A. H. RICHEY.

Tailors' Measuring Apparatus.

No. 165,026. Patented June 29, 1875.

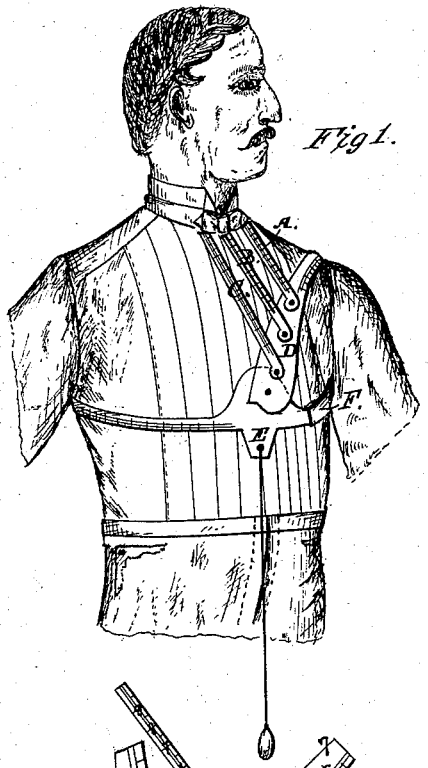

Fig 1.

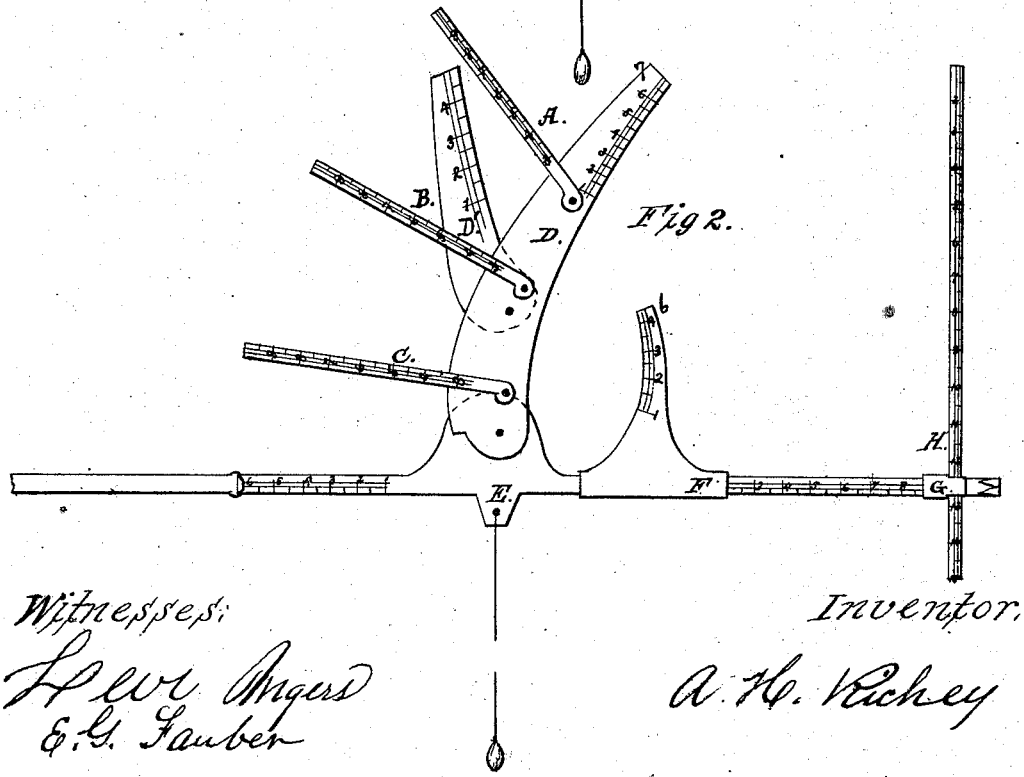

Fig 2.

Witnesses:

Lewis Ingers

E. G. Faber

Inventor:

A. H. Richey

UNITED STATES PATENT OFFICE.

ALBERT H. RICHEY, OF LEBANON, PENNSYLVANIA.

IMPROVEMENT IN TAILORS' MEASURING APPARATUS.

Specification forming part of Letters Patent No. **165,026**, dated June 29, 1875; application filed January 20, 1875.

To all whom it may concern:

Be it known that I, ALBERT H. RICHEY, of Lebanon, in the county of Lebanon and State of Pennsylvania, have invented a new and valuable Improvement in Tailors' Measuring Apparatus; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation thereof, which will enable those skilled in the art to make and use the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of the invention when applied and adjusted to the body of a person. Fig. 2 of the drawing is a representation of the same when it is removed from the body and applied to the cloth, for the purpose of drawing the pattern.

Similar letters indicate corresponding parts.

My invention relates to a tailor's measuring apparatus, which is composed of a series of thin metallic strips of sheet metal, some of which are made to slide and others to vibrate, and each strip is provided with an appropriate scale, and with adjusting-registers placed under each vibrating arm at its base; also, with open hooks, in such a manner that the same can be made to assume the shape of the body, and then transferred from the body and placed upon the cloth, for the purpose of drawing the pattern thereon.

My apparatus consists of an arm-scye gage, breast-rule, back-rule, and curved vibrating main arm. The main arm is provided with a vibrating arm for marking the shoulder-gage, and three smaller vibrating arms for marking shoulder-point, neck-gage, and neck-front. My back-rule is provided with a curved sliding arm for marking arm-scye gage, a slide for marking back-seam, and a sliding horizontal bar for marking neck-seam and length of waist. The arms and slides are provided with open hooks, to hold them in place after they are adjusted. The breast-rule is also provided with a strap, which is hooked to the back-rule around the body to keep the apparatus in place while the rest of the parts are adjusted to the body, and to enable me to use the plumb-line and bob to ascertain whether the measure is fitted square to the body, and the correct angles, the plumb being attached between the breast-rule and back-rule, directly beneath the main arm; all the parts being so constructed and connected to each other as to admit of its extension or contraction, as the shape of different persons may require, and after the shape of the body has been correctly adjusted the same can be transferred to the cloth, and the patterns can be drawn in the manner hereinafter described.

The manner in which my invention is operated to secure the results mentioned is as follows: The arm is placed through the scye, between slide F and arm D, and held tight up under the arm, the strap being fastened tight around the body to the hook attached to the end of the back-rule; adjust the plumb-line and bob E; shift slide F close to back of scye or arm, which denotes width of scye; shift slide G to center seam of back, which marks width of back-pattern; hook point 6 on slide F fair to the body at top; bring arm D fair over the shoulder to meet point 6 on slide F; hook point 7 arm D, which marks size of arm hole or scye; shift perpendicular bar-slide H up to the neck-seam, which marks height of neck on back and length of waist; carry arm A to point 1 on back at neck, and note register on arm A, and distance to point 1, which locates points 1 and 2; shoulder point and back shoulder-point to join; carry arm B up to neck-seam, note register on arm B, and distance to point 3, neck-seam or gorge; carry arm C up to center at neck-front; note register on arm C and distance to center of neck, which locates point 4, and gives correct size of neck and height of neck-front; note register on arm D; this gives the inclination of the shoulder; take the center of breast-point 5 on bar H; this gives quantity of goods required for breast-pattern; note distance, and locate height of back-point, back of scye on slide F; also, note distance on arm D at point 7, at back-point, as located by point 6, slide F; this gives size of scye and location of shoulder-seam at scye; note distance to center of back, slide H; these will give a correct adjustment of the apparatus for application to the cloth. The plumb having been correct during these operations, measure from plumb-line E front to center of stomach

with inch measure, and note distance, this will give quantity of goods wanted in front to center of body; measure with inch measure from same point on plumb-line E to center of back, natural waist-tight; this will denote correct quantity of goods required to center of back; measure full length of coat and length of sleeve from scye to elbow, and to wrist.

For drawing the pattern, place the apparatus, previously adjusted, as described, slide perpendicular bar H to edge of cloth toward the person drawing, allowing at waist for back curve and tack; place all adjusting slides and arms to correspond exactly as adjusted in measuring the body; mark on the cloth at all extended points from points of adjustment carefully to correspond with distances as taken in measuring; mark around the shape of scye; draw a line from plumb E square down to waist, and then remove the apparatus from the cloth. By the further aid of the inch measure the patterns can now be drawn correctly by a little calculation and practice, and the exact shape of the body will be secured.

The vibrating arm D′ attached to the main arm D is used in the same manner as the arm D where the body to be measured is more broad-shouldered than can be measured by the arm D, and also for the purpose of measuring ladies' dress-bodies, substantially as described.

What I claim as new, and desire to secure by Letters Patent, is—

In combination with the main arm D, the vibrating arms A, B, and C, slide F, and horizontal bar H, provided with appropriate scales and registers, and with open hooks for connecting the parts together, all constructed and arranged, substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

A. H. RICHEY.

Witnesses:
LEVI MYERS,
E. G. FAUBER.