(No Model.)

P. N. ARVIDSON.

TAILOR'S MEASURING SQUARE.

No. 483,521. Patented Oct. 4, 1892.

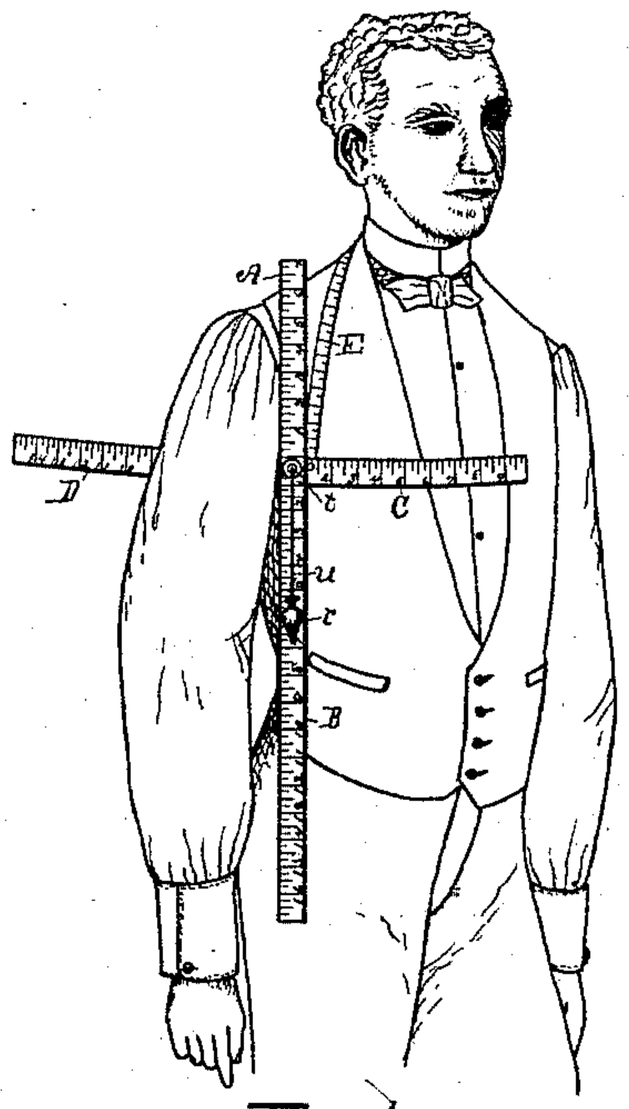

Fig. 1

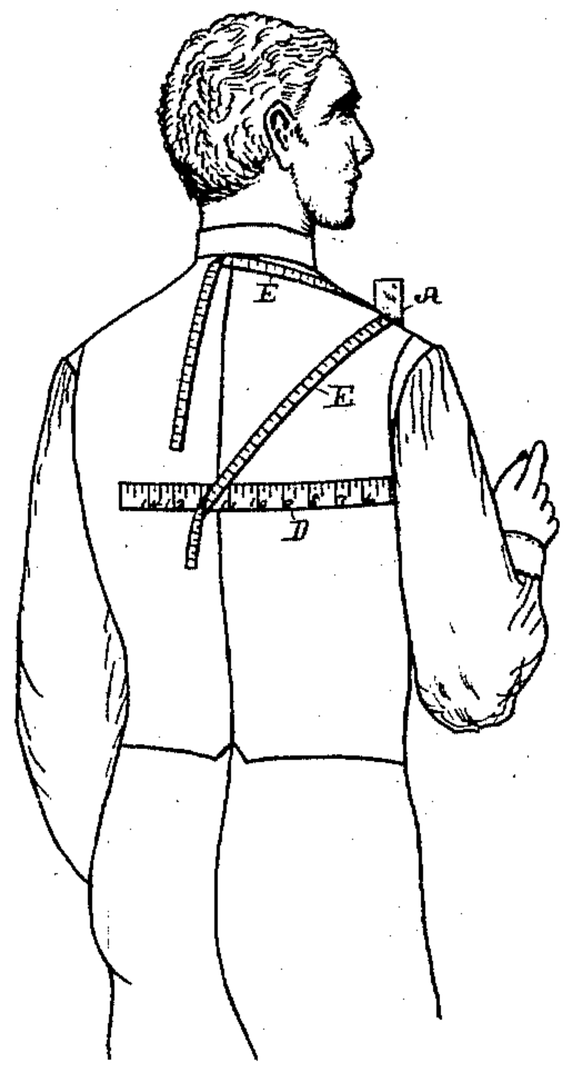

Fig. 2

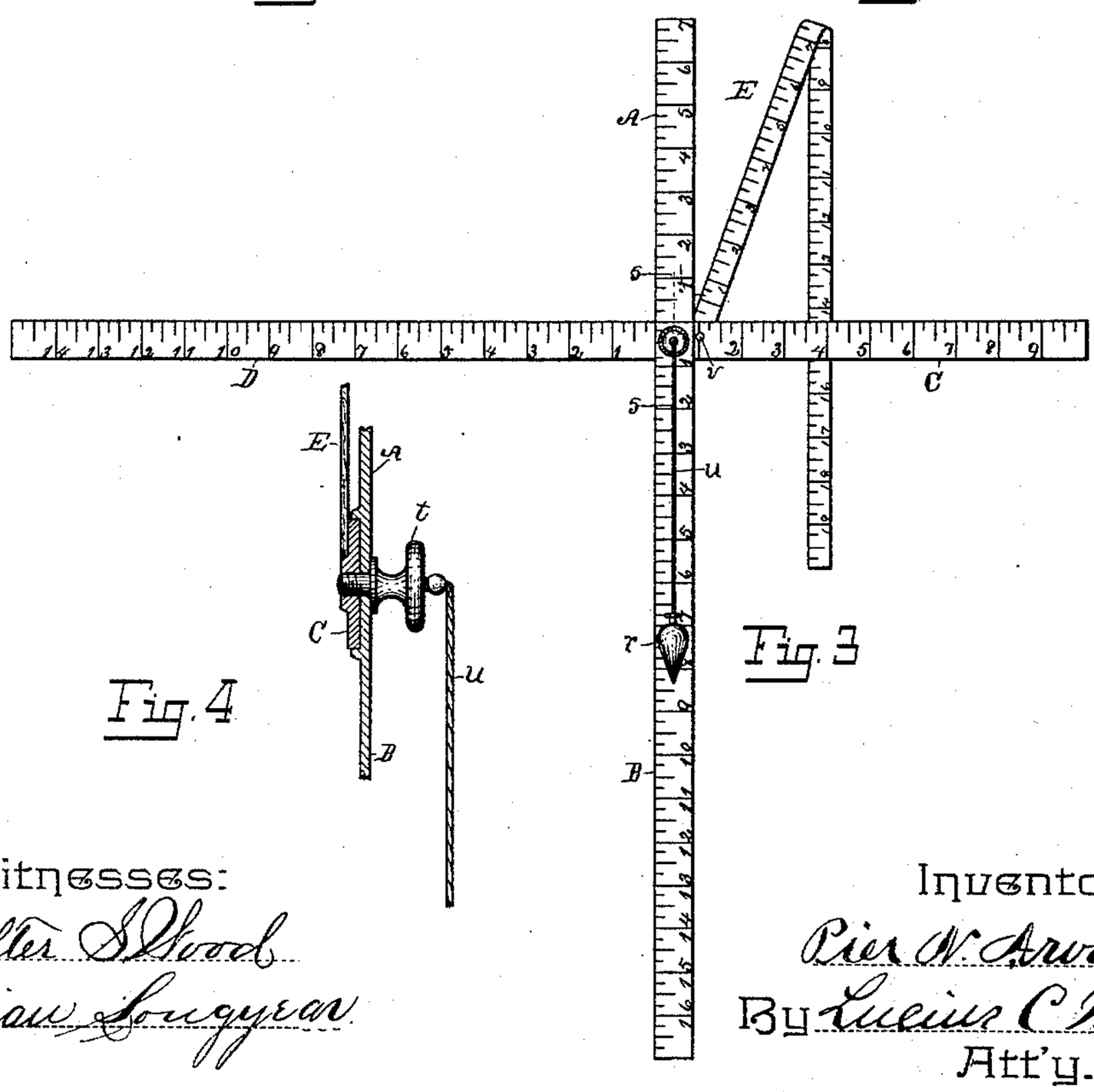

Fig. 3

Fig. 4

Witnesses:
Walter S. Wood
Marian Longyear

Inventor.
Pier N. Arvidson
By Lucius C. West
Att'y.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

PIER N. ARVIDSON, OF KALAMAZOO, MICHIGAN.

TAILOR'S MEASURING-SQUARE.

SPECIFICATION forming part of Letters Patent No. 483,521, dated October 4, 1892.

Application filed September 9, 1891. Serial No. 405,234. (No model.)

To all whom it may concern:

Be it known that I, PIER N. ARVIDSON, a citizen of the United States, residing at Kalamazoo, county of Kalamazoo, State of Michigan, have invented a new and useful Tailor's Measuring-Square, of which the following is a specification.

This invention relates to that class of tailors' measuring-squares the vertical portions of which when in use are held "plumb," and which are provided with means to indicate when they are so held.

The object of this invention is to construct a simple and cheap measure and one in which greater convenience is experienced in its use and in packing the same for shipment or carrying in a satchel.

In the drawings forming a part of this specification, Figure 1 is a front elevation and Fig. 2 a rear elevation, both of these figures showing the measuring-square in use; Fig. 3, an enlarged view of the square and measuring-tape combined, and Fig. 4 an enlarged broken section on line 5 5 in Fig. 3.

Referring to the lettered parts of the drawings, A B and C D represent two elastic metal bars bearing such measurement characters as are applicable to such devices. These metal bars cross each other at right angles and are rigidly attached together where they cross.

Fig. 4 shows three bars detachably fastened together by thumb-screw *t*, so that they may be taken apart and placed parallel with each other in packing or shipping. One of the bars fits in the channel in the back of the other bar, as in Fig. 4, and is thus prevented from getting out of a true right angle in relation to each other. It will be observed that these bars are not adjustable one on the other, but, as stated, are fixed rigidly but detachably together by the thumb-screw, so as to always preserve their proper relation with the measurement characters upon each. This thumb-screw projects well out from the face of the bars, and to its outer end is attached the cord *u*, to the lower end of which cord the plumb *r* is attached. By this means the plumb will hang out free from the upright measuring-bar and is thus readily detached from the measuring-bars when the thumb-screw is removed, since the cord and thumb-screw are attached together. The thumb-screw thus forms a convenient and practical support for the plumb, and the bars may be used as individual measures after they are detached from each other. At the point where the measuring-bars cross each other is attached, in a fixed and non-adjustable manner, a tape-measure E at *v*.

Some of the uses of this measuring-square are illustrated in Figs. 1 and 2, and its operation is, for instance: The square is placed with the end B of the horizontal bar C D beneath the arm and is adjusted until the plumb indicates that the bar A B is exactly perpendicular. The bars being elastic, the end of the horizontal bar C D are bowed around the chest and back, and proper measurements are noted both on said bar and on the upright bar. Since this tape-measure E is attached at a fixed point in the angle of the crossing-bars, the exact measurement from the front of the armpit to the back of the neck can be ascertained in relation to the other measurements, as can also the distance to the center of the back at the point on the line where the end D of the elastic bar C D embraces said back, as clearly shown in Fig. 2.

Other measurements may be made and noted by this instrument which are best understood by tailors and need not be here noted. Suffice it to say that it combines several measuring devices in one, facilitating the operation, saving cost to the user, and by its use greater accuracy of the different measurements—horizontal, upright, and oblique in their relation to each other—in measuring devices in which the plumb indicates the angle in which it is to be held during the several measurements is attained.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

A measuring-instrument comprising an upright elastic measuring-bar having an open channel on the back side, a horizontal elastic measuring-bar crossing the former-named bar at right angles and fitting into said channel, a thumb-screw rigidly and detachably holding these elastic measuring-bars together where they cross, said thumb-screw projecting

well out from the face of the bars, the plumb, the upper end of the cord of which is attached to the outer end of said thumb-screw, and a flexible measuring-tape attached in a fixed manner to the crossing measuring-bars at their point of interception, substantially as set forth.

In testimony to the foregoing I have hereunto subscribed my name in the presence of two witnesses.

PIER N. ARVIDSON.

Witnesses:
GEORGE W. RUSSELL,
B. L. DEFURLUNG.