

(12) **United States Patent**
Ward

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(54) **GARMENTS, CUTTING**

(76) **Inventor: Allen Ward**

Allen Ward
Letters Patent

The Schedule referred to in these Letters Patent and making part of the same containing a description in the words of the said Allen Ward himself of his improvement in the mode of marking out cloth for cutting into clothing by means of a protractor & scale.

To cut out a coat by my system, I first make a protractor about 16 inches diameter, and divide the semicircle of the Protractor into fifty equal parts, with the arc of the protractor placed from me, I begin on the left and number the degrees, with the number one on the first degree, 2 to 2 on the second, 3 to 3 on the third, and so increase the numbers agreeably to the lines, which lines must be precisely run from the middle of the straight edge of the protractor, & 90 to 90 will form a right angle with the straight edge of the protractor. I next proceed to make a scale the semi-circumference of my customers body taken close under his arms divided into 33 equal parts, and these parts numbered beginning at the left hand end of the scale with No 1, on the first line, No 2, on the second, and so continue the figures upon the parts, until all the parts are numbered, which constitutes a scale suitable for the thickness round the breast, I make one scale also for the waist in like manner having taken the length of the coat, I spread my cloth the nap running to my left, I apply the protractor and square my cloth by an angle of 33 degrees beginning at the right hand end of my cloth, which is generally termed the top of the cloth, from the rear corner of which I run an angle of 2 degrees, which represents the back seam of the coat, from the upper corner I run down said seam, or angle one and a half of the scale and make a mark on said angle or back seam, from said mark I run down one and a half and make a ^{second} mark, from which I run across at right angles with the back seam, eleven of the scales, this will give the top

of the back sight and the breadth of the back between the shoulder, from six and a half on the back line I proceed three and a half lower, and run another right line at angle of twenty five degrees, and run out on said line from the back seam 11 which will give the bottom and length of the back sight. The length of the waist being ascertained by the measure I run a line across the top of the cloth, sufficient for the breadth of the skirt, say 6 inches from the intersection of the back seam I run out on said line three and a half on the scale, which gives the width of the back between the buttons, and one inch and a half over for the skirt in the square at the top of the cloth I run across B, which will give the width of the top of the back. From which place I take a sweep of 30, of the scale to the top of the back sight, which sweep represents the shoulder seam. I also take a sweep of 30 from the top to the bottom of the back sight which curves the back sight. I also take a sweep of 30 from B at the top of the back to one and a half at the back seam which will curve the top of the back.

I also take a sweep of two lengths of the side seam from the bottom of the back sight to the width of the back at the top between the buttons, which sweep represents the side seam of the back. The back skirt is, cut equally to the taste, thus completes the making of the back of a coat for the present fashion. I next mark out the fore parts of the coat. First I run a line from the top of my cloth to the length of the coat parallel with and one and a half inch from the fore and doubled edge of the cloth, which line is termed the skirt line. I square said line at the top of my cloth, and run down said line five and a half, from thence down said line six and a half, from thence down said line three and one fourth, from five and a half I run an angle of sixteen and a half degrees the intersection of a back angle with the square line at the top of the cloth will form the top of the shoulder seam, from thence

I run down said seam low which will give the front of the
 shoulder seam. I next run an angle from six and a half on
 the flat line of 20 degrees. It come out on said angle nine
 and three fourths to find the front of the skirt. from thence I
 continue along said angle fourteen to find the top of the breast
 I then run another angle from three and a fourth on the flat line
 by 25 of the protractor which is a right angle with my scale
 I commence at the flat line and mark one on the far side of said
 line from which I take a sweep of six to the six and a half
 on the flat line, which sweep will hook the top of the side
 seam. from said three and a fourth on said flat line I run six
 on the angle of 25 degrees, which six will give the bottom of
 the skirt. from thence I continue 21 on said angle to find the
 front of the breast. from which point I take a sweep of 15 to the
 top of the breast. from thence I take a sweep of fifteen to the top
 of the shoulder seam to hook from the gauger. from the point
 of the shoulder seam to the front of the skirt. I take a sweep of
 twelve to form the upper part of the skirt. from said nine and
 three fourths on said skirt to the bottom of the skirt. I
 take a sweep of four and one fourth which forms the under part
 of the skirt. from the said bottom of skirt to six and a half on
 the flat line. I take a sweep of six which forms the hind part
 of the skirt and the top of the side seam. from which top I run
 down the flat line the length of the back side seam to find
 the hip, and from thence to the bottom of the coat. from the
 hip I run an angle of twenty one and a half degrees which forms
 the flap line. I run along said line 20 numbers of a scale cor-
 responding with the waist measure and from said twenty I
 proceed nine feether to the front of the waist from which I
 take a sweep thirty two to curve the front of the breast below
 from twenty on said flap line I run an angle of 32 by which I
 cut the skirt, an angle of 14 is to be run from the length of the
 breast on the skirt line which will form the bottom of the

breast. That the coat may have spring in the hips. I cut off the bottom of the side seam half an inch, more or less, cutting the coat across to 20 on the flap line, taking a sweep of 32 from said 20, to the hips; which sweep will cut the cloth bias and curving above the flap line, after which I cut off one number off the width of bottom of the side seam, and when sewing the curved and flap lines together the curved line must be held out to the flat line, the lapel must be cut separate and sewed to the breast agreeably to taste; to form a sleeve I run a straight line down the near edge of the cloth, I square said line at the top, I run down two of the breast scale, from which two I run an angle of nineteen degrees, for the width of the sleeve head, I run out on said angle fifteen, and to form the sleeve head I take a sweep of eight and a half, from two on the straight line, to fifteen on the angle from the elbow of the sleeve I run an angle of five degrees to create the sleeve top, and then cut the size and length of my sleeve by the customers measure; for crooked or straight men I run the angles differently to it; for a straight man I run the angles higher than described, and for a crooked man lower. I also add or diminish the number according to his size, that the neck may be regulated.

Wm. H. ...
 Wm. Thornton
 Wm. Elliot

Allen Ward

(1594 words)

DRAFTSMAN'S DIVISION.

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All communications should be addressed to
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