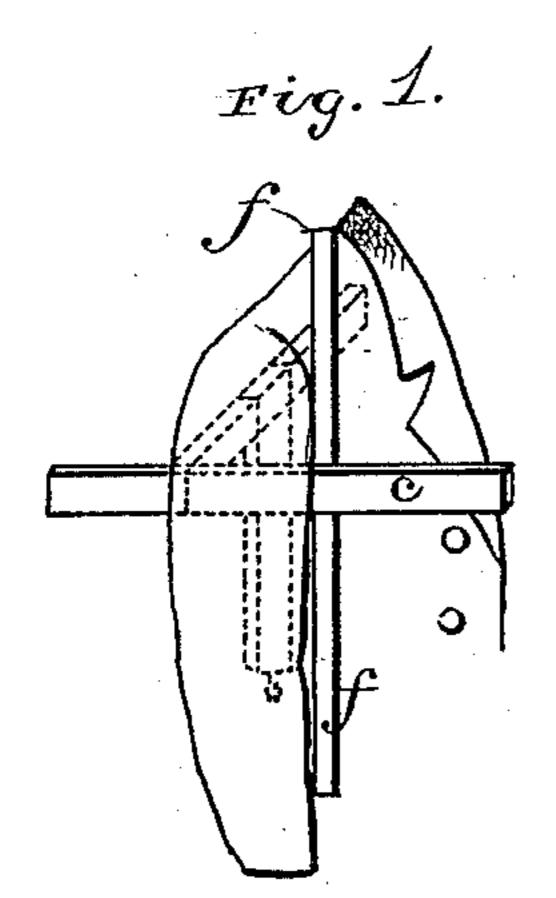
(No Model.)

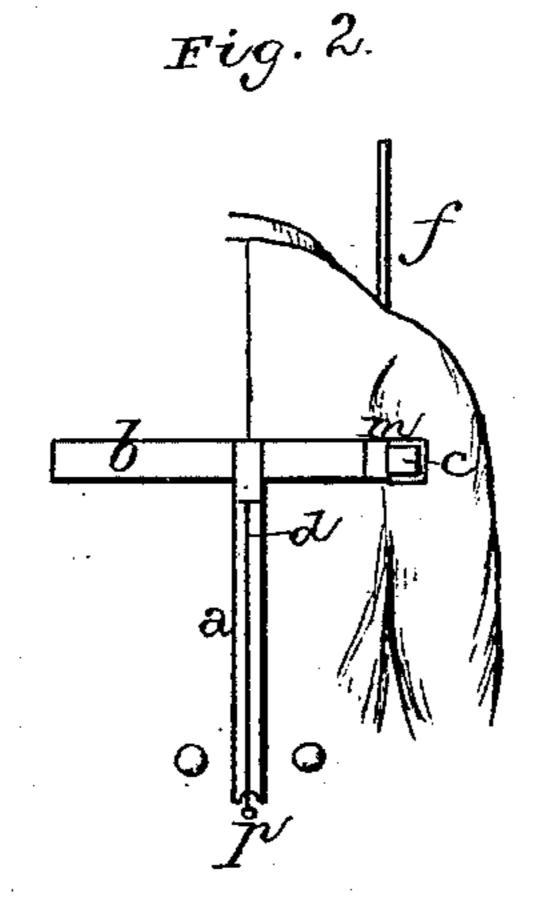
C. HARTUNG.

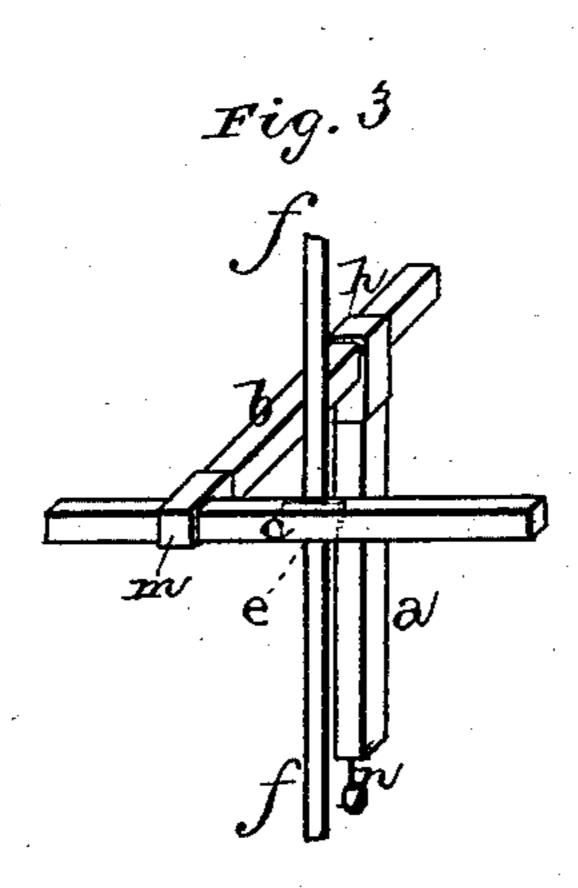
TAILOR'S MEASURE.

No. 245,717.

Patented Aug. 16, 1881.







Witnesses. M. M. Mortmer. D. Ca sel JAVENTON.

D. Harlung,
per J. O. Lehmann,
atty.

United States Patent Office,

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TAILOR'S MEASURE.

SPECIFICATION forming part of Letters Patent No. 245,717, dated August 16, 1881.

Application filed April 21, 1881. (No model.)

To all whom it may concern:

Be it known that I, CHARLES HARTUNG, a citizen of the United States, residing at Enon Valley, in the county of Lawrence and State 5 of Pennsylvania, have invented certain new and useful Improvements in Devices for Taking Measures; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others 10 skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to an improvement in devices for taking measures of persons, by which the material that is to be made into coats or vests, when spread out on a table, can be cut to make it exactly fitting; and it consists 20 of a series of pieces movably connected at right angles, the adjustment of which is indicated by a plumb-line on one of the said pieces, as will hereinafter be more fully described.

The accompanying drawings represent my 25 invention. Figures 1 and 2 are side eleva-

tions, and Fig. 3 is a perspective.

This device or instrument for measuring the form of a person consists of three narrow strips or pieces of wood, a b c, and a strip of metal, 30 f, all connected at right angles with each other. The vertical piece a has at its upper end a rectangular loop, n, in which slides the piece b at a right angle on top of the former. On the outside of the piece a, and attached near 35 its upper end, is a plumb-line, d, that reaches to the lower extremity of a, where the plumb p freely swings. By this plumb - line it is ascertained when the piece b is in a horizontal position. The piece b, sliding in the loop n, 40 can be shortened or lengthened without change of angle.

At the farther end of the piece b is the loop m, in which a third piece, c, slides on a horizontal line with the piece b, and at a right an-45 gle. At about the middle, at the inside of the piece c, is secured a metal plate, e, and enough is cut away of the wood to admit a metal strip, f, between the plate and the wood to slide ver-

tically up or down.

The method of measuring with this device is as follows: First close the coat and then (

place the piece c under the arm; see, by sliding the piece a to one side or another, that the plumb-line is on the center of the back and indicates its perpendicularity; then advance or re- 55 tire the piece c until the vertical strip f touches the shoulder where the arm joins. If properly held the strip f will now be vertical, like the plumb-line, on the back, and being of a length to reach down to the hip of the person it shows 60 all the points of the form, whether projecting or receding, on a vertical line. This line is to be slightly marked, as also the point where the strip f touches the shoulder, and also the point of the upper end of the piece a. From 65 this line and the given points all measurements are made, either horizontally or vertically, which, if transferred to the cloth, will exactly indicate how to cut to obtain a perfectly fitting garment.

By means of measuring at right angles it is much easier to ascertain and to transfer to the pattern the distance from one point to another than by the methods now in use; and my experience in cutting teaches that the rules laid down 75 fail to give reliable information for measuring and fitting the "balance of the coat" in the waist on a perpendicular line under the shoulder, which is of great importance in the cutting of a coat.

Having thus described my invention, I claim—

1. In a tailor's measure which is to be held in the hand while being applied to the person being measured, the combination of the back 85 piece, a, which extends up the back, the crosspiece b, adjustably attached to the top of the piece a, the piece c, which extends horizontally under the arm, and which is adjustably attached to the end of the part b, and the ver- 90 tically-adjustable strip f, which extends along up the side, and which is attached to the piece c, substantially as shown.

2. In a tailor's measure, the combination of the pieces a b c, adjustably connected together 95 at right angles to each other, with the strip f, and plumb-line p, attached to the part a, sub-

stantially as set forth.

CHARLES HARTUNG.

Witnesses:

Louis Moeser, T. F. LEHMANN.