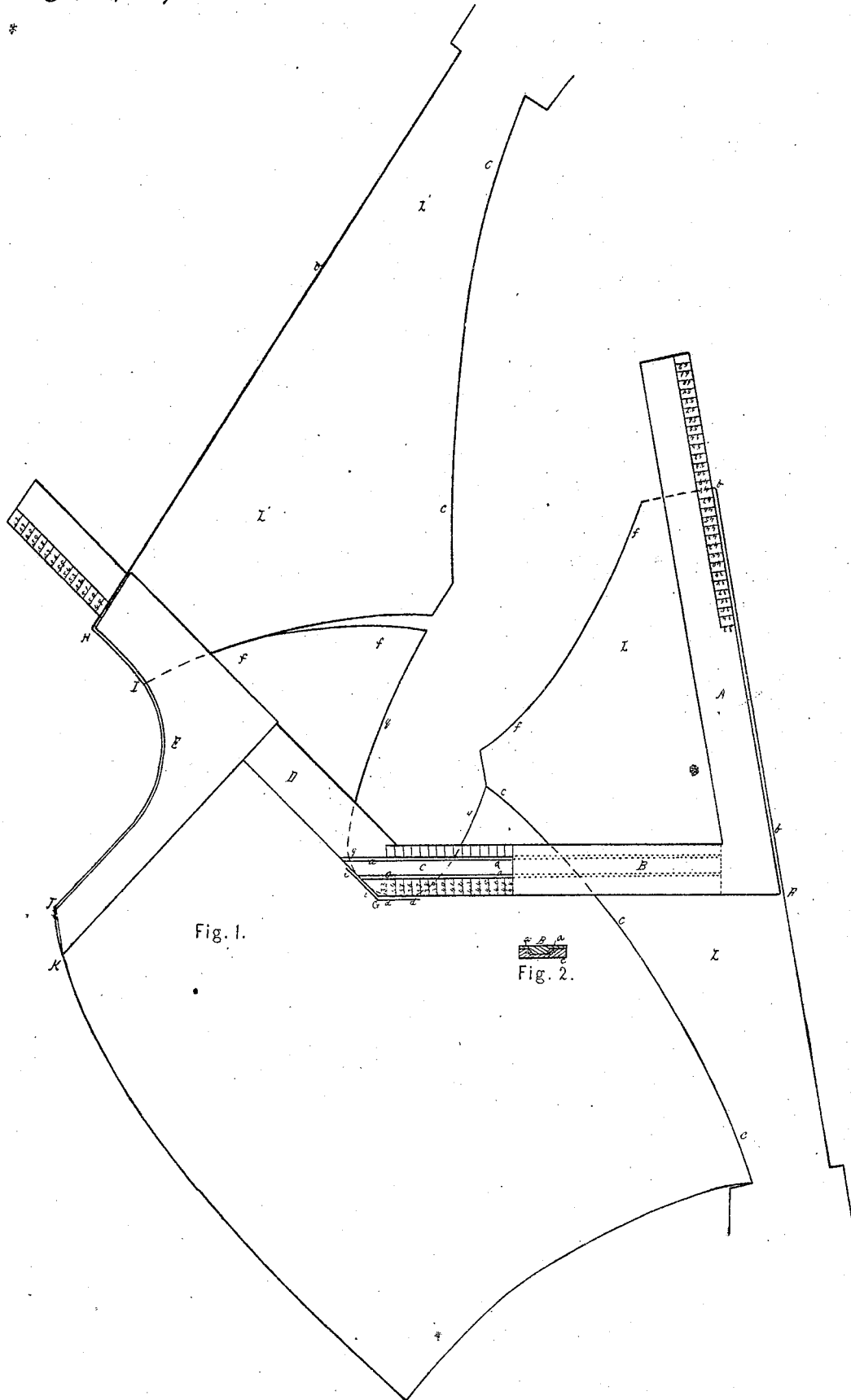


*A. Ward.*  
*Tailoring.*

*N<sup>o</sup> 4327*

*Patented Dec. 26. 1845*



# UNITED STATES PATENT OFFICE.

ALLEN WARD, OF BALTIMORE, MARYLAND.

## TAILOR'S MEASURE.

Specification of Letters Patent No. 4,327, dated December 26, 1845.

*To all whom it may concern:*

Be it known that I, ALLEN WARD, of the city of Baltimore, in the State of Maryland, have invented a new and useful Instrument  
5 for the purpose of Marking Out Cloth for the Purpose of Cutting Coats from the Same, which instrument I denominate "Allen Ward's Coat-Sector;" and I do hereby declare that the following is a full and  
10 exact description thereof.

My coat sector consists, mainly, of four arms and of a flexible neck slide. Two of the arms lie in a straight line with, and slide upon, each other, and might in fact  
15 be denominated a sliding arm; but as this sliding arm consists of two pieces, I have denominated each piece as an arm, for the purpose of more convenient reference.

In Figure 1 in the accompanying drawing  
20 ing A is what I call the first, B the second, C the third and D the fourth arm; E is the neck slide. The second is in part superimposed upon the third arm, as it is placed when the instrument is in use. The second is  
25 made to slide on the third arm in the manner of the slide of a sliding rule, there being a groove *a a* in the third arm into which a corresponding tongue on the lower side of the second arm fits as shown more clearly in  
30 the cross section Fig. 2, or they may be made to slide one upon the other in any convenient way. The respective arms may be made of box or of any other suitable wood; they may be about an inch and a half in width  
35 and a fourth of an inch in thickness. The first arm A should be about sixteen inches long, and may be considered as the base line of the apparatus, and as representing the back seam of the coat, with which it is  
40 to correspond in commencing the operation of marking out. To this is attached the second arm B making with it an angle of about eighty degrees; this second arm may be about eight inches long. The third arm  
45 C, along which the second arm slides, may be from eleven to twelve inches long; the part of this under the third arm is designated by dotted lines. To the end of this third arm is attached the fourth arm D, which should be of about the same length  
50 with the first arm and is to make with the third arm an angle of about a hundred and thirty five degrees. Upon the first, third and fourth arms I make divisions which are to  
55 correspond with each other in distance and are to be similarly marked; the relative situ-

ation of these divisions being such as is shown in the drawing. This drawing represents the instrument of one half the actual size of that which I have used, the divisions  
60 in that instrument being one fourth of an inch apart and numbered as herein represented; but they may be lettered or otherwise designated provided always that the mark on the respective arms correspond with  
65 each other in distance.

The neck slide E, may be made of leather pasteboard or other flexible material; it is to be in the general form represented in the drawing, but its curvature may be varied  
70 according to fashion; the part that embraces the arm D being formed into a sheath that allows it to slide up and down so as to stand at any required division; this slide serves as a pattern to mark the neck gorge.  
75 The neck slide being in place, and the tongue of the arm two inserted in the groove of the arm three, the instrument is ready for use and is employed in the following manner.

There are two modes of taking measure  
80 for a coat, one of them denominated the breast measure, and the other the blade-bone measure, the latter is that which I prefer, and I will first describe the application of my instrument to this mode, and then show  
85 how the breast measure may be applied by the same.

In the blade-bone measure, as every tailor knows, the end of the measuring tape or cord, used, is placed on the top of the back  
90 seam, is extended around the scye in front of and under the arm and square across to the nearest part of the back seam; one half of this measure is then to be taken, and commencing at the angle F, the division to  
95 which it reaches on the first arm A is to be noted; and supposing this to be to the division marked in the drawing No. 48, the arm No. 2, is to be slid on to the arm No. 3 till its end reaches that division on the latter  
100 arm, and the neck slide is also to be adjusted so that its upper end will coincide with the corresponding number, mark or distance on the fourth arm. The instrument is thus ad-  
105 justed for use in the subsequent marking for the coat.

The back is to be cut in such manner as fashion or fancy may dictate, a thing which does not require any particular directions; and the back is then to be placed on the  
110 goods intended for the fore parts; the outer edge of the first arm is then placed in a line

with the back seam, the division noted (say 48) being even with the top of the back seam, and while in this position, the side seam of the fore part is marked from that of the back. The front and bottom of the scye, or arm hole is then obtained by drawing a line against the outer edges of the third and fourth arms where they meet and form the angle G; the third arm giving the place of the bottom, and the fourth arm that of the front of the scye.

The next operation is to obtain the top and direction of the shoulder seam which is done in the following manner. The upper end of the neck slide and the divisions on the arm D are not square with said arm but stand at an angle of about eighty degrees with the inner side thereof. The back which has been cut as before designated is then to be laid on the instrument the top of the back seam touching the point H of the neck slide, and the back seam corresponding with the direction of the line of the upper end of said slide. While the back is in this position the shoulder seam is to be marked from it on the cloth, and the neck gorge and front of the breast are likewise to be marked out by passing the chalk along the line I, J, of the neck slide for the neck gorge, and along the line J K for the front of the breast. We have now all the points designated that are to be obtained by the use of the instrument which is therefore to be removed. The coat is now said to be balanced and the common sense of any cutter will be a sufficient guide in any variation that circumstances may require.

When the breast measure is preferred, which is taken by passing the measuring tape around the body directly under the arms, and taking the half of this girth, it may be applied by this instrument in the following manner. I have fully ascertained that in all persons of ordinary good proportions, two thirds of this measure will be equal to one half of the blade bone measure within a fraction too small to be noticed. This two thirds of the breast measure may therefore be substituted for the blade-bone measure in all cases.

I have in the accompanying drawing represented the lines of the garment in red ink to distinguish them from the lines of the instrument, and I will now repeat the operation of marking out by the aid of these lines.

L, L, is the back which has been cut, and laid on the arm A, with the top *b*, of the back seam on the number or distance supposed to have been noted, the instrument, and back, lying upon the cloth from which the fronts are to be cut. The side seam is

then marked by the line *c, c, c*, of the back; the lines *d, d*, and *e, e*, are also marked along the arms C, and D, to give the bottom and front of the scye as before named. The back L' L' is then to be applied with its top *b*, touching the point H of the neck slide as represented; the back seam *b, b*, being also in a line with the top of the neck slide; while in this position, the shoulder seam *f f* is to be marked from it on the cloth; the neck gorge is also to be marked by passing the chalk along the line I, J, of the neck slide, and the front of the breast by passing it along the line J K; all the points required for that purpose being now obtained, the section is to be removed and the scye is to be marked out as represented by the line *g, g g*.

Many attempts have been made to construct a coat sector with its arm or arms forming a rectangle, or square, but these have all proved failures and I have ascertained from numerous experiments and long practice that the angle which I have herein designated, or angles very nearly approaching them, are those which are proper for establishing a true balance in the respective parts and the depth of the scye, in marking out for coats.

Having thus fully described the manner in which I construct my coat sector and also that in which it is applied to the marking out for cutting a coat, what I claim therein as new and desire to secure by Letters Patent is—

The manner in which I have arranged and combined the four arms and the neck slide, the respective arms forming the angles herein designated, or nearly such, and the second and third arms being made to slide upon each other for the purpose of enlarging or diminishing the profile of the garment to be cut; there being also on three of those arms, divisions with marks or numbers corresponding with each other in their general proportion and arrangement, as represented in the drawing, and herein fully described. I will here remark that although the divisions and numbers marked on the respective arms are considered as useful and convenient for despatch, they are not essential; as the measure taken as herein designated may be applied to the arm A and a mark be made upon it the length of the combined arms B and C may also be determined by the same measure and the neck-slide also be moved thereby to its proper place these three measures always being about the same.

ALLEN WARD.

Witnesses:

THOS. P. JONES,  
M. A. BENTLEY.