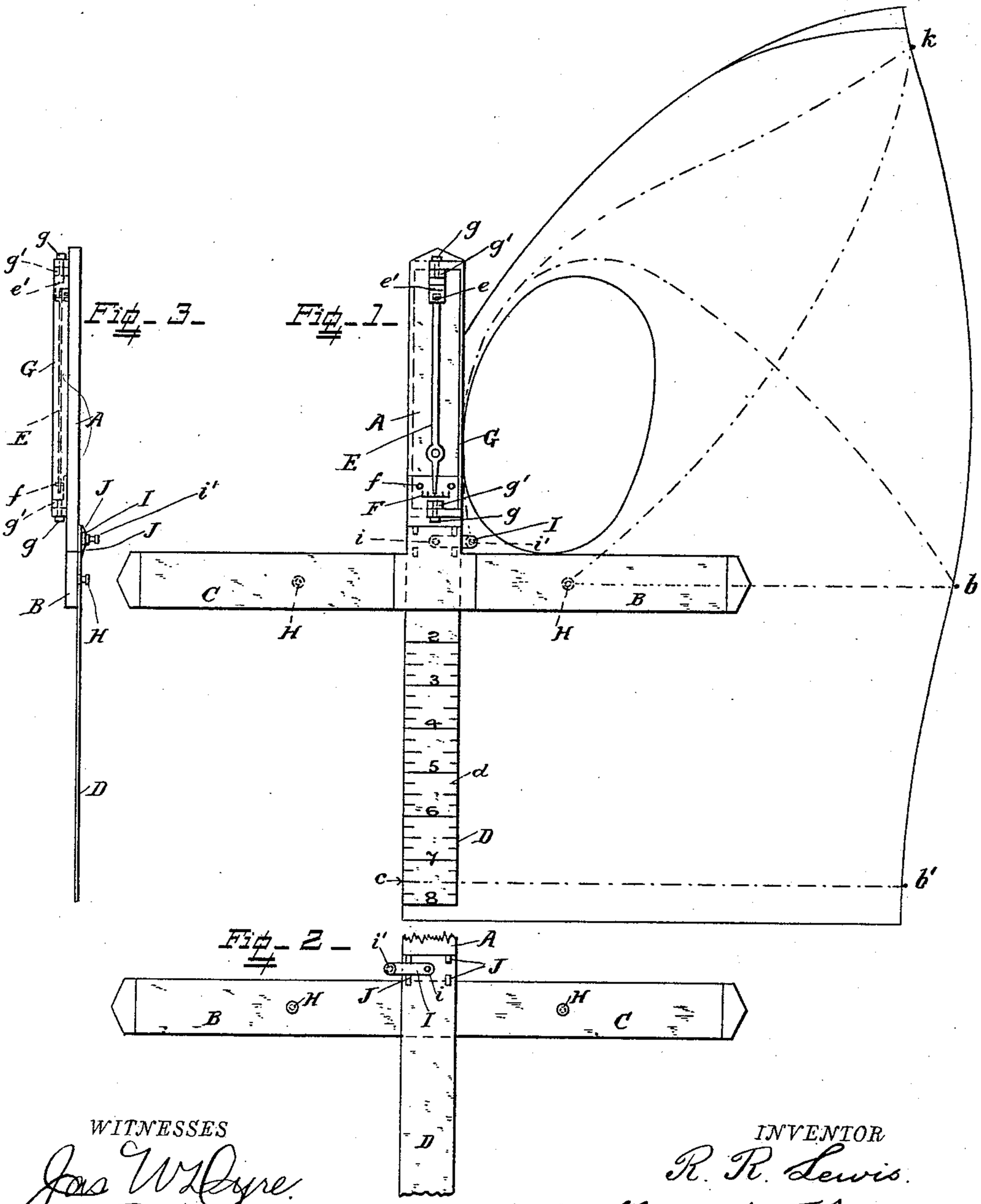
(No Model.)

R. R. LEWIS.

TAILOR'S MEASURE.

No. 441,675. Patented Dec. 2, 1890.



WITNESSES

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RICHARD R. LEWIS, OF UNION CITY, PENNSYLVANIA.

TAILOR'S MEASURE.

SPECIFICATION forming part of Letters Patent No. 441,675, dated December 2, 1890.

Application filed March 5, 1890. Serial No. 342,744. (No model.)

To all whom it may concern:

Be it known that I, RICHARD R. LEWIS, a citizen of the United States, residing at Union City, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Tailors' Measures; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This instrument relates to instruments used by tailors for measuring the human form; and it consists in the novel construction and combination of the parts hereinafter fully described and claimed.

In the drawings, Figure 1 is a front view of the instrument, showing the manner of using it. Fig. 2 is a rear view of the instrument, and Fig. 3 is a side view of the same.

A is a wooden vertical blade provided with cross-arms B and C at right angles to it, and D is a blade of flexible metal secured in line with the blade A below the cross-arms and provided with a scale of inches or other divisions *d*.

E is a pendulum pivoted at *e* in the bracket *e'*, secured to the upper part of blade A; and F is a graduated plate provided with stops *f* for limiting the motion of the lower end of the pendulum.

G is the reversible guard, pivoted in the center of the blade A by pins *g* and lugs *g'* and adapted to be turned over to guard the other side of the pendulum, as indicated by the dotted lines in Fig. 1.

H H are two pins projecting from the arms B and C at equal distances from the edges of the flexible blade. The said flexible blade is one inch wide, and the pins H H are five inches apart.

I is a swinging arm pivoted centrally between the pins H upon the pivot *i* and provided with the pin *i'*.

J are projections upon the back of blade D for retaining the arm I, which is springy enough to pass over them when turned forcibly by hand. The pin *i* comes a little over the edge of blade D when turned in either direction, and each pin H is exactly three inches from that edge of the flexible blade which is the farthest from it. The blade D is made flexible, so as to fit close against the body.

The principle upon which this instrument is constructed and applied is that the breast-measure should be six inches greater than the waist-measure to preserve a perfect proportion. This instrument is applied, as shown in Fig. 1, by placing it against the vest in front of the arm. The end of the pendulum comes opposite the point of contact with the arm, and the guard prevents the shirt-sleeve from obstructing the motion of the pendulum. When the pendulum indicates that the arm D is vertical, a measurement is taken from the pin H under the arm to a point *b*, which is at the middle of the back. An ordinary tape-measure is used with a ring at the end which will slip over the pin H. The instrument is so proportioned that the distance from pin H under the arm to point *b* should be one-quarter of the breast-measure. Thus if this distance is nine inches the correct breast-measure should be thirty-six inches. If ten inches, the breast-measure should be forty inches, and intermediate measurements will give different breast-measures varying in the same proportion. The tape-measure is then moved and applied to the waist, a mark being made on the vest down the outside edge of blade D. The figures on the scale *d* show at what distance the waist is measured below the arm. The distance is measured between the mark made against the outer edge of the blade at *c* on the waist-line to the point *b'*, which is at the middle of the back. If the proportion of the body is perfect, the distance between *c* and *b'* will be exactly the same as between H and *b;* but if the distance is not the same the amount of the difference will indicate the disproportion, and this amount of difference must be distributed between the breast and waist measures in cutting out and making up the garment. Thus measuring from H to *b* gives the breast-measure and also what the distance from *c* to *b'* ought to be, and measuring from *c* to *b'* gives the actual measure and the disproportion at the same time. The instrument can be applied to the other arm at the opposite side of the vest in a similar manner. The arm I is turned, as shown in Fig. 1, ac-

cording to the side of the body to which the instrument is applied, and measurements are taken from its pin *i* to point *b* and to the point *k* at the middle of the top of the back. A measurement is also taken from pin H under the arm to the point *k*.

What I claim is—

1. The combination, with the vertical blade and its cross-arms, of the pendulum pivoted to the upper part of the vertical blade and the reversible guard pivoted on the center line of the pendulum to the said vertical blade, substantially as and for the purpose set forth.

2. The combination, with the vertical blade and its cross-arms, of the flexible blade arranged in line with the said vertical blade, the pins projecting from said cross-arms at a certain fixed distance from the edges of the said flexible blade farthest from them, and a pendulum pivoted to the vertical blade, substantially as and for the purpose set forth.

3. The combination, with the vertical blade and its cross-arms provided with pins H, of the flexible blade arranged in line with the said vertical blade, the swinging arm provided with a projecting pin at its free end and having its other end pivoted to the blade centrally between the pins H, and the projections on the back of the blade for retaining the said swinging arm, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

RICHARD R. LEWIS.

Witnesses:

J. W. SPROUL,

W. O. MORROW.