T. R. BOONE.
Tailor's Measure.

No. 212,587. Patented Feb. 25, 1879.

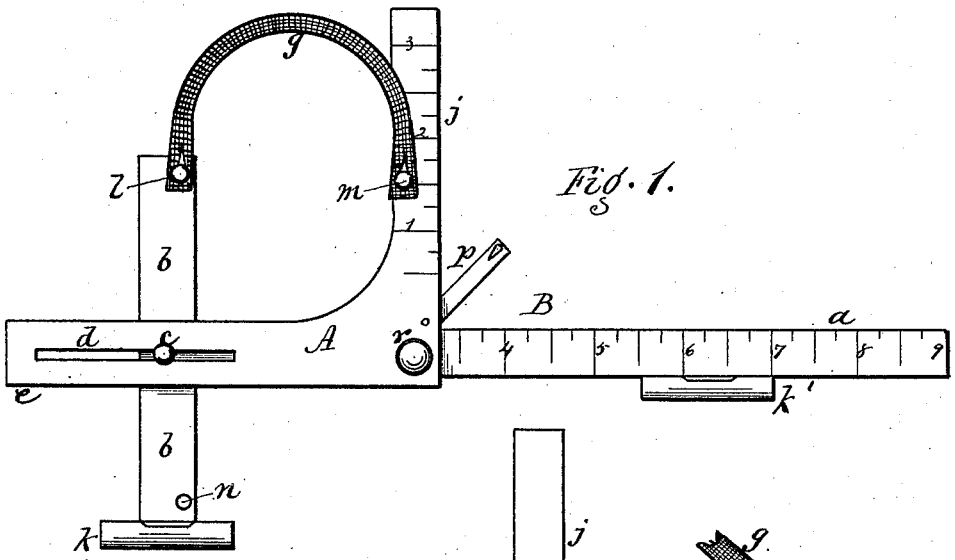


Fig. 1.

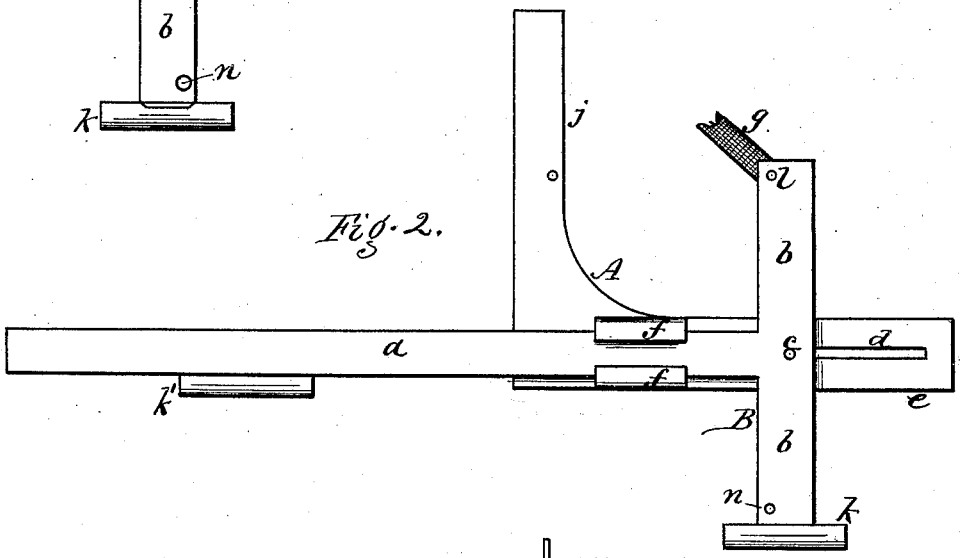


Fig. 2.

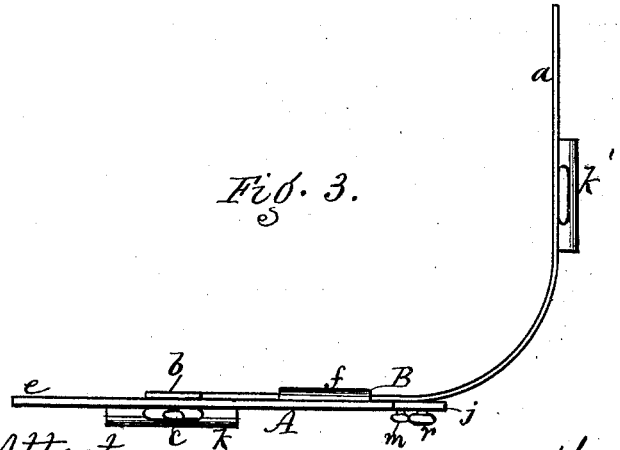


Fig. 3.

Attest.
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# UNITED STATES PATENT OFFICE.

THOMAS R. BOONE, OF ROCHESTER, NEW YORK.

## IMPROVEMENT IN TAILORS' MEASURES.

Specification forming part of Letters Patent No. **212,587**, dated February 25, 1879; application filed January 9, 1879.

*To all whom it may concern:*

Be it known that I, THOMAS R. BOONE, of the city of Rochester, county of Monroe, and State of New York, have invented a certain new and useful Improvement in Tailors' Measures; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is an elevation of my improved instrument. Fig. 2 is a similar view, but looking on the opposite side from Fig. 1. Fig. 3 is a plan or edge view, showing the spring-strap bent in the position it assumes when applied in use.

My improvement relates to tailors' measures in which spirit-levels are employed; and consists in the special construction and arrangement, as hereinafter more fully set forth.

The instrument is made of thin spring-brass or other metal, and is designed to be fitted under the arm, while a spring-strap is employed which can be bent around the back.

It consists, essentially, of two parts—an arm-gage, A, and strap B. The arm-gage is of right-angled form, as shown, and fits under the arm, the vertical part *j* coming in the rear of the arm. The spring-strap consists of the horizontal flexible portion *a*, which forms a measure, and a cross-head, *b*, which crosses the horizontal portion *e* of the arm-gage, and is secured thereto by a set-screw, *c*, that passes through a longitudinal slot, *d*, of said arm-gage. The body of the strap also passes through guides *f f* of the arm-gage, as shown in the inside view, Fig. 2. By this means it will be seen that the cross-head can be slid out and in and secured at any adjustment.

The upper portion of the cross-head forms the rest for the front side of the arm when it is fitted thereto, and when so fitted between the vertical parts of the instrument the latter is secured by means of an elastic strap, *g*, which passes over the shoulder.

The adjustment before described enables the instrument to be adjusted to any-sized arm.

On the lower end of cross-head *b* is a small spirit-level, *k*, and on the lower edge of flexible strap *a* is another spirit-level, *k'*. These levels are exactly adjusted to each other.

*l*, *m*, and *n* are small studs or hooks for the attachment of the elastic strap *g* and the connection of the ordinary tape-line used in measuring. *p* is a permanent short strap, having a hook end, attached near the bottom of the arm-gage A, also used for the connection of the ordinary tape-line. *r* is a finger-knob for operating the parts.

The horizontal strap *a* and the vertical arms *j* of the arm-gage are both provided with a scale of inches and subdivisions, as shown.

This instrument is used as follows: It is first adjusted to the arm of the subject, as before described, and made close fitting thereto. This adjustment is attained by moving the cross-head *b* closely up to the front of the arm. The instrument is then leveled by the two levels before described, and the flexible strap *a* is then bent around the back, as shown by the curved lines in Fig. 3, and a mark is made at the center of the back, thereby indicating the distance from the front of the arm to the center of the back. It also locates the distance from the top of coat or collar to the center of back or scye. This distance can be accurately laid out by placing the instrument upon the pattern or cloth and marking the measurement.

From this instrument the various other measures are taken by the ordinary tape-line. The tape-line is first attached to stud or head *c* and passed angularly over the shoulder up to the top of collar in the rear. It is then carried from the same point *c* over the shoulder and down to the scye or point first marked by the flexible strap *a*. From the same point *c* it is also carried to the center of the breast, in front. From the point *n* the tape-line is next carried to the center of the waist, in front, and also to the center of the natural waist, behind. By attaching the tape to the permanent strap *p*, and carrying it over the back of the shoulder, up to the top of the collar, the amount of cloth to be given at the top of side body will be ascertained. The scale on the vertical part *j* of the arm-gage A is to locate the height of the shoulder-seam.

By laying out the above-named measurements in the well-known way very accurate cutting may be produced.

The leveling of the instrument, as before described, adapts the same exactly to the per-

son, whatever may be his form, and from this adjustment the center-point at the back is attained by bending the flexible strap *a*. This strap adjusts forward and back with the cross-head, and when the cross-head is fitted to the front of the arm as the starting-point for the measurement the flexible strap is also relatively adjusted to the back, so that whatever may be the size of the person the instrument will be adapted to him.

Having thus described my invention, I claim—

1. In a tailor's measure, the combination of the right-angled arm-gage A, for fitting under the arm, and the strap B, consisting of the cross-head *b* and flexible measure *a*, formed in one piece, attached to and sliding on the arm-gage, and provided with the two spirit-levels *k k'*, as shown and described, and for the purpose specified.

2. In a tailor's measure, the combination of the right-angled arm-gage A, flexible strap B, sliding upon the arm-gage, the spirit-levels *k k'*, and the elastic shoulder-strap *g*, as shown and described, and for the purpose specified.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

THOS. R. BOONE.

Witnesses:
R. F. OSGOOD,
CHAUNCEY PERRY.