

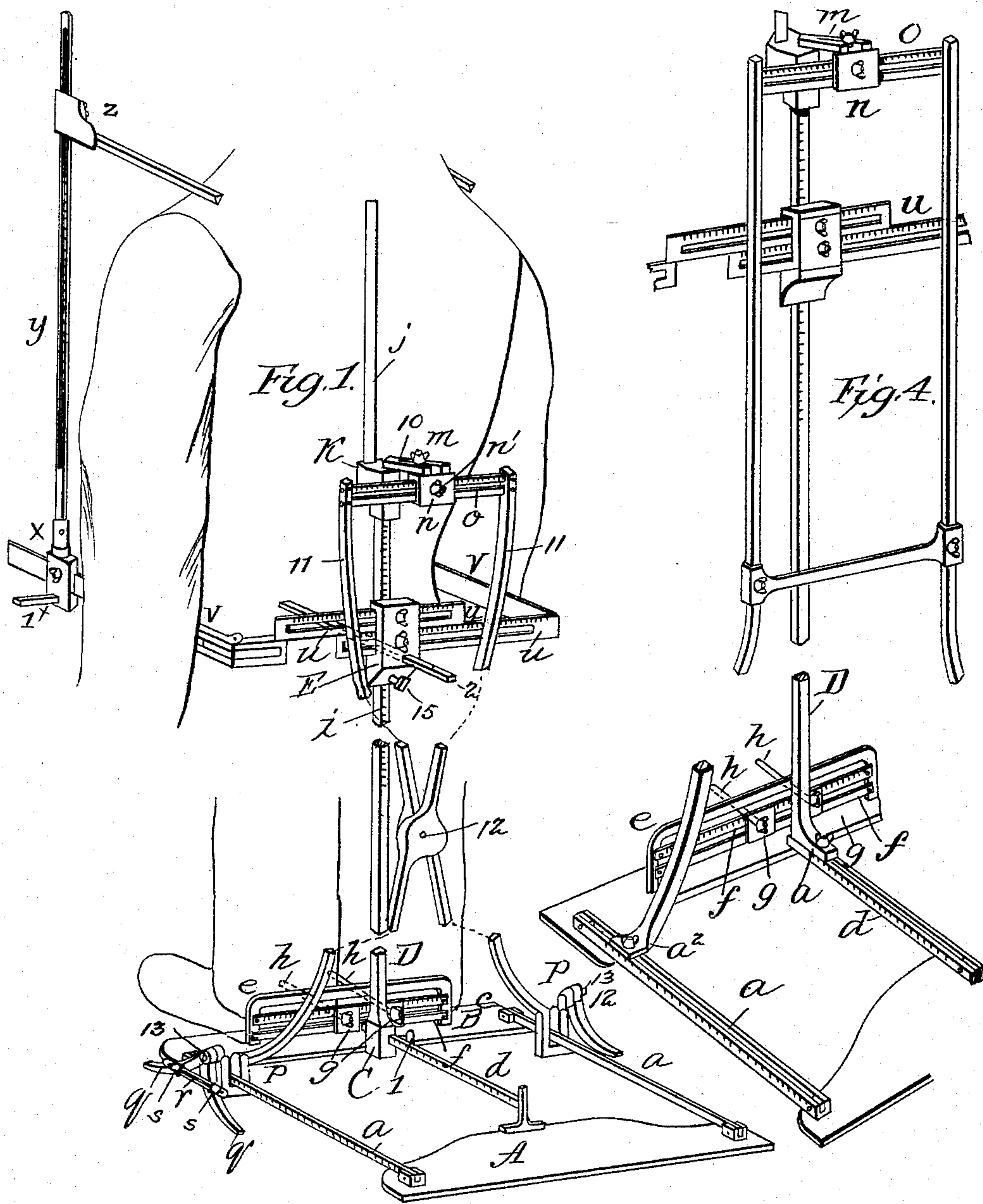
(No Model.)

2 Sheets—Sheet 1.

A. TROCHU.  
TAILOR'S MEASURING APPARATUS.

No. 483,271.

Patented Sept. 27, 1892.



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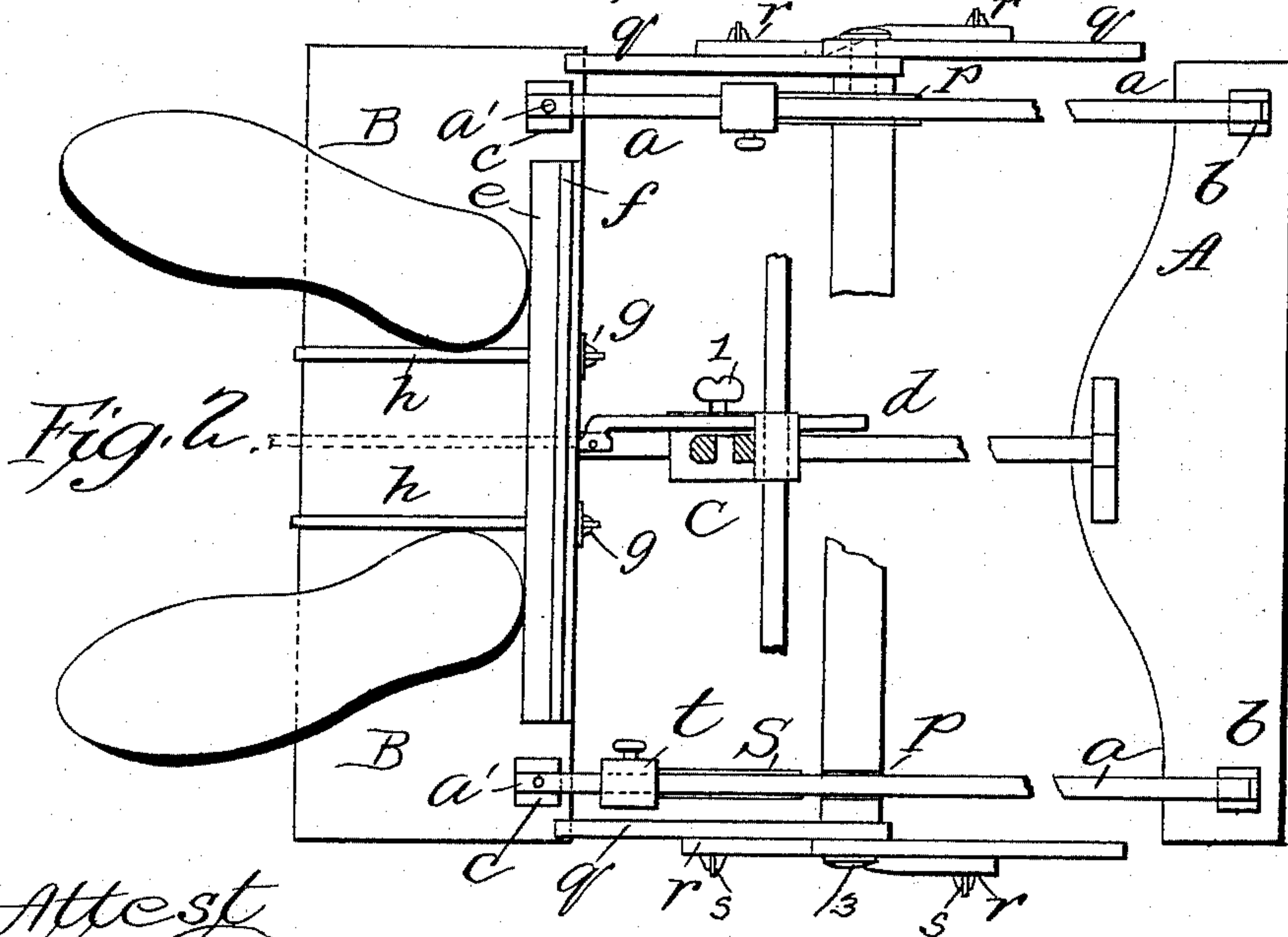
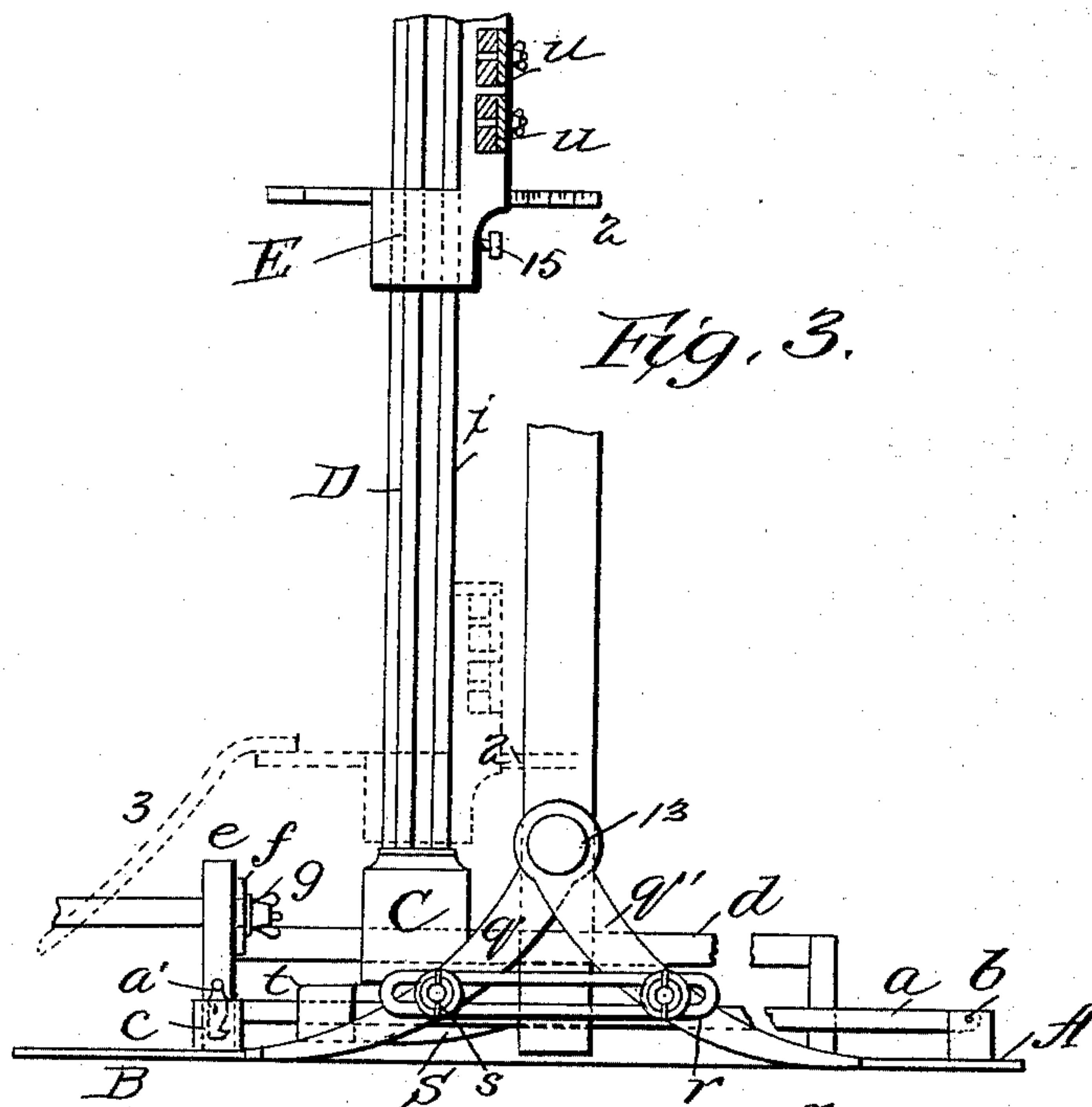
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2 Sheets—Sheet 2.

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TAILOR'S MEASURING APPARATUS.

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# UNITED STATES PATENT OFFICE.

ATHANASE TROCHU, OF REDON, FRANCE.

## TAILOR'S MEASURING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 483,271, dated September 27, 1892.

Application filed November 9, 1889. Serial No. 329,748. (No model.) Patented in France February 16, 1889, No. 196,131.

*To all whom it may concern:*

Be it known that I, ATHANASE TROCHU, a citizen of the Republic of France, residing at Redon, France, have invented a new and useful Apparatus for Taking Measures for the Use of Tailors, (for which a patent has been secured in France, No. 196,131, dated February 16, 1889,) of which the following is a full, clear, and exact description.

My invention is designed to aid tailors in taking the measures of persons to whom garments are to be fitted, and is shown in the accompanying drawings, in which—

Figure 1 is a perspective view of the invention with sections broken away in order to show the parts on a large scale. Fig. 2 is a plan view of the base. Fig. 3 is a side elevation of the lower part of the apparatus. Fig. 4 is a view of a modification.

The main base is composed of the sections A B, connected by the graduated cross rods or rules *a*, pivoted to the ears *b* of the plate A and having pawls at *a'* at their free ends engaging the ears *c* of the plate B, Fig. 3. Another rule *d* extends from the plate A centrally thereof and connects with the slotted rule *f*, extending transversely of the base and on the front plate B. On this rule *d* a socket C is arranged to slide, and this may be fixed in any desired position by the thumb-screw *l*. In the socket a standard D is fixed, composed of a graduated section *i* and an upper section *j*, connected thereto by the block K. This block has a slotted bracket 10, through the slot of which a thumb-screw *m* extends into a block *n*, adjustably connected to the slotted cross-rule *o* by the screw *n'*. From the ends of this cross-rule the arms 11 extend, these crossing each other at 12 and having their lower ends bent around below the rules *a* from the inside and up the outside of the said rules. At their upper ends these bent portions *p* have journal-pins 13 for the feet *q q*, which are connected adjustably by the link *r* and the set-screws *s*, whereby the said feet may be held at any desired distance apart. By means of this supplemental frame formed by the rule *o*, the depending intersecting arms, the bent lower ends *p*, and the adjustable feet the vertical position of the standard D may be maintained at all times, and thus any inequalities of the floor compensated for.

In making this adjustment the feet are made to bear firmly on the floor, the screws *s* are then tightened to hold them in this position, and additional stability is secured by the keys or wedges *S*, which have the loops *t*, arranged to travel on the rules *a*, the said wedges passing in between the loops or bent portions *p* of the supplemental frame and the lower edges of the rules. As thus blocked up, the supplemental frame is held rigidly, and this blocking up is not done until the person to be measured stands on the platform B. The upper end of the supplemental frame, carrying the rule *o*, now has sufficient stability to maintain the upper end of the standard rule D in any position to which it may be adjusted, and this adjustment is effected by tightening the screw *m* to first connect the standard to the sliding block *n* by means of its bracket, and then sliding said block *n* along the rule until the proper point is reached, when, by tightening the screw *n'*, the standard rule will be held in proper position, and this position, which is the vertical one, can be accurately determined by a spirit-level placed on the block E, Fig. 1, which block will be referred to hereinafter.

The slotted rule *f* on the plate B carries two sliding boxes *g*, each having a projection *h*, which, as shown, are brought against the inner side of the ankles or feet of the person. As the vertical position of the standard corresponds to the correct vertical position of the person, the position of the blocks *g* on the rules will indicate whether the person's feet are equally distant from the center line of the body.

The block E on the standard D carries rules *u u*, projecting laterally on each side of the standards, and these have pivoted at their outer ends the forwardly-projecting arms *v*, adapted to bear against the hips or sides of the body, and thus indicate by the position of the rules *u* whether one side is more prominent than the other, it being understood that the vertical rule standard D will show whether the person stands upright or inclines to one side or the other. The block E is held adjustably on the standard D by the set-screw 15, and by lowering it to the thighs and knees it can be seen by the displacement of the rules by reason of the bearing-bars *v* whether



the person has straight limbs or not, and the amount of the inequality can be accurately ascertained. On the bars *v* are sliding boxes *x*, carrying graduated rods *y*, having thereon sliding rods *z*, which enable the tailor to get the exact height of the shoulders and to ascertain whether one shoulder is higher than the other, and in this connection it may be stated that if in the first instance it is seen that the person is not following the vertical standard accurately a wedge may be placed under his heel to make his position vertical and correspond with that of the standard D, and then it can be seen by means of the bars *z* whether the shoulders are equally high or whether this unevenness results from a difference in the length of the limbs.

By the bars *z* the depth of the armhole can be ascertained, and the other measurements around the upper part of the body can be taken by the aid of these rods. The rod *y* is swivelled to the block *x*.

By means of the studs 1<sup>x</sup>, passing through the blocks *x*, and the stud 2, passing through the block E, the depth of the waist and back may be determined, respectively.

A depending arm 3 (dotted lines, Fig. 3) may be connected to the front end of the pin 2, so that when the block E is adjusted to its lowest position, as in dotted lines, Fig. 3, the said arm extending between the feet will indicate whether the person turns his feet inward or outward. The pin 2 is used also for measuring the length of the legs.

The form of the sliding connection between the boxes and the rules, as shown in Fig. 3, is such that no oil is required, and there is no danger of the person's clothes being stained.

In some instances it may be found sufficient to employ a supplemental frame carried by the main frame, and such a construction is shown in Fig. 4, in which the feet *a*<sup>2</sup> bear directly upon and are connected rigidly to the rules *a*. I prefer the arrangement first described as being capable of more extensive use by reason of its adaptability to all situations without regard to the evenness of the floor.

It will be seen that the entire apparatus is light and capable of being readily packed for transportation.

I claim—

1. In combination, a base, a standard extending therefrom, the supplemental frame supported independently of the standard and extending up alongside the standard from the base thereof, and an adjustable connection between the upper part of said frame and the standard, substantially as described.

2. In combination, the base, the standard, a supplemental frame adjustable independently of the main base and standard and bearing upon the floor, and the connection between the said frame and the standard, substantially as described.

3. In combination, the main base, the standard D, the supplemental frame having adjustable feet to bear on the floor, and the adjustable connection between the said frame at its upper end and the standard, substantially as described.

4. In combination, the main base, the standard D, the supplemental frame, the connection between the said frame and the standard, and the adjustable feet for the supplemental frame, consisting of the pivoted parts *q q* and the means for holding them adjustably, substantially as described.

5. In combination, the main base, the standard extending therefrom, and the adjustable supplemental frame, including the bent portions *p* and the wedges *S* between the said portions and the main base, substantially as described.

6. In combination, the main base, the graduated standard, the supplemental adjustable frame, including the rule *o*, and the adjustable connection between said rule and the standard, substantially as described.

7. In combination, the main base, the standard, the adjustable block E, the transverse rules carried by the said block, the arms at the ends of the rules, and the uprights *y*, adjustable on said arms and the arms on the uprights, said arms being adjustable and extending rearwardly to bear on the shoulders of the person, substantially as described.

8. In combination with the frame comprising the base, the standard, the rules *u u*, and the arms *v v*, and the pins 1 2, substantially as described.

9. In combination with the frame comprising the base and the standard, the rule *f* on the base and the blocks carried thereby, and the arms projecting from said blocks, substantially as described.

10. In combination, the base, the standard, the block E, adjustable vertically thereon, the rules and arms carried by the said block, and the depending arm 3, also carried thereby, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

ATHANASE TROCHU.

Witnesses:

I. DUPONT,  
CH. CASALONGA.