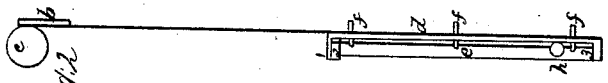
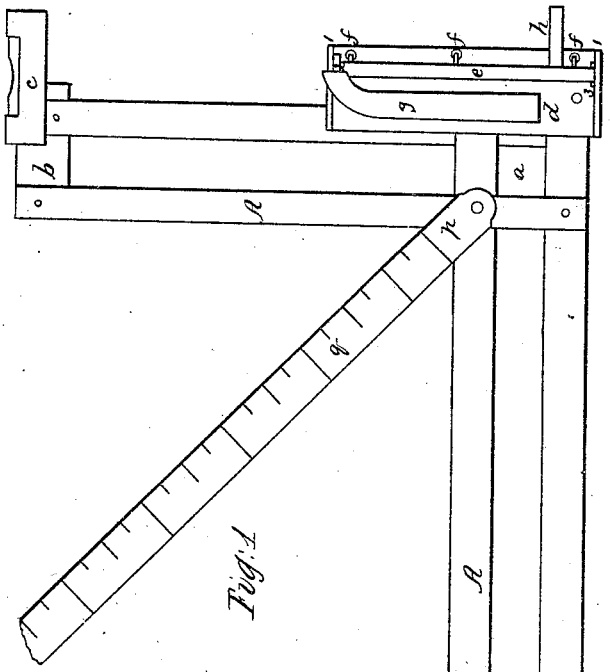
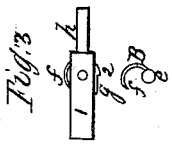
D. Williams.

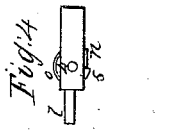
Tailor's Measure.

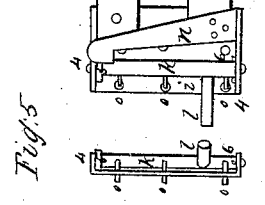
No. 1,136. Patented Apr. 26, 1839.

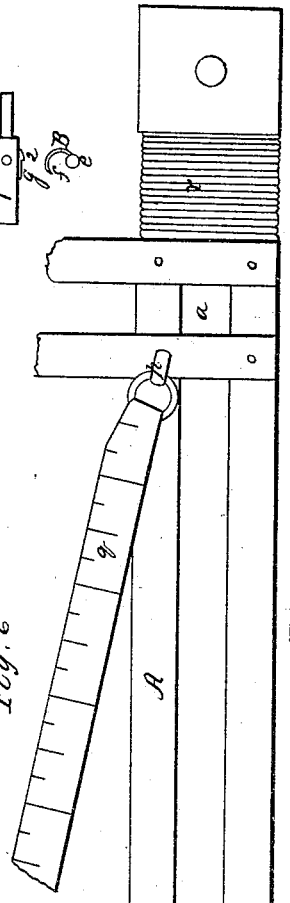












Witnesses
Charles Paine
W Sewell

Inventor
Daniel Williams

UNITED STATES PATENT OFFICE.

DANIEL WILLIAMS, OF NEW YORK, N. Y.

INSTRUMENT FOR MEASURING THE HUMAN BODY PREPARATORY TO CUTTING GARMENTS.

Specification of Letters Patent No. 1,136, dated April 26, 1839.

To all whom it may concern:

Be it known that I, DANIEL WILLIAMS, of the city, county, and State of New York, teacher of the art of cutting out garments, have invented, made, and applied to use certain new and useful Improvements in the Means of Measuring the Human Form, so as to Cut Out Garments that Shall Fit with Great Certainty; and such improvements are intended to be attained by the application of an instrument which I call the "tailor's measurer," which is so formed that it is to be attached to the person whose measures are required under and in front of the arm where the pressure bears on the garment when in use, and when thus attached the instrument affords a fixed point from which all the needful measures can be commenced and completed, and that the methods of constructing and using the said instrument are fully set forth and shown in the following description and in the drawings annexed to and making a part of this specification, wherein—

Figure 1 represents the instrument of an average full size for general use. The detached figures are also in full size and are consecutively explained hereafter and the same letters and figures as marks of reference apply to the same parts in all the several figures.

A is a square formed of two pieces of thin elastic steel in each limb, riveted together in the angle *a*. The upper ends of the short limb are attached to a brass plate *b* and on this is mounted a small brass cylinder *c* containing a spirit level. At the lower and outer side of the shorter limb a brass plate *d* is riveted on so as to stand outside the edge of the limb and the ends of this plate are turned up so as to form flanges 1. 1. with small sockets, which receive the ends of the small shaft *e* which is made with a collar 2 at the upper end and is kept from slipping through the lower socket by a small pin 3. On this shaft *e* are three small grapple hooks *f. f. f.* shown detached at B., and so formed, that they pass through holes in the edge of the plate *d* and curving around at the back of the plate the points of the grapple hooks return into other holes in the plate on the opposite side of the shaft *e*. A notch in the collar 2 receives the edge of a small steel spring *g* which when in this situation keeps the hooks in place and when drawn back allows of the shaft being turned by a small handle *h*, so as to withdraw the hooks from the holes in the plate *d*. This part of the apparatus is shown in plan and side section in the detached Figs. 2 and 3.

At the opposite end of the longer limb of the square A is a smaller plate *i* its flanges 4.4. shaft *k*, collar 5 pin 6, handle *l*, and spring *n*, with three hooks *o. o. o.* collectively forming a similar grapple to the former shown in end section and plan in Figs. 4 and 5. At the inner angle formed by the two limbs a brass plate *p* is riveted by, and revolves around a center stud, and has fastened to it a tape *q* of any required length graduated in inches and parts of an inch.

The limbs of the square may be made solid if so chosen, and instead of the grapple hooks *f. f. f.* being attached to a centrical shaft and used with a circular motion they may be set on one side of a small brass plate fitted for attaching to a piece of flat spiral spring *r* with a piece of caoutchouc strap inside or of elastic web, *s*, and the spring or elastic web be attached at the other ends to the ends of the longer limb of the square as shown in the detached Figs. 6 and 7 but I prefer the mode of construction before described as being lighter and more portable more effective in use and less likely to get out of repair.

The coat or outer garment is to be made quite smooth around the shoulder. Then the method of using the instrument is as follows: Place the instrument with the grapple hooks turned out and the shorter limb vertical in front of the right shoulder, allowing the longer arm to pass under the arm pit and horizontally around behind and having adjusted it by the spirit-level so that the longer limb shall be duly horizontal while the shorter limb is vertical against and close up to the fleshy part in front but not riding on the bone of the shoulder, then attach the instrument to the coat or outer garment by turning in the grapple hooks. In this situation the instrument is ready for use and the following directions are to be carefully followed. Pass the tape measure backward under the arm and in line with the upper edge of the long limb of the instrument to the back seam then note the number of inches and parts from the front of the arm and make a mark on the back seam at the upper edge of the tape. The

tape is now to be extended upward diagonally to the socket bone or top of the back seam so as to pass near the top of the side seam at the sleeve head. Having set down the number of inches to the socket bone the measure is carried diagonally from the fixed point down to the hip at the bottom of the back seam. These measures all noted down the measure is passed upward in front of the arm to the socket bone behind the neck then over the shoulder and diagonally down to the mark first made in the back seam and over the shoulder close to the sleeve head down to the upper edge of the instrument, all which measures noted down terminate the measuring unless a measure is taken across the chest which in most cases may be done to advantage particularly when measuring a lady for a riding habit and care is needed to take all the measures equally tight. In particular cases where it may be needful to measure both sides of a person this may be done by applying the same instrument to the left side with the longer limb in front of the shoulder adding a spirit level on the end of the longer limb at right angles to the first level and proceeding in all other respects as before described except that in some cases it may be needful to have both limbs of the square of the same length.

I do not claim to have invented any of the parts herein described, separately taken because nearly all have been before used for other similar and different purposes, but

I claim as my own invention—

The application of the grapple hooks for the purpose of securing the instrument while in use in combination with the square, the spirit level and measuring tape as the same are herein substantially described when used for measuring the human form for the purpose of fitting garments of any description thereto.

In witness whereof I have hereunto set my hand this fourth day of March one thousand eight hundred and thirty nine.

DANIEL WILLIAMS. [L. S.]

Witnesses:

CHARLES PAINE,

W. TERRELL.