are marked the words "Top back arm-size," with an arrow pointing toward the angle *b*, as the point from which this measurement is drawn. Farther along on the edge *a'* are marked the words "Dart form," and also the words "Hip-point," with an arrow indicating this point, and at a little space beyond the latter are inscribed the words "Side-body form." At the other end, B, of the form are inscribed the words "Neck-point," and an arrow is arranged to indicate this point on the edge of the form. At a little space beyond the last-named feature are inscribed the words "Back arm-size point," with an arrow also indicating this point, and above this are arranged the words "Front arm-size turn-over." The explanation and purpose of these terms and their

arrangement will be hereinafter described; but I would state here that where an arrow is not used to designate the points on the form, then the measurement should begin at the corners *b b'*.

D designates a scale comprising graduated strips *d*, formed in a bunch. The graduations on each strip increase in size, according to the size marked in opposite ends of the strips—thus, the graduated spaces in the strips *d* for size 34 are smaller than for size 35. These strips are graduated in accordance with the various bust-measures, and the number of the size to which each strip is applicable is marked on opposite ends of the strips, and thereby either end will give the size. I generally use a scale comprising all measures from 24 to 48, as it includes all the ordinary sizes of ladies. The bunch is so arranged that it can be adjusted to any bust-measure within the limits stated by sliding the strips in or out until the required measure is reached. If the dress-maker does not wish to take the trouble of adjusting the scale for a certain measure, she can avoid it by taking from the bunch the strip having the proper bust-measure, and measure with the same as she would any other scale. After she has finished, it is readily inserted in the bunch of scales according to its former position. The spaces on each strip are arranged numerically, in order to regulate the proportions of the dress after the sizes of the same are determined upon.

In Fig. 4 I have shown a modified form of scale, which may be preferred by some, as it obviates the use of the separate strips by making the entire scale in one piece. The graduated arrangement of spaces and sizes are the same as in the separate strips, and said graduations are to be placed upon a single sheet of card-board, sheet metal, or other appropriate material.

In drafting dresses the graduated spaces are used, generally, instead of the inch-rule. Thus, if the distance between one point and another point on the material is nine numbers, this distance is readily obtained from the scale.

In the operation of my invention I provide certain rules for taking ladies' measures, which have a certain connection with my system, so I will recite them here.

I. The bust-measure should be easy, the

tape passing straight across the back, just over the shoulder-blades. Then bring it around over the fullest part of the bust, and, after drawing the tape to the comfort of the person, ascertain the measure. If it comes between two sizes, take the larger one, for by my system of measurement this bust-measure draws the scale of the entire pattern.

II. *Waist*.—Measure tight around the smallest part.

III. *Chest*.—Measure close from arm to arm just above the bust.

IV. *Width of back*.—Measure close from arm to arm just above the shoulder-blades.

V. *Length of back*.—Place your tape on the top bone of the spinal column. Then measure down on a level with the top of hip-bone if a bustle is worn, and as much lower as the form of the person requires for a close fit when a bustle is not worn.

VI. *Length of front*.—Place your tape at the neck, same as back-measure, bringing it around to center bust to the length desired.

VII. *Under arm*.—Place the end of the tape under the arm. Then carry it down to top of hip-bone.

VIII. *Arm-size*.—Since this system is strictly mathematical and accurate, the arm-size is complete when you are through drafting the patterns. I will, however, give this measure. Carry the tape under the arm and over the point of shoulder.

IX. The same can be said of the back shoulder-seam, as the width of the back indicates the length of the shoulder. Cut the front shoulder one-fourth of an inch shorter than the back shoulder. Spring the front in the hollow of the neck to the length of back shoulders.

X. *Shoulder*.—The regular rules can be followed.

XI. *Hips*.—Measure loosely around the hips. For drafting basque-skirts the rule is four inches down the skirt, and as many across as measure requires.

I will now draft a pattern for a basque and take 36 as the size, referring to Fig. 1 of the drawings.

The following measurements are given: bust, 36; waist, 26; under arm, 8; neck and front, 19½; length of back, 16½; width chest, 14; width back, 13½; length of shoulder, 6½; around arm, 15½; hips, 39. Now proceed as follows:

First. Take rule and draw a line across top of paper on which the draft is to be taken, and then draw another at right angles to this on the left-hand side of the paper, the length of the last line being the whole length of the rule and designated as the "bust-line."

Second. Select the scale indicating the bust-measure, (thirty-six inches in this case.) Now measure accurately from bust-line on top line the exact length of scale, and then mark. Now measure its length from this mark to the right again, and mark. Measure again with these measurements half-way down the paper, and again near the bottom of paper. Now

take the straight edge and draw lines from marks made on top line to marks made on bottom line. One of these lines will be designated as the "center line" and the other as the "back line."

Third. Measure on the back line the length of waist, (sixteen and one-half inches,) and mark. Repeat this operation for the center and front or bust lines, and draw a straight line from mark to mark, forming the waist-line.

Fourth. Now measure up with rule from bottom waist-line on bust, center, and back lines, the length of under-arm measure, (eight inches,) marking each point accurately. Then draw straight line from mark to mark to form the under-arm line.

Fifth. Measure with scale from top line down on bust-line eight numbers, and mark for front of neck. Then measure from bust-line on top line six numbers, and mark for top of neck. Place the neck-point on neck-mark on bust-line, also touching mark on top line. Then draft your neck. Now measure from top line down center line four (4) numbers, and mark. Then draw a line from neck-mark on top line six and three-fourths inches in length to and on a level at one end with the mark on center line, forming the shoulder-line.

Sixth. Measure with scale from under-arm line down on center line six (6) numbers, and mark. Then measure from under-arm line down on bust-line seven (7) numbers, and mark. Now draw straight line from mark to mark to form upper-dart line. Then measure with the scale from bust-line on this line eight (8) numbers, and mark for top of front dart. Now measure seven (7) numbers, and mark for top of back dart. Measure from bust-line on waist-line five (5) numbers for front of dart, and mark. Then measure from this mark four (4) numbers for width of dart, and mark. From this mark measure three (3) numbers more, and mark for space between darts, and four numbers more for width of back dart.

Seventh. Now take dart-point at the angle b and place at the marks for front dart on dart and waist lines, and draw a curved line for front of first dart. Turn dart-form over and draw back curve of front dart. Then draw back dart in the same manner.

Eighth. Take your rule and measure from bust-line on under arm-line half the width of chest-measure, (seven inches,) and mark. Then measure one-half of width of back-measure (six and one-half inches) from back line on under-arm line, and mark.

Ninth. Take your scale and mark four (4) numbers straight up from mark made for width of chest, also four (4) numbers straight up from mark made for width of back, and mark. Now measure straight up from this last mark eight (8) numbers more, and mark. Dot four (4) numbers to the left on top line, and draw straight line from the two last marks. On this line ascertain the length of shoulder, (six and three-fourths inches,) and mark. Place the

point of top back arm-size at this mark, and draw to the mark straight up from width of back-mark. Then place the back arm-size point on this mark, bringing it around out under arm-line and draw the curve. Now turn form over, crossing the mark for front shoulder, touching mark straight up from width of chest-mark, and draw the curve touching under-arm line under the arm.

10 Tenth. Now measure in from the back-line on the bottom waist-line one (1) number of the scale and mark, four (4) more numbers and mark. Then place point of form at side-body mark, bringing it to the mark on bottom waist-

15 line, and draw your curve in the back.

Eleventh. Take tape and calculate one-half of waist-measure, (thirteen inches.) Hold firmly between thumb and fingers of right hand the thirteen-inch mark and place it just below the bottom waist-line on back slope-line, and measure left to obtain the width of back at waist-line; next, the space between darts; thirdly, the space front of first dart. Still hold your tape firmly. Place it on back-dart line at waist-line, and measure to the first under-arm line, and see what you have left. You have six inches left in this waist-measure. Now hold your tape up to thumb. You have three inches for under arm and side body.

30 Place your tape on center under-arm line on waist-line, and mark. Now carry tape to the right, placing it in center of space, and mark on each side, leaving waste cloth about equal on each side.

35 Twelfth. Now mark arm-size line half-way between side, back, and center line, place rule on this mark and on first right-hand mark on waist-line, and draw straight line. Place form a little over one-eighth of an inch outside of arm-size, and draw slanting line and dot, as indicated in drawings. These lower waist-lines vary according to persons. Draw line from dot made by No. 1 on the scale on the waist-

40 line to under-arm line, and dot, as shown.

45 Most forms require these dots to make sufficient spring in the back.

Thirteenth. When your draft is complete, cut it out, place the front upon your cloth, pinning it in position. Now take the under-

50 arm-piece, placing it so as to allow two and one-half inches for hip-dart.

The size of the hip-dart varies according to different persons, and experience will be the teacher for the correctness of the same.

55 For drafting skirts of basques use dart-point or hip-point, according to size of hips, the

straight edge of the form being used for back seams.

The advantages I claim for my system are simplicity, mathematical correctness, inexpensiveness, and efficiency. The means employed are remarkable for simplicity, yet work to perfection.

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

65 1. The herein-described pattern-chart, having a square end and a rounded end, a graduated straight edge, and the curved edge a' , substantially as set forth.

2. The herein-described pattern chart or form, having a square end, B' , and a rounded end, B , joined by the edge a' , gradually curving from the rounded end to the other end, and a graduated straight edge or rule, all formed in one piece, substantially as set forth.

75 3. The herein-described chart or form, having a square end, B' , with the following words inscribed thereon: "Top back arm-size," "Dart form," "Hip point," "Side body form;" a rounded end, B , having marked thereon the following: "Neck point," "Back arm-size point," "Front arm-size turn-over;" an edge, a' , gradually curving from the rounded end and joining with the square end, and a graduated straight edge or rule, all substantially as set forth.

4. In dress-charts, the combination of the form or pattern A , having the ends $B B'$, curved edge a' , and straight edge a , with the scale comprising a series of gradually-increasing scales connected together, as set forth.

5. In dress-charts, the combination of the form or pattern A , having the ends $B B'$, curved edge a' , and straight edge a , with the scale comprising a series of scales connected together, each of the scales gradually increasing in length, and divided into spaces that increase in size proportionately with the increasing length, as set forth.

6. A pattern chart or form having a square end, a rounded end, and a curved edge, the curve of said edge gradually decreasing from the rounded end to the square end, as set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

LIBBIE A. CALL.

Witnesses:

CHAS. R. NEVITT, Jr.,

LOU GOULD.