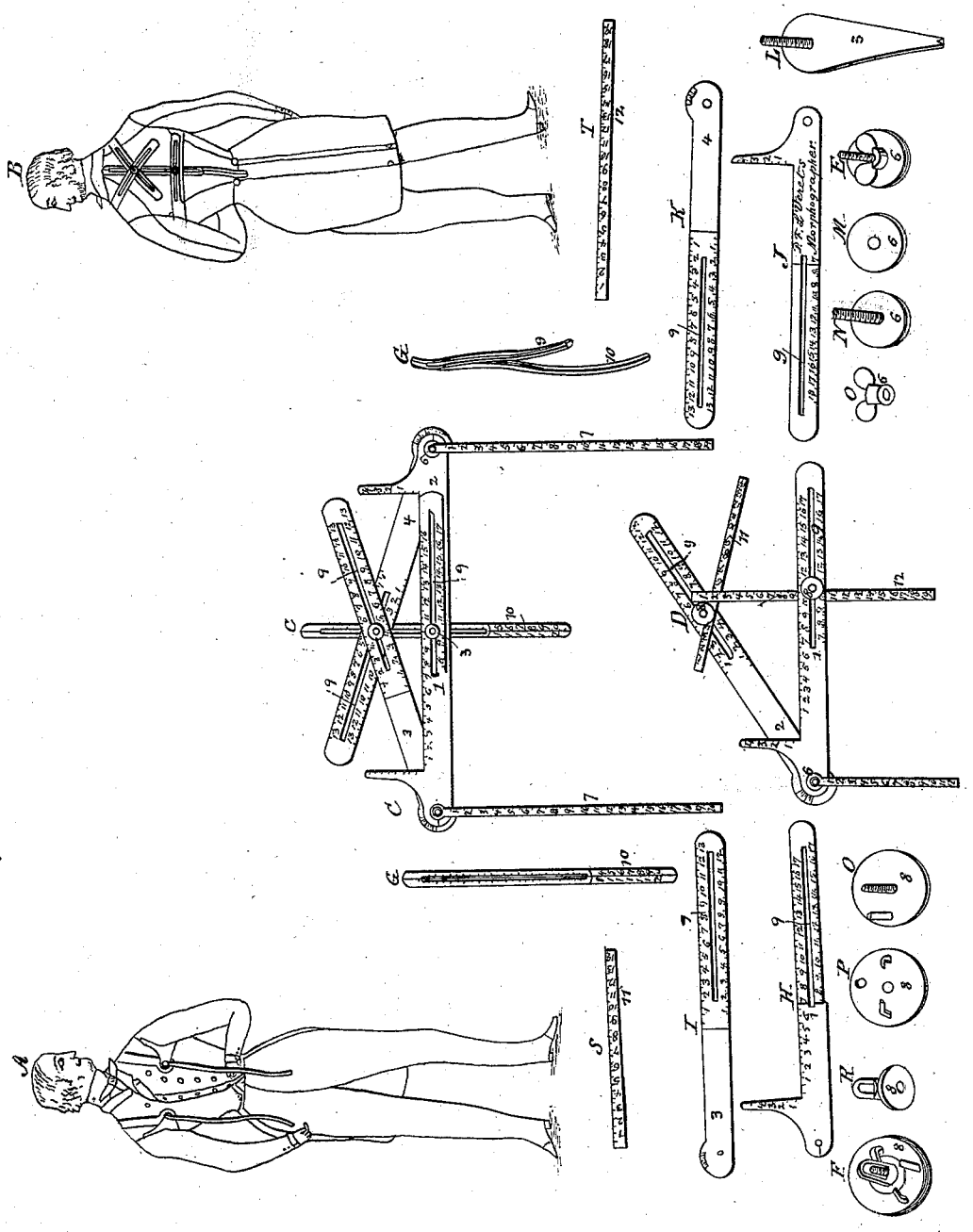
2 Sheets—Sheet 1.

# P. F. L'VERET.

## Tailors' Measure.

No. 2,640. Patented May 26, 1842.



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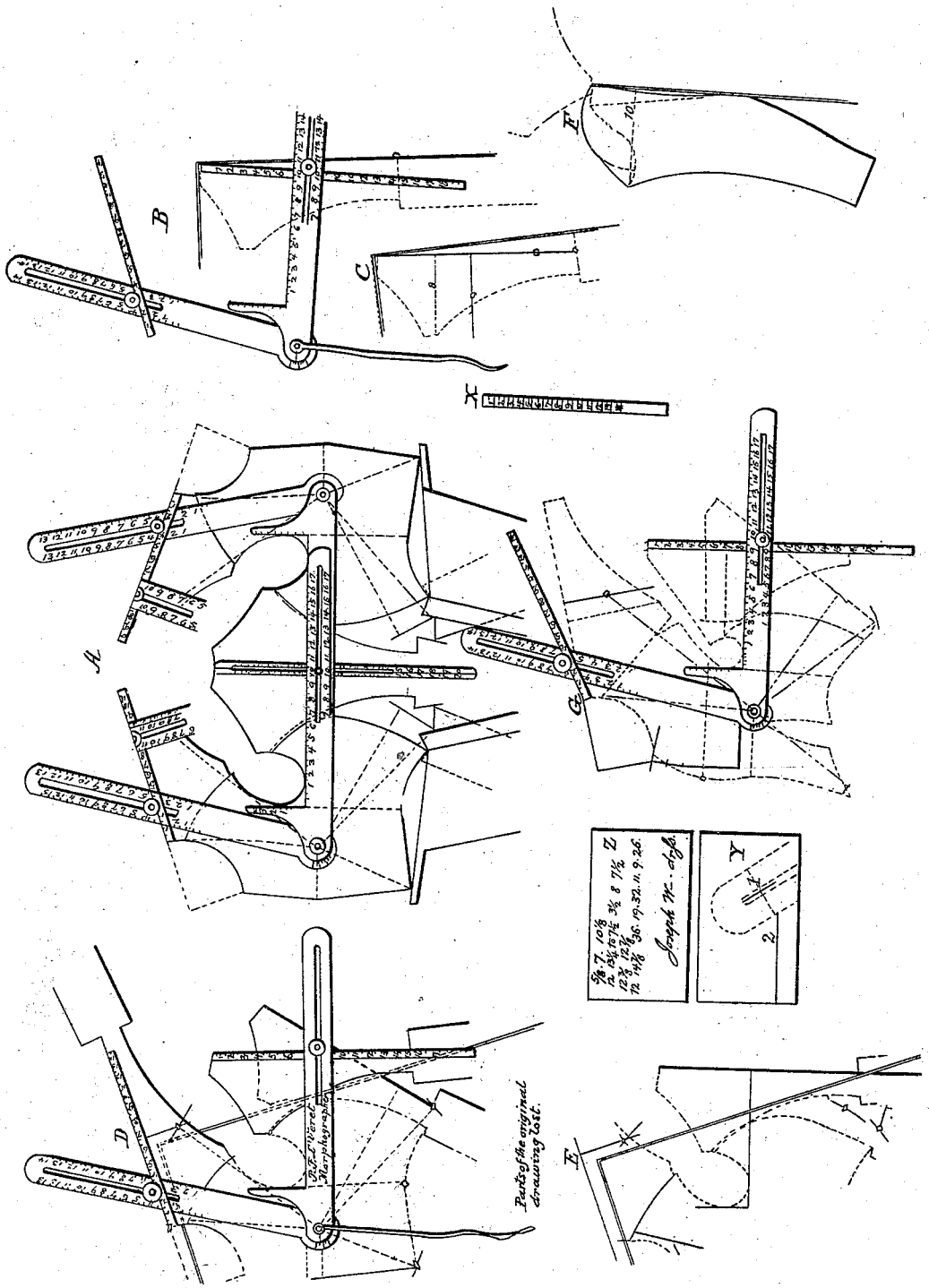

# UNITED STATES PATENT OFFICE.

PETER F. L. VERET, OF WARRENTON, GEORGIA.

## INSTRUMENT FOR MEASURING GARMENTS.

Specification of Letters Patent No. 2,640, dated May 26, 1842.

*To all whom it may concern:*

Be it known that I, PETER F. L. VERET, of the town of Warrenton, in the county of Warren and State of Georgia, have invented a new and useful machine or instrument to be used in cutting body-garments, to take the measure of the human body, and particularly those parts which are so susceptible of variation from general proportion, and to ascertain exactly as well the general shape or figure as any peculiarity which may be found to exist in its conformation, which instrument I have denominated "morphographer;" and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same.

Figure C, plate 1, is a full view of that portion of the instrument used in taking the measurement of the body; this is denominated the measurer and is composed of eleven separate parts or pieces, viz: Four straps made of pasteboard and linen pasted together and covered with morocco or other material, made pliable and strong, having a piece of sheet brass or tin at the end of those two having the projection to give said projection firmness and strength, for form of these straps, see parts 1, 2, 3, 4, Fig. C, four screws made strong upon their bases with caps and pressure plates, all of steel, Fig. C, 5 and 6, one quadruple scale made of tin or other metallic substance thin, Fig. C, 10, two tape measures connected with the pivot screws by a ring, the ring constituting part of the length of the tape, Fig. C, 7. The straps 1, 2, 3, 4, are two feet in length and two inches in width, connected at the ends by pivot screw 6, and united to the quadruple scale, 10, by screw 5.

Fig. H 1 is a view of the left side strap being two feet in length and two inches wide having a projection of four and a half inches, three inches from the pivot formed a right angle with the upper edge. This projection is marked with inches, commencing at the distance of one inch from the angle; the upper edge of this strap is also marked with inches from 1 to 17, beginning at the angle; the lower edge of this strap is also marked with inches from 7 to 17 corresponding with those on the upper edge. This strap is ¼ inch narrower from 7, on the lower edge to the end to leave the figures on the right side strap uncovered as at Fig. C, 2 when parallel and in contact. Fig. J, 2 is the right side strap corresponding in size and shape with Fig. H, excepting that this strap is of uniform width and marked with inches only on the lower edge. Fig. I, 3 is the left shoulder strap; this stray has a projection of ½ inch of a rounded form at the pivot end upon which degrees are marked; this strap is also marked with inches on upper and lower edges beginning 9 inches from the pivot and extending to the end opposite the pivot as far as 13 inches. K, 4 is the right shoulder strap corresponding with the left in every respect. The two tape measures Fig. C, 7 are marked with inches and parts on the opposite edges of one surface, with a ring at one end through which the screw cap passes connecting it with the pivot screw 6, which ring constitutes part of its length, viz: 25 inches. Figs. G are views (front and oblique) of the quadruple scale 10, Fig. C. Fig. C, 6 is a view of the pivot screw (Fig. C, 6) complete, Figs. M, N. O. Said screw in detached parts, viz: N, 6, is a view of the base and screw which last is firmly fixed in the former; M, 6, the pressure plate which passes over the upright screw N, 6 and rests upon its base. O, 6 is the screw cap by which the straps between the base and pressure plate as at 6 Fig. C, are held in any required position. L, 5 is a view of the base and upright screw of screw 5 Fig. C, the cap and pressure plate of which correspond with M, 6, and O, 6. This instrument can be adapted to a body of any size or shape by means of the openings 9 in Figs. I J K H and G, and 1 2 3 4 and 10 of Fig. C, which by allowing a passage of the uprights of the screws enable the person using the instrument to expand or contract it at pleasure. Fig. D is a view of that portion of the instrument used to convey the measurement to the cloth and is used exclusively in cutting; this is denominated the operator and is a counterpart of one half of the instrument Fig. C; the straps may be constructed of pasteboard, brass, tin or other material; the scales 11, 12 are designed to represent one half of the quadruple scale 10, Fig. C. Fig. F, 8 is a view of the screws 8, Fig. D, complete. Figs. P, Q, R, said screw in detached parts viz: Q the base with upright screw and pressure plate stay, P the pressure plate, R the screw cap. Figs. S 11, T 12 are detached representations of scales 11, 12 Fig. D.

N. B.—The drafts above alluded to are

graduated by a scale of $\frac{1}{4}$ inch to an inch, except the screw E and parts M, N, O, and screw F and parts R, P, Q, and Fig. L; all of these are of full size. Figs. A and B are representations of the instrument applied for measurement, A being a front view, B, a back view.

In cutting by this instrument there are three orders of measurements essential to a perfect fit each being however of different degrees of importance. The first order consists in obtaining the following measurements, viz: The exact place of the arm-hole; the exact distance from the front of one arm-hole to the front of the other around the back; the opening of the arm hole which straightens or lowers the shoulder; the exact height of the back from the level of the lower part of the arm hole to the neck; a central point or pivot to obtain by measurement the length of the shoulder to the top of the back at the center; the length of the shoulder over its point from the pivot to the upper edge of the side strap; the width of the breast; the length of the side from arm hole to hips; the exact length of the waist; the distance from the pivot to back screw between the shoulder blades and hip buttons; the distance from the pivot to the hip buttons at the center of the back; all of which measurements are taken with the instrument without its being removed from the body.

The second order of measurement and not least in importance as it enables the cutter to give a handsome shape to his cutting and to cover the appearance of deformity in the subject is taken from the first order but without interfering with it. The half of the distance from the front of one arm hole to the front of the other around the back is divided into 28 equal parts which constitutes a scale suited to the subject of that measurement, which serves to give the width of the back, the center of the breast at the neck, to form the top of the sleeve, and to give the length of the different sweeps to give the coat a regular and handsome form in its proportion.

The 3rd order is connected with the 2nd and is entirely governed by fancy or fashion and has reference to collar, lappel, &c., but in no instance is to interfere with the first order.

Plate 2nd, Fig. A, is a general view of the instrument, Fig. C, plate 1st, developed on a draft after the manner of the first and second orders.

Fig. X is a view of a scale alluded to in 2nd order, adapted to diagrams A, B, C, D, E, F, and is $10\frac{3}{8}$ inches in length.

In diagrams B, C, D, E, the double lines represent the edges of the cloth, the full single lines the measurements indicident to the first order as well as all marks of diamond shape; the small dotted lines indicate those of the second order and the long dotted lines in diagrams A, D, G indicate measurements effected with the tape measure 7, Figs. D and C, plate 1st.

*Manner of applying the measurer Fig. C, Plate 1st.*—Loosen the four screws so that the instrument may be expanded sufficiently to pass upon the person with ease in the manner of a vest; adjust the two side straps by placing their projections immediately in front of and in contact with the arm at the shoulder and the upper edge of the strap close under the arm in which position they may be held by the person by pressure of the arms against the body; pull the side straps by their ends moderately tight, having the quadruple scale at the center and extending to the top of the back; confine these straps by the screw; fasten the shoulder straps moderately tight having laid them smoothly, their corresponding numbers meeting at the center of the quadruple scale, by which the instrument will be held in place allowing the subject to resume his natural position; now attend to one pivot, first pressing the projection and upper edge of that side strap somewhat firmly in front of and under the arm; lay that shoulder strap smoothly on that shoulder, the upper edge being as close to the neck as possible; then fasten the pivot screw tight and notice the degree indicated by a dot on the edge and center of the front end of the side strap say $\frac{5}{8}$; fasten the other pivot at the same degree; regulate the instrument in parallel on the back, the lower or side straps being in a horizontal or level position, the quadruple scale in perpendicular and reaching the height required and adjusted to the exact center ascertained by the correspondence of the numbers on the lower edges of the right and left side straps, the shoulder straps crossing at their corresponding meeting, the whole then confined closely on the body for position, see Figs. A, B, plate 1. Then take the numbers of your measures on a blank card in the following order, viz: First line.—Pivot $\frac{5}{8}$, the number on the quadruple scale, in contact with the upper edge of side straps—say 7—then the central number of the two side straps—say $10\frac{3}{8}$. Second line.—Take the tape pivot measures one in each hand and at the same time, measure the distance from pivot to the top of the quadruple scale—say 12—then pass the tape measure over the lower part of the shoulder to the side strap on that side; put down the number on the tape measure first—say $13\frac{3}{4}$—and the number on the side strap where the measure meets it—say $7\frac{1}{2}$—viz: $13\frac{3}{4}$ to $7\frac{1}{2}$; cross the two tape measures on the breast and take the central number—say $3\frac{3}{4}$—take the measure from pivot to lower part of the front—say 9—and the distance from the

pivot to the hips—say 7½—then the measure of the body behind, passing the measures under the arms and crossing them between the shoulder-blades and hip buttons at the center of the back; take the central number on the measure—say 12⅜—and the number on the quadruple scale where the tape measures meet and cross—say 12—mark this last number under the preceding one thus, $\frac{12\frac{3}{8}}{12}$, which begins two new lines; then measure in the same measure to the center of waist between the hip buttons—say 12⅞ tape measure and 14⅞ on the scale, placing the measure of the tape on a line at the side of the previous tape measure and the same in relation to the number indicated on the scale respecting thus, $\frac{12\frac{7}{8}}{14\frac{7}{8}}$; place the succeeding measures on the last line. These last measures are taken in the usual way, viz: Length of sleeve, etc., for representation of card and measures in order, see Fig. L, plate 2. Now unscrew the two pivot screws and the screw on the side straps and take the instrument off. Now place the back of the card under the top of the scale and part of the shoulder straps; draw a line through the opening in the scale on the card also draw a line along the upper edge of the strap to the scale; then make a dot on the card close to any number on the scale and strap and mark each number on the card close to the dot, and you have the measure complete; for representation of the back of the card with marks see Fig. Y, plate 2. Now adjust the operator, Fig. D, plate 1, so as to make it an exact counterpart of one half the measurer by first fastening the pivot screw upon the side and shoulder straps having the dot on the end of the shoulder strap at the same degree as on the measurer; this will bring the side and shoulder straps of the operator in the same relative positions and at the same angle as those of the measurer, and fasten firmly; secondly, place the longer of the two scales upon the side strap in such manner as to bring the same numbers upon each in contact upon each as are so upon the measurer; then place the upper edge of the shoulder strap upon the card before alluded to parallel and close to the line previously drawn upon it by the edge of the said strap of the measurer so as to bring the dot and number upon the card immediately in connection with that number upon the shoulder strap; then place the short scale parallel and close to the oblique line upon the card and bring the dot and number in connection as before and secure with the screw; this operation will bring the two scales in the same relative positions to and at the same angle with the side and shoulder straps as in the measurer; for the lines alluded to see Fig. V, plate 2.

Now proceed to mark the coat. First mark a line on the cloth for the center of the back, make a dot ½ inch from the top of said line; place the operator on the cloth, bringing the edge of the long scale against said line the top of the scale at the dot upon the line; draw a line by the upper edge of the side strap across the back; make a dot upon that line at the number where the measure taken over the point of the shoulder meets—say 7½—make a dot upon the line of the center of the back at the number where the measure taken to that line between the shoulder blades and hip buttons meet; then likewise to the waist see Fig. B, plate 2. These marks are of the first order. Fig. C, plate 2, is a representation of the marks of the first order for the back and also of the marks of the second order which last are obtained by scale Fig. X, plate 2. Then for the fore part of the coat place the operator upon the cloth, mark a line by the straight edge of the projection and upper edge of the side strap to the scale then from the top of each scale to its junction with its respective side or shoulder strap; then make use of the tape measure as represented on Fig. D, plate 2, making a dot at the termination of each respective measurement and a sweep over the dots to facilitate the operation. The operator may now be dispensed with. Place the straight edge of the back against the line drawn from the top of the long scale to the side strap, making a dot at the junction of the side seam with the arm hole and one on the edge of the back crossing the line drawn by the upper edge of the side strap; place the back even at the side seam at the mark intended for the point of the side of the fore part, then bring the lower end of the back at the center on the lowest dot made by the tape measure and make a mark at the opposite side of the back, to get the lower part of the fore part at the side seam, then move the back so as to bring the straight edge on a line with the second dot made by the tape measure, and make a mark opposite to said dot against the back; then trace a curved line upon those marks from the upper point of the fore part to the lower which will give the shape of the side of the fore part, but a careful cutter will always measure the back to the side of the fore part from the top down to get the exact length as the curve varies with the shape of different persons. Now proceed to the shoulder, place the top of the back at its center at the dot on the line drawn by the scale attached to the shoulder strap and corresponding to the measure of that part of the shoulder; bring the dot made on the back at 7½ on the dot or sweep made by the measure taken over the point of the shoulder; trace a line against the back for the shoulder seam; draw a line by the center of the back to get

the gorge; measure 7½ with the scale X from the top of the back and make a dot; draw a line from that dot downward at right angles with the last line six degrees with scale X; draw a line across the breast level with the line under the arm hole and place your square on said line and draw a line perpendicularly upward immediately above the mark made for the center of the breast and make a dot at six degrees of scale X; get the central point between the proximate extremities of the two lines of 6 degrees which will be the exact height of the breast at the junction of the gorge; draw a line from the point of the gorge to the junction of the back and arm-hole at the side seam; the sweep of the gorge is made by half of the length taken direct from the point of the gorge to the center of the upper part of the back, the sweep of the pitch of the arm hole by 2½ degrees scale X touching both lines; the length of that sweep, to the upper part of the side of the fore-part is made by 4 degrees scale X and the continuance of the sweep of the pitch of the arm hole to the point of the shoulder by 10 degrees scale X. For a view of marks of first and second orders see Figs. D and E, plate 2. Fig. F, plate 2, is a sleeve. Fig. G, plate 2, represents a draft for a ladies' habit; the application and operation of the instrument is the same as for a coat excepting the 2nd order.

What I claim as my invention and desire to secure by Letters Patent is—

The construction and combination of the morphographer in its different parts and its application to the measurement of the human body and transferring said measurement to the cloth, thereby enabling the practical tailor to furnish his customer a body garment accurately fitted and adapted in all respects and in every instance to the person.

PETER F. L. VERET.

Witnesses:
JOSEPH W. THOMAS,
STODDARD W. SMITH.