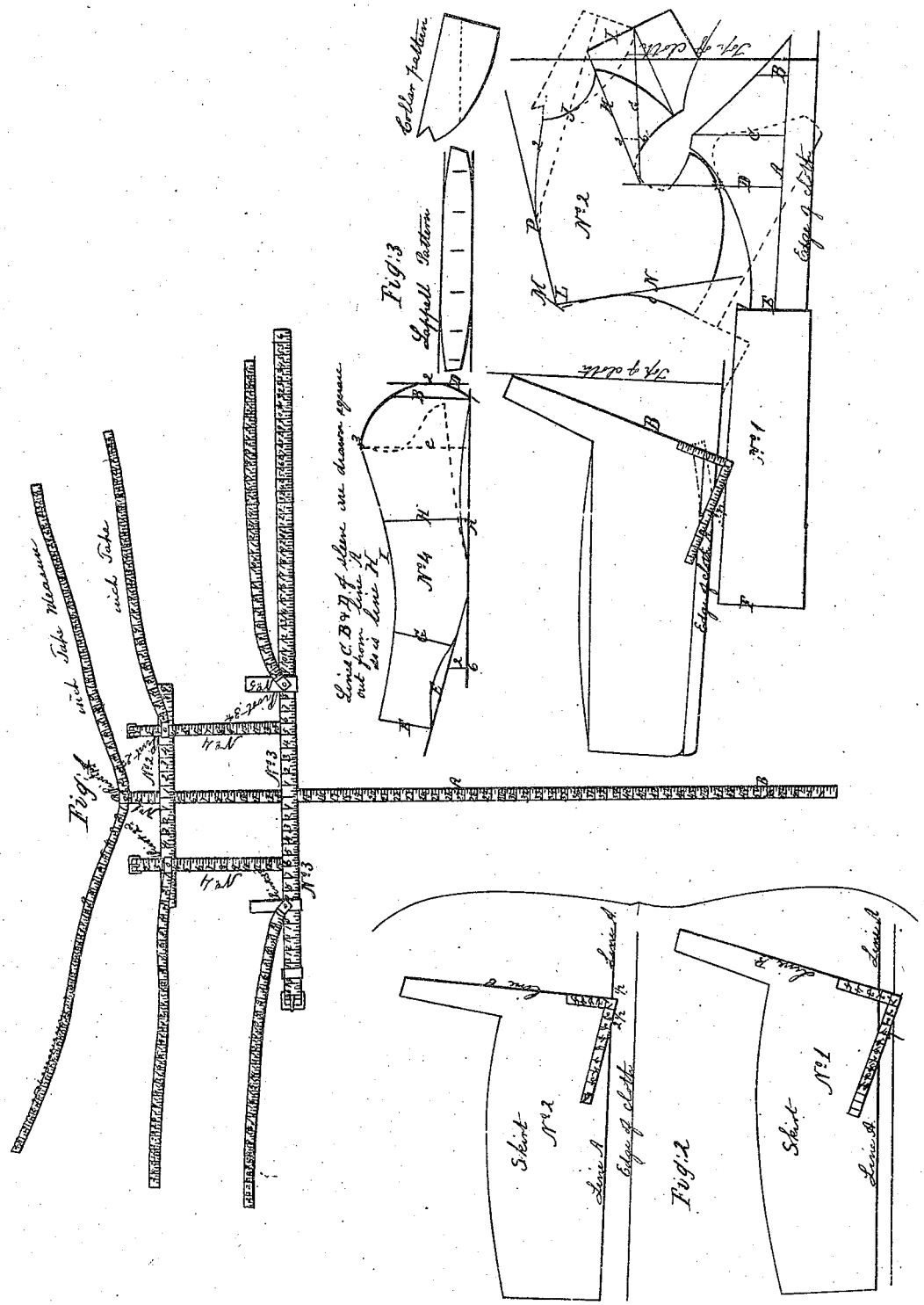
W. I. Lammont.

Tailors' Measure.

No. 1,566. Patented Apr. 18, 1840.



UNITED STATES PATENT OFFICE.

WM. J. LEMMOND, OF LANCASTERVILLE, SOUTH CAROLINA.

TAILOR'S MEASURING INSTRUMENT.

Specification of Letters Patent No. 1,556, dated April 18, 1840.

To all whom it may concern:

Be it known that I, WM. J. LEMMOND, of Lancasterville, in the district of Lancaster and State of South Carolina, have invented a new and Improved Mode of Measuring the Different Shapes of Men Preparatory to Drafting and Cutting Garments Therefor; and I do hereby declare that the following is a full and exact description, reference being had to the annexed drawings, making part of this specification.

The nature of my invention consists in the combination of a horizontal graduated sliding strap, having graduated vertical sliding straps upon it with tape measures attached to them with a graduated vertical strap and also the combination of a graduated horizontal strap having vertical sliding pieces with tape measures attached to them, with the vertical strap.

To enable others skilled in the art to make and use my invention, I will proceed to describe the instrument and its application.

Figure 1 represents the apparatus.

At pivot 1st there is a hook which is hooked on the person to be measured at the top of his back precisely over the socket bone of the neck. No. 1 is a spring steel ranging up and down the center of the back with 20 inches marked on it and an inch measure attached at A and at the lower end of this inch measure at B there is a piece of wood attached having 5 inches marked on it. The use of this spring steel No. 1 is to obtain the correct measure from socket bone down opposite to the shoulder point or back scye, which measure obtained correctly, and applied in drafting a coat, will remedy the evils of a coat being too high, or too low in the neck, which in the first case causes the collar to rise too high and press against the neck, and in the latter case causes it to stand off too far from the neck;—a further use of the spring steel No. 1 is to obtain the correct depth or bottom of the scye from socket bone at pivot 1st also the length of the waist and with the inch tape attached at A the length of skirt, &c., is obtained. The 5 inch piece of wood as above mentioned is to obtain the correct measure for the spring of the skirt of the coat which being taken correctly and applied in drafting the skirt of the coat, will prove to be self varying and remedy two important evils in garment cutting—the first is that of the skirts not having enough spring which causes them to gape or incline to stand apart or open—the second is that of the skirts having too much spring which causes them to lap across each other. By this measure being taken expressly for that purpose, and the skirt drafted accordingly the skirt will never be on either of the above mentioned extremes—but on the contrary always giving and diminishing spring according to necessity (see the accompanying draft of a dress coat skirt and explanation which makes a part of this specification). No. 2 is a spring steel having 12 inches marked on it each way from the center of the back 5 on No. 1 and is movable, it slips up or down on No. 1 as necessity requires and gives the correct width of each back between the shoulders, these measures are obtained correctly by slipping straps No. 4 to their proper places on No. 2 to buckle around each shoulder, if necessity requires one back to be wider than the other (caused by a deformity in the shape) showing how much it should be and also the correct width of each. Nos. 4 which are leather straps having 13 inches marked on them, being buckled to the proper tightness around the shoulder they show the size of the same, and the difference if any; the inch tape measures attached to each of these straps at pivot 2nd are to take the length of each sleeve or arm and show the difference, if any in their length. No. 3 is a leather strap and slips up or down on No. 1 as necessity requires to give the depth of the scye which shows on No. 1 from the top of the back;—to obtain this measure correctly No. 3 should be slipped to the proper place so as to buckle around the breast close up under the arms. No. 3 also gives the size of the breast. Nos. 5 on this strap No. 3 are pieces of tin or brass and are movable;—their use is to get the front of each scye from the center of the back at 11 on No. 1 if one shoulder is further forward than the other it will be detected by slipping these brass or tin pieces back until they come against each shoulder, and the difference will be seen on No. 3 from center of the back at 11 to the front of each scye. The two inch measures attached to pivot 1st are to take measure from that point down to the bottom of the lapel which gives the coat the proper length in front never dropping too low or being too short. The same straps give another important measure which is taken around in front of

the arms down to back taking at the proper length of waist and is the only measure that will throw a coat in properly at waist. The inch measures attached to Nos. 5 at pivot 3 are to take the measure from that point in front of the arms up to socket bone at pivot 1st and the same straps extended on down to the center of the back between the shoulders at 5 or No. 1 these measures always give cloth to the shoulders according to their shape and several necessities and if there be any difference in the height of the same (which is often the case) it will be detected by these measures last mentioned taken from front of arms up to the socket bone, center of back &c., by the use and application of the above instrument in drafting garments, the cutter is provided with a certain safe and simple remedy against error no matter how inexperienced he may be.

Directions how to take measure for the spring of skirts with a correct and self-varying system of drafting the same.—Suppose the instrument Fig. 1 on the customer and all the necessary measures obtained except the one now to be taken, which is to regulate the spring of the skirt. Your customer standing erect you will lay a straight-edge (some four feet long) on his back ranging up and down the back touching his hips and shoulders there will consequently be more or less of a space between the straight-edge and the small of the back or where the waist of the coat should be—this is now what you must do. You must find by measurement how much the straight edge lacks of touching the back at the proper length of the waist which is done simply by measuring (with the piece of 5 inch wood that is attached at B Fig. 1) from the inside or the side that lies next to the back on a level straight in till you touch the back at the proper length of the waist. You have now the measure that will give and regulate the spring of the skirt according to what necessity requires. For instance suppose two men precisely the same size in every respect yet one is very straight in the back, and a skirt having ordinary spring will lap across each other when on this man—while the other man is very hollow or sway backed and the same coat will gape or stand open in the skirt, whereas the measures above mentioned taken and applied in drafting the skirt will always remedy these two important evils, being self varying throughout. Observe the following rule.

Directions for applying the measure in drafting skirt, (see Fig. 2.)—If the measure for the spring is $\frac{1}{4}$ of an inch, lay your square with the first $\frac{1}{4}$ on the short arm on line A as represented in draft Fig. 2 and the first one and $\frac{1}{4}$ inches on the long arm touching or lying on the same line you then have the spring required by drawing line B as represented by the short arm of the square if the measure is $\frac{1}{2}$ an inch in the same way laying the first $\frac{1}{2}$ inch of the short arm on line A and the first $2\frac{1}{2}$ inches of the long arm on the same line then draw line B which gives more spring more being required.

If the measure is $\frac{3}{4}$ of an inch come out that $\frac{3}{4}$ with the short arm from line A and $3\frac{1}{2}$ in. of the long arm on the same line. If the measure is 1 inch in the same way as above, lay the first inch of your short arm of the square on line A and move in the long arm of your square till the first $4\frac{1}{2}$ inches on it lies on the same line. Observe this rule strictly and everafterward add double the distance below with the long arm of the square that you have to come out from line A with the short arm. For instance, if the measure is $1\frac{1}{4}$ inches as above directed you will lay the first $1\frac{1}{4}$ inch of your short arm on line A and the first 5 inches of your long arm on the same line: If the measure is $1\frac{1}{2}$ inches go down 6 inches on the long arm; if the measure is $1\frac{3}{4}$ inches go down $6\frac{1}{2}$ inches on the long arm; if the measure is 2 inches go down 7 inches on the long arm; if the measure is $2\frac{1}{4}$ inches go down $7\frac{1}{2}$ inches on the long arm; if the measure is $2\frac{1}{2}$ inches go down 8 inches on the long arm; if the measure is $2\frac{3}{4}$ inches go down $8\frac{1}{2}$ inches on the long arm, &c., always remembering that let the measure be what it may, taken for the spring, you must come out from line A represented with the short arm of the square, just the distance from line A that your measure calls for moving the long arm in or out as directed see Fig. 2. The first draft No. 1 of Fig. 2 is drafted for a man whose measure taken for the spring is 2 inches consequently following the rule laid down you must come back from line A that numbers the short arm of your square as represented and move the long arm of the square in till the first 7 inches on it rests on the same line. You then draw line B by short arm of square which is the spring required. The second draft No. 2 is for a man whose measure for spring is only $\frac{1}{2}$ an inch in the same way observing the rule as above you come out from line A $\frac{1}{2}$ an inch with the short arm of square and move in the long arm till the first $2\frac{1}{2}$ inches on it rests on the same line then draw line B by the short arm of the square which is the spring required for the coat. Observe that though these men may be precisely the same size in every particular yet it will be seen what a material difference each man requires for his correct spring of skirt.

Explanation of back and fore part, (Nos. 1 and 2, Fig. 3.)—1st. Draw line A ranging with edge of cloth giving yourself plenty of

cloth to turn in back skirt. 2nd. Apply your measure as taken from socket bone down level with shoulder point on line A. 3rd. Apply to bottom of scye, length of waist skirt, &c., and dot the several places as you go down. 4th. You now draw lines C D E and F square out from line A and edge of cloth. 5th. Apply the width of back across line C and make a dot. 6th. Apply front of scye measure on line D. 7th. Draw line G square up from line D. 8th. Go up line G 6 inches and on a square from it go out 2 inches and draw line H. 9th. We will now retire to back No. 1 again, the width of back scye may be according to fancy or fashion so also the width of back at top and at waist. 10th. Line B is got by a sweep which is the length from top of back down to line C. 11th. Side and shoulder seams are swept by length of waist. 12th. We will now proceed with forepart No. 2 by applying the measuse taken from front of shoulder up to socket bone on line H and make a dot. 13th. Apply the measure (taken with the same straps over the shoulders down to the center of the back between the shoulders) on line G make a dot and draw line I. 14th. Lay your back seam on this line I as represented and make shoulder seam of forepart. 15th. Line J is drawn square out from line H and is just half way between line D and line I. 16th. The neck gorge is swept with half the stock measure commencing at the top of the shoulder point and intersecting line J. 17th. We will now throw the coat in correctly at waist by applying the measure (taken from socket bone down in front of the arm around to back tacking) you will lay the forefinger of the right hand on the back and forepart as represented by the star thus *—on line D; then with the left hand you move in the lower part of the back till it comes within the compass of the measure as above mentioned. 18th. Your back being now in its proper position as represented by the dotted back you will make your side seam K. 19th. Let your back lie as it is and take one half of your waist measure (and your chalk in your right hand and your left hand at back tacking as represented by dotted back) sweep L. 20th. You now take the length of your measure from socket bone to bottom of lapel and your chalk in your left hand holding the end of your sweep in your right hand placed at top of back at the junction of lines H and I you now sweep M where these lines L and M cross is the proper length for bottom of lapel and also the proper size of waist. 21st. To get line N you go up your back on line A (as it lies in its dotted position) one fourth the length of waist and draw line N to intersect at the cross sweeps L and M. 22nd. Line O is swept with one fourth the waist measure commencing at lower joint of side seam and intersecting line N as represented. 23rd. Line P is drawn square up from line N as represented. 24th. To get the front of lapel measure one fourth the stock measure round or neck gorge make a dot measure on one half the stock measure make a dot take your collar pattern lay it down as represented by the dotted collar with the break of collar at the last dot you made on neck gorge for half the stock measure—place your finger on the collar pattern at the dot one fourth the stock measure making a pivot of this last dot—then move the hind part of the collar pattern till you have the proper break of lapel, then dot the front of the collar and sweep line 2 by length of waist commencing on line P at the lower part of the break of lapel and sweeping to dot made at front of collar.

Explanation of skirt No. 3 represented in Fig. 3.—1st. Draw line A 1½ inches from edge of cloth; we now suppose the measure taken to be ½ an inch. 2nd. You then place the first ½ inch of the short arm of your square on line A as represented hold the forefinger of the right hand on this making a pivot of it; you then with the left hand move in the long arm of the square till the first 2½ inches on it is on line A as represented—then draw line B by the short arm of the square. 3rd. For width of skirt at top go across one fourth the waist measure for width at bottom go according to fancy or fashion; the length is got by back skirt. (See general directions.)

General directions for taking measure and drafting skirt No. 3.—If your customer measures in at the waist ½ an inch come out that quantity from line A and go down 2½ inches striking the same line with the long arm of the square as before directed. If he measures ¾ of an inch go down 3½ inches; if he measures 1 inch go down 4½ inches and ever after add double the distance below that you have to come out from the line A for a fourth add a half, for a half add an inch, &c.

Explanation of sleeve No. 4, (see Fig. 3).—1st. Draw line A on the edge of the cloth. 2nd. Draw line B 1½ inches from top of cloth. 3rd. From B to C is one fourth the measure from sleeve head to elbow draw line C. 4th. Line D is one fourth the distance above B that it is from B to C. 5th. Apply one half the scye measure across on line C make a dot. 6th. Sweep sleeve head by one fourth the scye measure commencing where line B starts from line A touching line D at 2 terminating on line C at 3 where you made your dot when applying half the scye measure across on line C. 7th. From elbow go down line A 6 inches and on a square from that go out 2 inches and draw line E. 8th. Line F is drawn square out from line E. 9th. Apply half of your several measures taken around the

arm and hand on lines H G and F and get line I by your eye. 10th. For under side take off one fourth the measure across line C, this must be taken off at top on line B as shown by the dotted line.

What I claim as my invention and which I desire to secure by Letters Patent consists in—

The combination of the horizontal graduated sliding strap No. 2 having graduated vertical sliding straps No. 4 upon it with tape measures attached to them with the graduated vertical strap B and also the combination of the graduated horizontal strap No. 3 having vertical sliding pieces No. 5 with tape measures attached to them with the vertical strap B, the whole being constructed and operating in the manner and for the purpose described.

WILLIAM J. LEMMOND.

Witnesses:
M. CLINTON,
HENRY R. PRICE.