

A. BORCHARDT.
 Shirt-Neck Shaper.

No. 206,856.

Patented Aug. 13, 1878.

Figure 1.

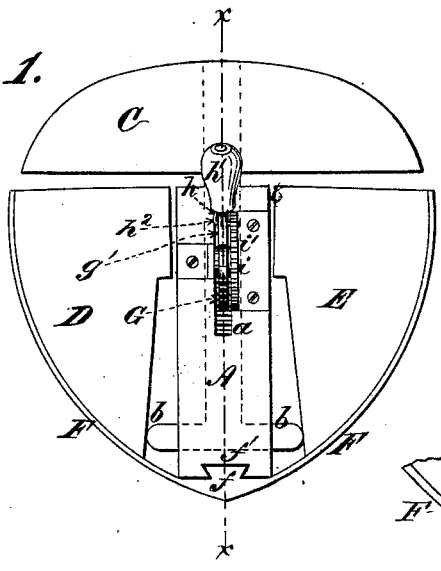


Figure 6.

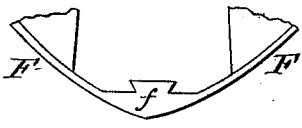


Figure 2.

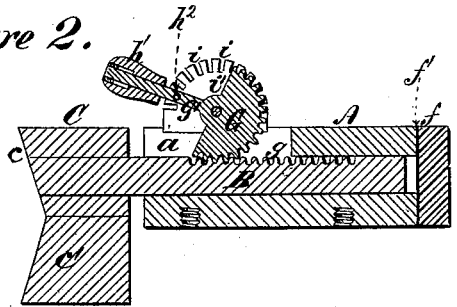


Figure 3.

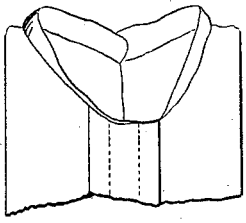


Figure 4.

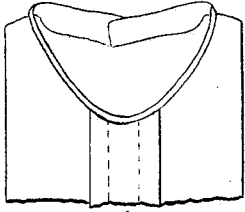
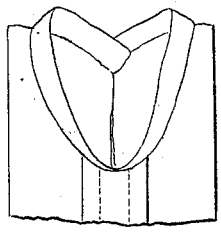


Figure 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

ALBERT BORCHARDT, OF WEEHAWKEN, NEW JERSEY.

IMPROVEMENT IN SHIRT-NECK SHAPERS.

Specification forming part of Letters Patent No. **206,856**, dated August 13, 1878; application filed May 9, 1878.

To all whom it may concern:

Be it known that I, ALBERT BORCHARDT, of Weehawken, Hudson county, New Jersey, have invented a certain Improvement in Shirt-Neck Shapers for Ironing-Tables, of which the following is a specification:

It is the object of my improvement to preserve the shape of the neck-slope during the process of ironing shirt-bosoms; and my invention consists of a shaper which is adapted for insertion within the neck-band, and which has a perimeter of prescribed shape, and is capable of adjustment to adapt it to shirts of different sizes.

The accompanying drawings, representing my invention, are as follows:

Figure 1 is a top view. Fig. 2 is a transverse section through the line *xx* on Fig. 1. Figs. 3, 4, and 5 are diagrams representing the different shapes which shirts of the same pattern may assume when ironed in the ordinary way. Fig. 6 is a detail view of a portion of the side wings.

My shaper consists of a central bar, A, which is adapted to be secured by screws or otherwise to the end portion of a board or table upon which the shirt-bosom is placed to be ironed. The central bar is longitudinally perforated to receive a sliding stem, B, which is affixed by its outer extremity to the segment C, which engages the back portion of the neck-band. The bar A is provided with the transverse slot *a* for a portion of its length, to admit either a cross-bar affixed to the lower end of the sliding stem, or to admit instead of the cross-bar two arms, *b b*, projecting laterally on opposite sides from the lower end of the sliding stem B. The arms *b b* project outwardly from the sides of the central bar A, and, respectively, engage the inclined inner surfaces of the side wings D and E. The side wings are affixed by their outer edges to the metallic band F, the central portion of which is provided with a dovetail, *f*, which slides in the dovetailed groove *f'* formed vertically across the end of the central bar A. The metallic band F acts as a spring, and tends to hold the side wings D and E against the sides of the central bar, but, being elastic, yields to allow the side wings to move outwardly in opposite directions, in obedience to the action upon them

of the arms *b b*, when the sliding stem is projected forward. The sliding stem is moved back and forth by means of the segmental pinion G, the teeth of which engage the rack *g* formed upon the upper side of the sliding stem B. The segmental pinion is rocked back and forth by means of the lever *g'* projecting radially from its hub. The lever *g'* is provided with a spring, *h*, like an umbrella-spring, which is operated by the sliding back and forth of the tubular handle *h'*. When the handle is pressed inward, the spring *h* is compressed against the lever, and its free end *h²* is thrown laterally outward from the lever into position to engage one of the notches *i* in the circular gage-plate *i'*. It will be seen that when the free end *h²* of the spring has entered one of the notches *i* in the gage-plate the movement of the segmental pinion in either direction is prevented, and the parts of the instrument are held stationary.

It will, of course, be understood that the side wings D and E may be permanently hinged to the central bar A; but there is an advantage in having them detachable, because it may be desirable to employ side wings of variable shape to fit shirts of different patterns.

In operation, the shirt is slipped onto the ironing-board and the neck-band buttoned around the shaper, the shaper being so arranged that the sliding stem B is in line with a line through the center of the bosom from top to bottom. The sliding stem is then projected and the side wings simultaneously expanded by operating the segmental pinion, as has been described, and the neck-band, irrespective of its size, is thus stretched in the proper degree.

It will be seen that the curved outer edge *c* of the segment C is slightly flaring, and that a block, *c'*, of corresponding shape, is affixed to the under side of the segment C, and flares in the opposite direction. The seam of the neck-band lies upon the line of junction of the segment C and the block *c'*, and the exterior faces of the segment C and the block *c'* thus serve as a guide to maintain the neck-band in the proper position.

The necessity for my invention is illustrated in Figs. 3, 4, and 5, representing the actual shapes which shirts of precisely the same pat-

tern are made to assume by different modes of ironing without the use of my shaper. When the shaper is used, the shape of the neck-slope is in all cases precisely the same.

I claim as my invention, as an attachment for an ironing-table for employment in ironing shirt-bosoms—

1. A neck-shaper composed of segments adapted to be expanded to conform to neck-bands of variable dimensions, substantially as described.

2. In a shirt-neck shaper, substantially such as described, the segment C, affixed to the

outer end of the sliding stem B, provided with the sliding arms *b b*, in combination with the side wings D and E, having inclined inner faces adapted to be engaged by the arms *b b*, substantially as and for the purpose set forth.

3. The central bar A, provided with a sliding stem, having the side arms *b b*, in combination with the detachable side wings D and E, substantially as and for the purpose set forth.

ALBERT BORCHARDT.

Witnesses:

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