(No Model.)

J. GOTHARD.

TAILOR'S MEASURE.

No. 420,448. Patented Feb. 4, 1890.

Fig. 1.

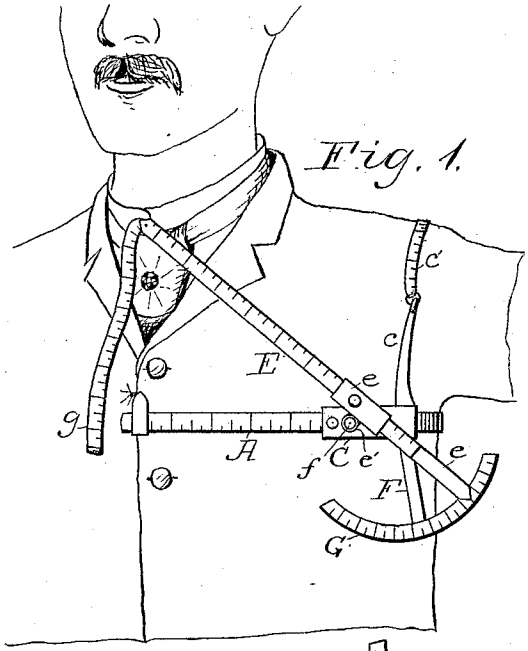
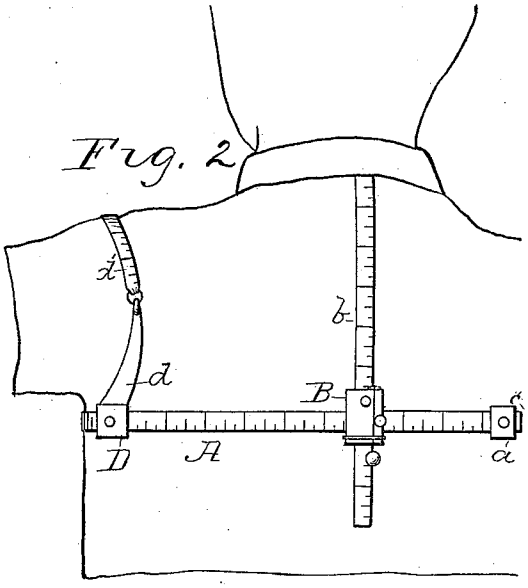


Fig. 2.



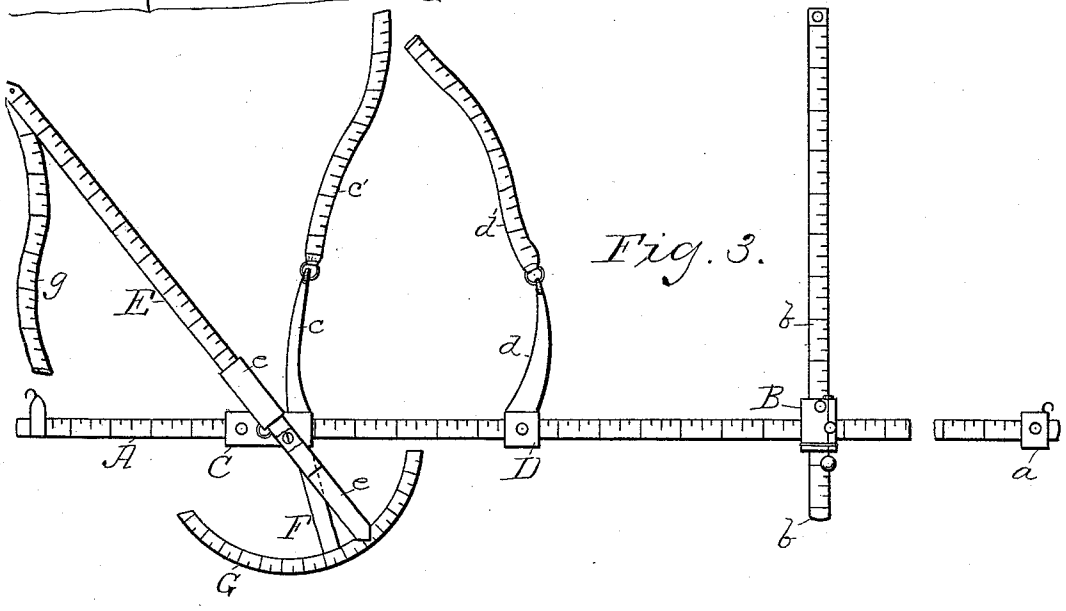


Fig. 3.

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UNITED STATES PATENT OFFICE.

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TAILOR'S MEASURE.

SPECIFICATION forming part of Letters Patent No. 420,448, dated February 4, 1890.

Application filed July 5, 1889. Serial No. 316,635. (No model.)

To all whom it may concern:

Be it known that I, JAMES GOTHARD, of the city of Chicago, Cook county, Illinois, have invented certain new and useful Improvements in Tailor's Measuring Apparatus, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

One of the greatest difficulties experienced by tailors in taking measurements for the purpose of drafting patterns for coats or for garments covering the upper part of the body is to get the exact measurements of the back in such manner as to make due allowance for the stoop of the customer, and to get the exact location of the shoulders with reference to the curvature and other proportions of the back, as well as the breast and chin measurements. This is done at present by expert cutters; but because of there being few, if any, mechanical means for expeditiously and accurately ascertaining the several points necessary to be indicated in order to make correct patterns cutting is, as a rule, monopolized by the expert few.

The object of my invention is to provide a measuring apparatus, the use of which can be easily learned and quickly manipulated, to correctly ascertain the breast, chin, back, and shoulder measurements, substantially as hereinafter fully described, and as illustrated in the drawings, in which—

Figure 1 shows a front view of the bust of a man with my improved measuring apparatus in position. Fig. 2 shows a rear view of the same. Fig. 3 shows an elevation of the said apparatus detached.

Referring to the drawings, A represents a flexible steel breast-measure, which is provided with a hook suitably secured to its left-hand end, that is secured in the cloth of the breast of the coat a little to the right of the center, so that when drawn horizontally around the body well up under the left armpit, to get one-half the girth-measure, the cloth into which it is hooked will be pulled to the center of the breast. The other end of this breast-measure is provided with a longitudinally-adjustable slide *a*, which has a hook secured to and projecting from it, which is caught into the clothing on the side of the center of the back farthest from the arm under which the measure A passes.

B represents a block, which is adjustable longitudinally on measure A by means of a suitable set-screw, which has a vertically-adjustable flexible rule *b* passing through a suitable slit in it at right angles to measure A. This rule is graduated, and is adjusted transversely so as to coincide with the spinal column or the center seam of the back of the coat, and is then adjusted vertically until its upper end touches the collar-seam of the coat, or that point at the back of the neck where it is desired the center seam would strike the collar-seam of the coat.

C and D represent sliding blocks, which are adjustable on measure A between the front end thereof and block B. Block D has a curved arm *d* arising from it the back of which is toward rule *b*, and the adjacent end of block C has a curved arm *c* arising from it the length of which is a little greater than arm *d*, but the curvature of which is opposed to it. These arms *c* and *d* have the graduated tapes *c'* and *d'*, respectively secured to their ends, and their use is to locate and ascertain the arm or sleeve measurements. To do this, arm *d* is adjusted on measure A away from the center seam of the back until its end touches the point where the arm-seam should be, and then arm *c* is adjusted from the center of the breast until its end touches the front arm-seam, and then one or both tapes *c'* and *d'* are looped over the shoulder so as to complete the arm-seam measurement, as shown in Figs. 1 and 2 of the drawings.

Block C is longer, preferably, than block D, and has pivoted to its front surface in a suitable manner the oscillating bar *e*, the upper end of which is made thicker and wider than the remainder of its length, slightly, and is provided with a longitudinal slit therethrough, through which the longitudinally-adjustable flexible chin and shoulder graduated rule E moves. In order to hold this oscillating bar *e* and rule E at any desired angle, I provide a lug *e'* at one side of the bar, through which I pass a set-screw *f*, by manipulating which so that it will bite against the adjacent surface of block C it will hold bar *e* as desired. Projecting down-

ward from block C is an arm F, which carries on its extremity a graduated quadrant G, which is struck from the center of oscillation of bar *e*, and in front of which the lower end of said bar passes and acts as an index-finger to register the degree of the angle described by the rule E.

The object of rule E is to indicate the chin measurement. This is done by oscillating said rule until at the proper angle and then adjusting it longitudinally until its end (which is pointed) touches the chin. The angle is then recorded by looking at the graduated quadrant, and the distance from bar *e* is recorded by observing the graduations on the face of the rule itself.

Rule E is provided with a tape-measure *g*, which is secured to its end. The use of this tape *g* comes in when it is desired to take the shoulder-seam measure where it intersects the collar-seam, and also the distance therefrom to the point where the center seam of the back intersects said collar-seam. To do this, the rule E is oscillated until at the proper angle, and then it is adjusted longitudinally so that by bending it over the shoulder to the point of intersection of the shoulder-seam and collar-seam the location of said point can be recorded, by noting the angle and extension of said rule. When this point of intersection of said collar and shoulder seams is recorded, the tape *g* is brought into use to ascertain the distance therefrom to the point of intersection of the center back-seam with the said collar-seam.

In addition to locating the points alluded to by means of rule E, said rule may also be used to locate the point where the shoulder-seam intersects the arm-seam.

One of the great advantages to be gained by the use of my improved measuring apparatus lies in the fact that when the arm measurements by means of arms *c* and *d* are taken, and where the back measurements are taken by means of rule *b* they need not be disturbed, so that by placing said measure A out straight upon the paper from which the patterns are to be cut the different points necessary to be had to make correct patterns can easily be located.

It is obvious that the devices for obtaining the back, the arm, and the chin, shoulder, and collar measurements, respectively, while all co-operating one with another are yet independent. I wish therefore to be understood as claiming them all in this light.

What I claim is—

1. The combination, with measure A, of the block C, oscillating bar *e*, pivoted thereto, rule E, adjustable longitudinally on said bar, and quadrant G, connected to said block, as set forth.

2. The combination, with measure A, of the block C, oscillating bar *e*, pivoted thereto, rule E, adjustable longitudinally on said bar, tape *g*, secured to the upper end of rule E, and quadrant G, connected to said block, as set forth.

3. The combination, with measure A, attachable to the person, as described, of blocks B and C, adjustable longitudinally on said measure, rule *b*, adjustable vertically through block B, oscillating bar *e*, pivotally connected to block C, rule E, adjustable longitudinally in said oscillating bar, and quadrant G, suitably connected to block C, as set forth.

4. The combination, with measure A, attachable to the person, as described, of block D, the vertical arm *d*, arising therefrom, and block C, the vertical arm *c*, arising therefrom, oscillating bar *e*, pivotally connected to block C, rule E, adjustable longitudinally in bar *e*, and the quadrant G, connected to said block C, as and for the purpose set forth.

5. The combination, with measure A, attachable to the person, as described, of block B, vertical rule *b*, adjustable therethrough at right angles to measure A, block D, arm *d*, arising vertically therefrom, block C, arm *c*, arising vertically therefrom, oscillating bar *e*, pivotally connected to block C, rule E, adjustable longitudinally in bar *e*, and graduated quadrant G, struck from the center of oscillation of bar *e*, and suitably connected to block C, as and for the purpose set forth.

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Witnesses:
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EMIL DUNNER.