C.E.McDonald.
Tailoring

Nº 60.028. Patented Nov. 27. 1866 Mitnesses. Speakows John E. Spooner Curron Ellh Conald

# Anited States Patent Pffice.

## IMPROVEMENT IN APPARATUS FOR OBTAINING THE MEASURES FOR LADIES' DRESSES.

## CURRAN E. McDONALD, OF INDIANAPOLIS, INDIANA.

Letters Patent No. 60,028, dated November 27, 1866.

#### SPECIFICATION.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, Curran E. McDonald, of the city of Indianapolis, county of Marion, and State of Indiana, have invented a new and useful Instrument for more accurately Measuring and Fitting Ladies' Dresses, and other Garments; and I do hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawings and the letters and figures of reference marken thereon.

The invention consists in the construction and the mode of operation and application of said instrument. To enable others skilled in the art to make and use my said invention, I will proceed to describe its construction and operation.

Said instrument is to be made of brass, German silver, or any other suitable sheet metal. A B and C D, of fig. 1 of the accompanying drawings, represent two graduated strips of sheet metal, each from half an inch to three-quarters of an inch wide, and from eight inches to eleven inches long, held together by the clasps represented by u u and v v, of fig. 1 and fig. 2 of the accompanying drawings, in such a manner that they will slip upon each other lengthwise. The end D of the upper slip C D is provided with a convenient index, to be used in connection with the graduated face of AB, which said index is represented by I, of said fig. 1. Each of the said graduated strips A B and C D is provided at one end with a suitable knob, which said knobs are respectively represented by E and G, of said fig. 1. In the space between the two clasps u u and v v, aforesaid, is a sliding stage, represented by S, of the said fig. 1, and held to the instrument by suitable clasps, represented by w and x, of the said fig. 2, so that it will slide lengthwise on the said A B and C D. The said sliding stage S is also provided with an index, represented by I', of said fig. 1, to be used in connection with the graduated face of CD. The said stage S carries a knob, represented by F, of said fig. 1, in all respects similar to the knobs E and G, aforesaid; all of which, when in their proper places, are as represented by their respective letters in the said fig. 1. Said instrument is provided on the under side with two suitable hooks, one at each end, as represented by hand K, of said fig. 2, for the purpose of securing it when it is being used, as hereinafter described. In order to use the said instrument, it is so adjusted that when the end C is laid on the back middle of the neck hem, the knob G will just reach the back middle of the waist seam; and the knob F so adjusted that it will be about midway between the knob E and the knob G, as represented by CEFG, of fig. 3, of the accompanying drawings; the said instrument being held firmly in its place by the hooks H and K, aforesaid, being firmly fastened in the dress at E and G. The ring of an ordinary tape measure is then placed on the knob E, and the distance to a, of said fig. 3, the top end of the shoulder seam, measured in the direction of the dotted line E a. The distance to b, the lower end of the shoulder seam, is next measured in the direction of the dotted line E b. The distance to c, the back side of the arm-hole; is now measured in the direction of the dotted line E c. The ring of the tape measure is now placed on the knob F, aforesaid, and the distances F a, F b, and F c successively measured. The distance to d, the top end of the side seam, is then measured in the direction of the dotted line F d, and the distance to e, the bottom of the side seam, measured in the direction of the dotted line Fe. The ring of the said tape measure is now placed on the knob G, and the distances G d and G e successively measured. This gives the measure of one side of the back of the form to be fitted. If the form be well proportioned no other measure is necessary to fit the back; but if the form be crooked or misshapen, the other side must be measured in the same manner. The operator having now noted the position of the two indices, I and I', and the various measures aforesaid, proceeds to transfer them to the cloth. In order to accomplish this, the indices I' and I must be placed in the same position which they occupied when the measure was taken. The instrument is then laid on the cloth, as represented by C E F G, of fig. 4, of the accompanying drawings. The ring of the tape measure, aforesaid, is then placed on the knob E, and the distance E a, aforesaid, taken up on the tape measure. With that distance for a radius, a small arc of a circle is described, as represented by f f, of said fig. 4. The ring of the tape measure is then placed on the knob F, and taking F a, aforesaid, as a radius, another arc of a circle, represented by g g, is described, so as to intersect the arc f f; then the point of intersection will be the original point a, the upper end of the shoulder seam. In the same way b, the lower end of the shoulder seam, may be found by describing the intersecting arcs l l and m m with E b and F b, for their respective radii, the point of intersection being the original point b. c, the back side of the arm-hole, is found by using Ec and Fc for the radii of the intersecting arcs nn and oo, respectively. For d, the top end of the side seam F d and G d are used for the radii of the intersecting arcs p p and rr, respectively. Lastly, e, the lower end of the side seam, is found by using F e and G e for the radii of the intersecting arcs s s and t t,

respectively. The centre of the end, C, of the instrument will be the back middle of the neck hem, and the centre of the knob G the back middle of the waist seam. With all these points established, respectively, it only remains to trace the figure C a b c d e G C, which will be the true outline of one-half of the back of the intended garment. The other half of the back may be laid out in the same way. The front is measured and laid off in the same way, except that, in the distance G e, proper allowance is made for the darts or gores, as represented by G e  $e^2$ , of fig. 5, of the accompanying drawings, so that when the said darts or gores have been properly arranged, the distance G e will be as originally measured.

What I claim, and desire to secure by Letters Patent, is-

The within-described instrument, when the same is constructed as aforesaid, in its said several parts, and operated for the purpose and in the manner substantially as set forth.

CURRAN E. McDON.

Witnesses:

I. S. BIGELOW, JOHN C. SPOONER.

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