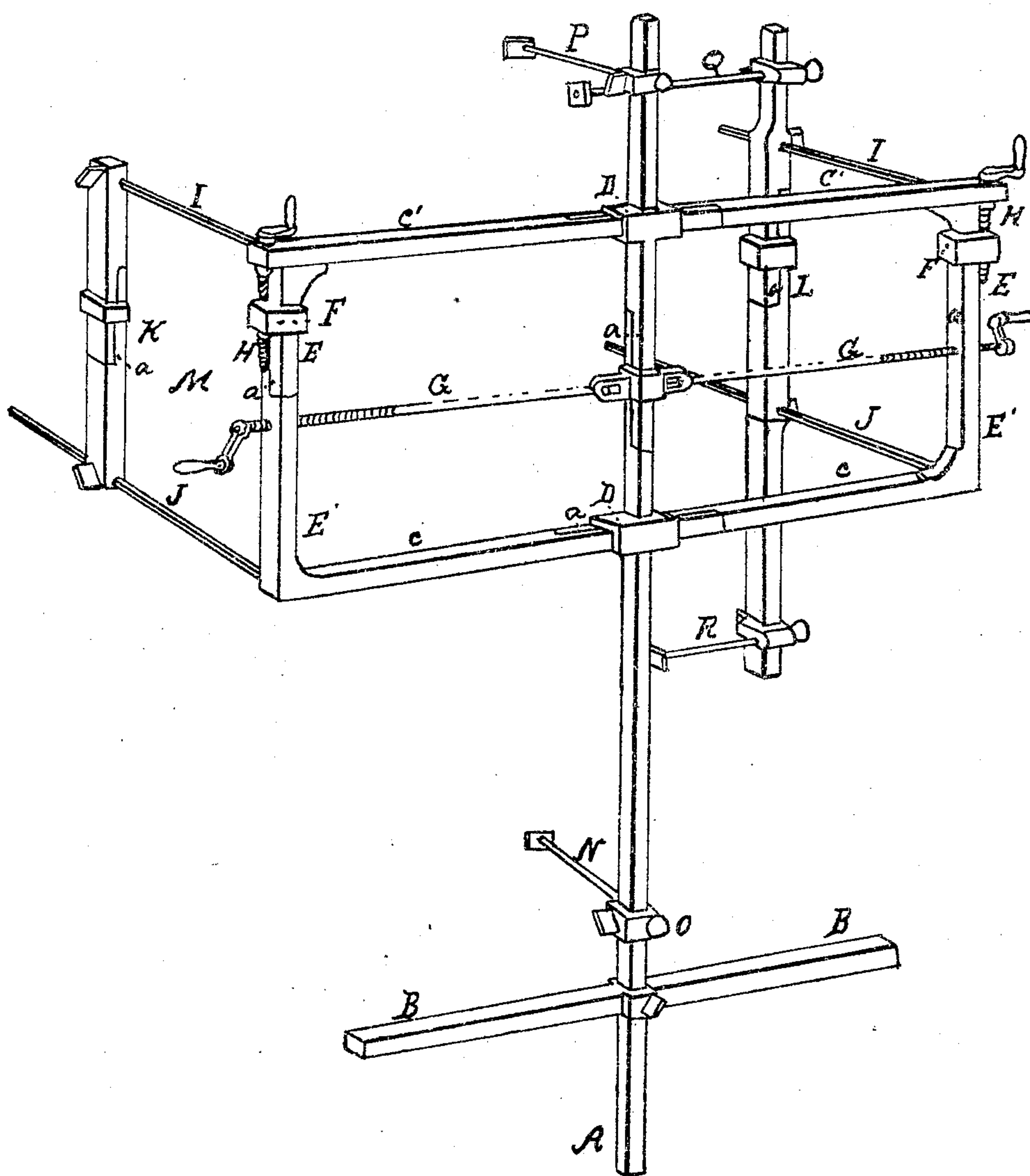


*H. C. Brundage*  
*Tailoring*

*N<sup>o</sup> 2450.*

*Patented Feb. 7. 1842.*



# UNITED STATES PATENT OFFICE.

HENRY C. BRUNDAGE, OF MIDDLETOWN, NEW YORK.

## CONSTRUCTION OF INSTRUMENTS FOR MEASURING GARMENTS.

Specification of Letters Patent No. 2,450, dated February 7, 1842.

*To all whom it may concern:*

Be it known that I, HENRY C. BRUNDAGE, of Middletown, in the county of Orange and State of New York, have invented a new and improved instrument for measuring the body preparatory to the drafting and cutting of coats or other garments; and I do hereby declare that the following is a full and exact description thereof.

10 I denominate this instrument "the expanding and contracting rectangular tailors' gage." The instrument is made inflexible, but with its parts sliding upon each other in such manner as that it may be readily adapted to the size of the person to be measured; when used, it is sustained entirely by the shoulders, not having or requiring any standard by which it is connected with the ground.

20 A, A, in the accompanying drawing is a rod of brass, or other metal, which when the instrument is in use passes up and down the middle of the back, in the line of the back seam of a coat.

25 B, B, is a cross piece having a socket through it, allowing A, A, to slide within it; the piece B, B, is to rest against the lower part of the back, or swell of the hips, and serves to steady the instrument; the piece B is held in place by means of a set screw.

30 C, C, and C', C', are bars of metal which cross the bar A, A, at right angles; said bar A, A, having sockets D, D, attached to it, within which the bars C', C', may slide. 35 The bars C, C', are connected together at their ends by the bars E E', forming with them a rectangular parallelogram. The bars E, E', are attached permanently at their angular junctions to the bars C, C', 40 but each of these bars is so constructed as to admit of the parallelogram which they constitute being regulated in its dimensions, both of length and width. The arrangement for effecting may be varied. That 45 shown in the drawing consists in halving the bars C, C', and E, E', where they enter the sockets D, D, and F, F, so as to form a lap joint, as shown at a, a, a, a, a similar joint being made on the bar A, A.

50 G, G, are screw rods, tapped into E, E, and having swiveling heads at b, b, and by turning these the parallelogram may be lengthened or shortened. The screws H, H, will serve in like manner to adjust its 55 width.

I, I, and J, J, are rods attached to, and

projecting at right angles from, the four corners of the parallelogram C, E. These rods enter through openings in vertical bars K and L which bars are capable of extending and contracting in the same manner with E, E, obeying with them the action of the screws H, H. The bars K and L, slide on the rods I, and J, to which they may be affixed by set screws. There will thus be formed two rectangular spaces M, M', at the ends of the instrument.

When this instrument is applied to use the arms are to be passed through the spaces M, M', the rods I, I, resting on the shoulder, those J, J, being brought up close under the arm, and the bars K and L, being placed in contact with the fore parts of the arm, which is thus to be embraced lightly, but closely on four sides. The rods J, J, are at the same time to be brought into contact with the sides of the person by means of the screws G, G'. The respective bars rods and slides are graduated into inches and parts of inches, so that the width of the body, and the dimension of the arm at its junction therewith together with others to be designated, can be at once read and marked down.

To certain of the above described bars I attach slides, the rods of which are graduated, and by which I am enabled to obtain the other measurements which it is the office of this instrument to furnish. Upon the bar A, A, there are two such slides; one of these is seen at N, and this serves to give the distance from A, to the hollow of the back, to which it is to be adjusted by means of its sliding socket O. The second slide P, measures the distance from the rod A, to the socket bone of the neck the respective vertical distances being shown on the bar A, A. The bar L, is extended above and below the rods I and J, to receive two other slides Q and R, the slide Q, serves to measure the distance from L, to the neck, just above the collar bone; and the slide R, the distance from L, to the hollow of the side, just above the hip, at the point where the waist is to terminate.

It will be seen by every competent cutter that the foregoing measures are all that it is essential to take by means of the instrument, the ordinary measuring tape unconnected with it, and employed in the usual way furnishing whatever is further required. The numbers representing the foregoing meas-



ures being duly set down, and those obtained by the measuring tape being also noted, the drafting is to be proceeded with by the aid of the ordinary square, in a manner well understood by good cutters, upon systems well known and practiced.

Having thus fully described the nature of my instrument for the purpose of measuring the body preparatory to the drafting and cutting of coats, or other garments, what I claim therein as new, and desire to secure by Letters Patent, is—

The manner in which I have combined the respective bars, rods, and slides, so that the four marked C, C', E and E', in the drawing, shall form a parallelogram, capable of adjustment in its dimensions by the sliding of the bars of which it is composed, upon or within each other, for the purpose set forth; there being combined therewith a bar or rod A, A, which when the instrument is in use, passes down opposite to the middle of the back; and combining also therewith the rods I, J, and the bars K and L, forming openings M, M', through which the arms are to pass, and to which the bars and

rods surrounding these openings are to be adjusted, as set forth; and as constituting an essential part of said measuring instrument. I claim the combining therewith of the slides N, P, Q, and R passing at right angles to, and adjustable on, the respectable bars by which they are sustained.

I do not claim either of the parts, or devices herein described, taken individually but limit my claim to the combination of the whole substantially as set forth, so as to constitute an instrument which is sustained by the shoulders of the person to be measured leaving him free to move during its use, and not requiring the employment of measuring tapes, attached to, or combined, with said instrument. Other slides in addition to those herein designated may be used, if preferred, but these would not change its nature, nor do I, after fair trial, deem them necessary or useful.

HENRY C. BRUNDAGE.

Witnesses:

HENRY LITTLE,  
ELIJAH MCCREA.