J. G. W. FELDMANN.

PATALOONS CONFORMATORS.

No. 183,756. Patented Oct. 31, 1876.

Fig: 1.

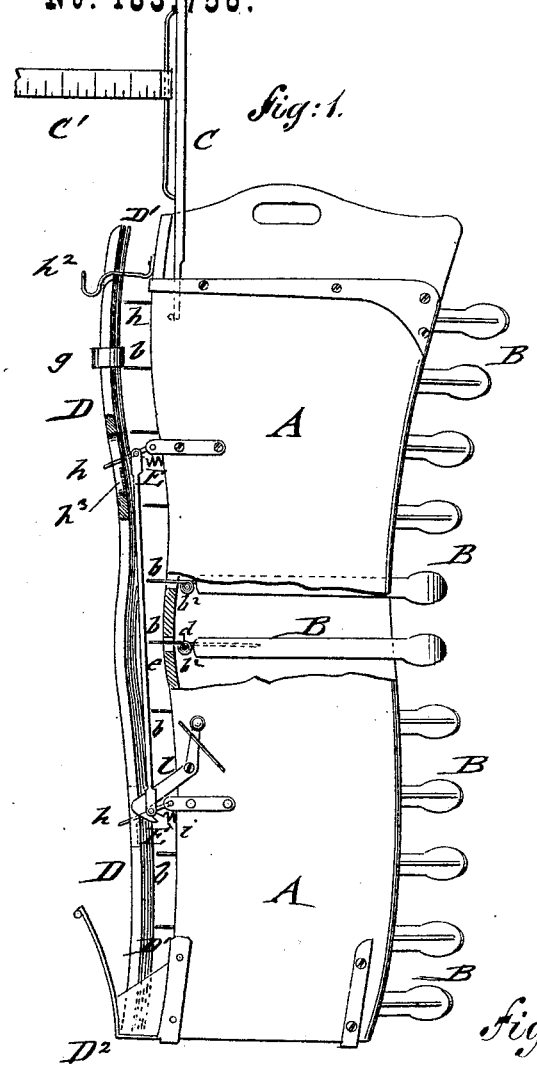


Fig: h.

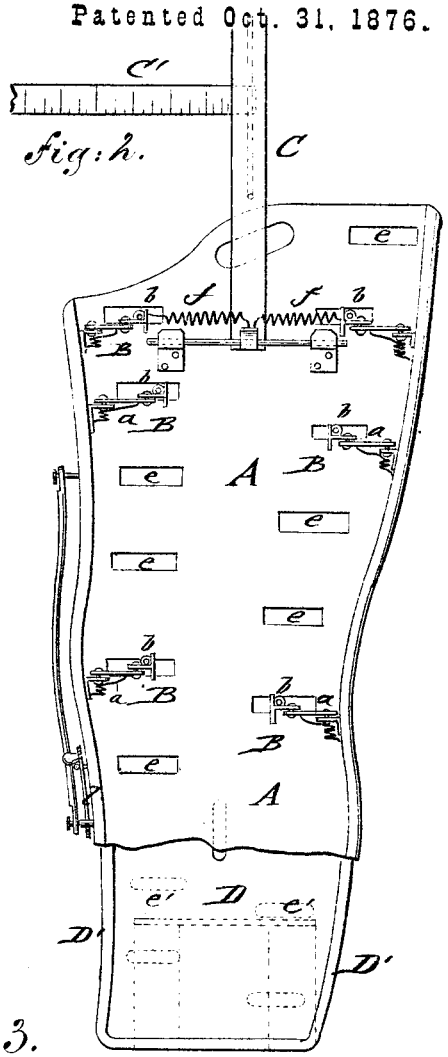
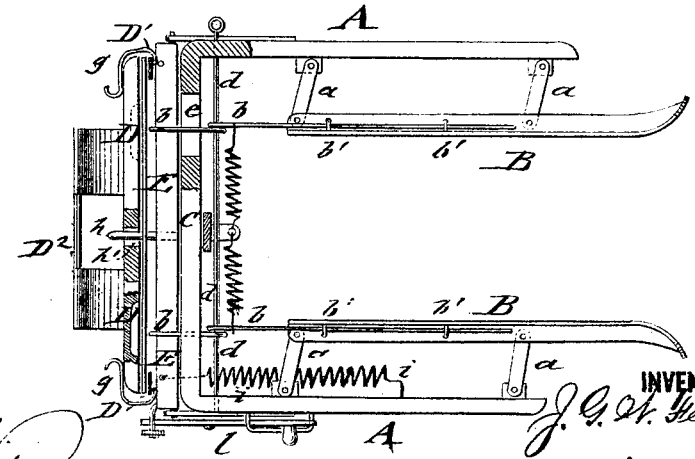


Fig: 3.



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IMPROVEMENT IN PANTALOONS-CONFORMATORS.

Specification forming part of Letters Patent No. **183,756**, dated October 31, 1876; application filed April 3, 1876.

To all whom it may concern:

Be it known that I, JOHN G. W. FELDMANN, of the city, county, and State of New York, have invented a new and Improved Pantaloon-Conformator, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a side elevation, Fig. 2 a rear view, and Fig. 3 a top view, partly in section, of my pantaloon-conformator.

Similar letters of reference indicate corresponding parts.

My invention relates to an improved apparatus or conformator for taking the measurements of the leg of pantaloons or other garments, so that a truer and more perfect fit of the same is produced, the apparatus being analogous to the hat-conformators in general use; and the invention consists of a frame of the size and general shape of the leg, with a number of spring-acted adjustable set pieces that bear on the leg, and mark, by pins passing through recesses of the main frame, the exact shape of the leg on a pattern-paper applied to a detachable marking-frame, which is supported by a suitable foot-part and forced against the marking-pins, releasing a suitable spring mechanism. A center waist-rule and tape line at the top part serve to take other measures.

In the drawing, A represents the main frame of my improved apparatus or conformator for taking the measures for pantaloons, &c. The frame A is made of wood, sheet metal, or other suitable material, of the general size and shape of a leg, and open at the rear to be placed on the leg for measuring. Frame A is provided with suitable side and top handles for being applied and taken off the leg. A suitable number of spring-acted set-pieces or tongues, B, with outer curved ends, are applied at proper distances from each other by parallel pivot-pieces *a* to the inside of the side walls of the frame, to adjust themselves by their parallel motion readily to the conformation of the leg. The set-pieces carry pins *b*, which slide in staples b^1, and are guided by eyes b^2 on fixed lateral guide-rods *d*, the lower ends of the pins projecting through slotted recesses *e* of the front plate of the main frame to the outside of the same.

To the upper part of main frame, applied to suitable supports, is an upward-extending waist-rule, C, that is connected by spiral springs *f*, Fig. 2, to the marking-pins *b* of the uppermost set-pieces, in such a manner as to follow the motion of the set-pieces and retain a position midway between the marking-pins, so as to be always in the true center link of the leg to which the apparatus is applied. A tape-measure, C′, is applied to the upright waist-rule by sliding along a guide-rod or staple of the same, and serving to take the measures from the waist-rule to other points of the body.

A detachable marking-frame, D, is provided with a hinged-edge frame, D^1, for applying and holding the pattern-paper, on which the shape of the leg is to be marked by the pins. The hinged frame D^1 is of the shape of the marking-frame, and is retained after the pattern-paper has been placed thereon by suitable spring-clamps or other fastening devices. The marking-frame D is arranged with a number of grooves, *e′*, corresponding in number and disposition to the slots *e* of the front wall of the main frame. The marking-frame D is applied to the main frame by being first placed on a supporting-frame or foot-part, D^2, at the lower part of the main frame A, and then by its middle part against lateral rest-pieces E, that retain the marking-frame at such a distance from the main frame as not to interfere with the motion or injure the marking-pins. The accurate position of the marking-frame D is defined by guide-pins *h* of the rest-pieces E passing through slots h^1 of the marking-frame. The upper end of the marking-frame is held by suitable spring-clamps h^2. The rest-pieces E are pivoted to side legs of the main frame, and acted upon by spiral springs *i*, they being jointly swung into outward position at any angle to the front wall of the main frame by a connecting-rod, and retained in this position to support the marking-frame by a pivot-hook, *l*. When the apparatus has been applied to the leg and all the set-pieces and pins brought into position to indicate the shape of the same, the retaining-hook *l* is released, and by the action of the springs *i* the rest-pieces are instantly thrown toward the front wall of the main frame so that the guide-pins of the

same press on the cross-parts h^3, Fig. 1, of the slots h^1 of the marking-frame, and force the same against the marking-pins. The pins pierce, thereby, simultaneously the pattern-paper, assisted by the grooves or indentations back of the same, and indicate thus the exact conformation of the leg on the same, so as to enable tailors and others to cut the pantaloons and fit them in exact conformity to the anatomical proportions of the leg, and produce a superior make and fit of pants and other leg-covering garments.

Having thus described my invention, what I claim as new in pantaloons-conformators, and desire to secure by Letters Patent, is—

1. A pantaloon-conformator consisting of a main frame with adjustable set-pieces or tongues and marking-pins, and a detachable marking-frame, carrying a pattern-paper, substantially in the manner and for the purpose specified.

2. The main frame, open at the back and provided at the side walls with a number of parallel moving and spring-acted set-pieces or tongues that adjust themselves to the leg, substantially as described.

3. The combination of the adjustable set-pieces with the sliding marking-pins moving on lateral guide-rods to resume position simultaneously with set-pieces, substantially as specified.

4. The combination of the marking-pins, the recessed front wall of the main frame, and the correspondingly-grooved marking-frame, to pierce pattern-paper on release of the marking-frame, substantially as specified.

5. The combination of the sliding upright waist-rule, carrying tape-measure, with the uppermost marking-pins and set-pieces to retain central position between the same, substantially as described.

6. The combination of the marking-frame with the swinging and spring-acted rest-pieces, having guide-pins to press marking-frame against pins on release of rest-pieces, as described.

7. The combination of the swinging and spring-acted rest-pieces with a locking device to retain rest-pieces in position for holding the marking-frame at the required distance from the marking-pins during the adjusting of the apparatus, as specified.

8. The main frame provided with bottom frame or shoe D^2, for supporting the marking-frame, substantially as specified.

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