W. H. STEDMAN.

GARMENT TURNER.

APPLICATION FILED JAN. 6, 1913.

1,100,203.

Patented June 16, 1914.

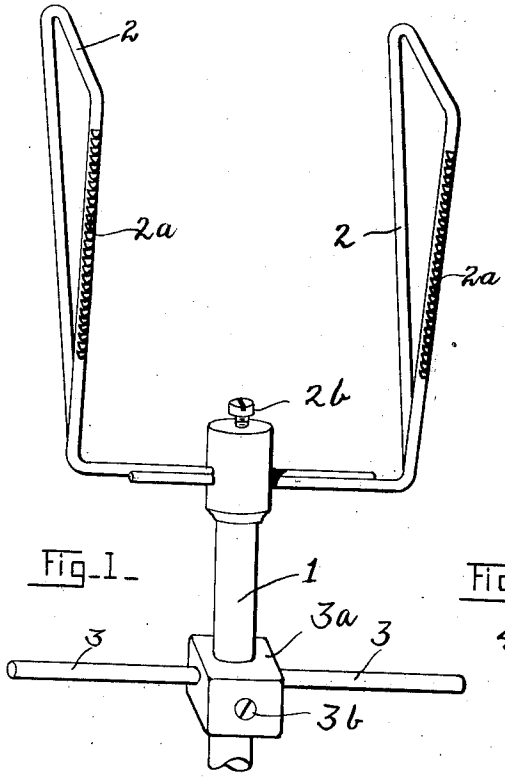


Fig. 1.

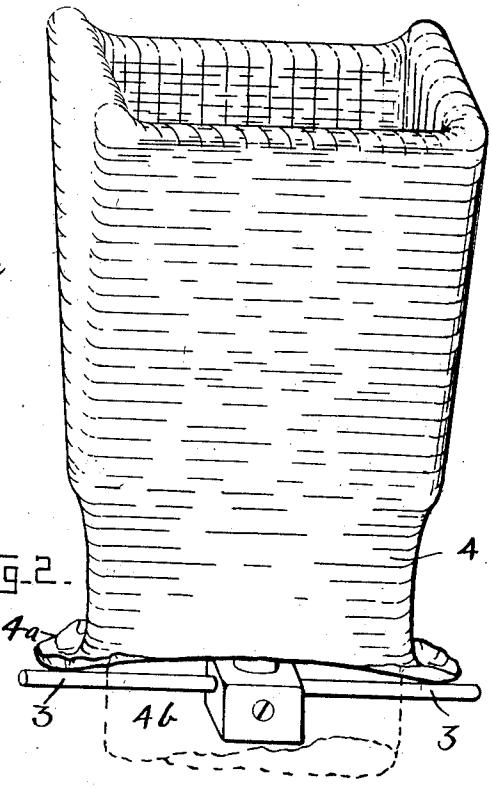


Fig. 2.

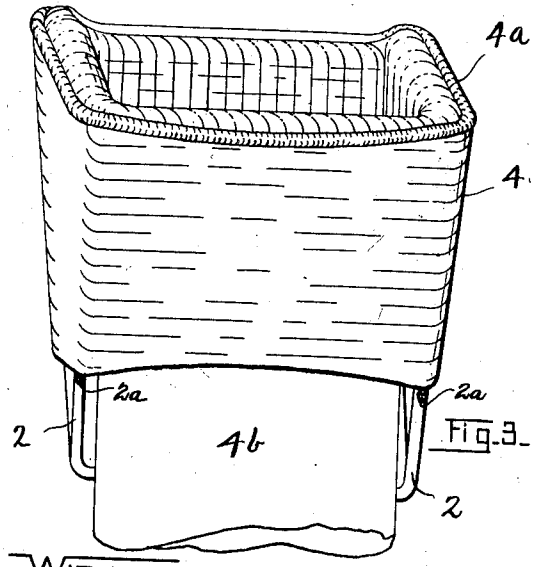


Fig. 3.

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GARMENT-TURNER.

1,100,203. Specification of Letters Patent. **Patented June 16, 1914.**

Application filed January 6, 1913. Serial No. 740,521.

To all whom it may concern:

Be it known that I, WILLIAM H. STEDMAN, a citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Garment-Turners; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, and to the figures and letters of reference marked thereon.

In the manufacture of hosiery having a hem at the upper end as well as in the manufacture of other garments, particularly knitted garments, where hems are to be formed on the same, it is usual to first turn the same, a stocking, for example, wrong side out for a suitable distance from the end, then turn or double this reversed portion back upon itself right side out until the raw edge extends to or beyond the fold. The raw edge or surplus material is then trimmed off and finally the said edge and fold are secured together by sewing. Hand manipulation of the garment to form the hem is slow, tedious and the results irregular, which difficulties have led to the production of devices for assisting in the performance of operations stated, whereby the production could be increased, the labor reduced and the results made substantially uniform.

The present invention relates to devices of the character stated for facilitating the hand manipulation of the garment and the device adopted for illustrating the invention is one particularly adapted to aid in the turning of stockings for the formation of the hem portion, the objects of the invention being to provide a device on which the stocking or garment will be held in such wise that the successive folds may be formed with facility and without danger of slipping during the manipulation of the end portion of the garment, and in this way insure rapid manipulation and uniform results.

The invention consists in certain novel details of construction which will be hereinafter described and pointed out particularly in the appended claims.

Referring to the accompanying drawings, Figure 1 is a perspective view of a garment turner, particularly adapted for turning stocking tops and embodying means whereby it may be adjusted to accommodate stockings of different size and for the ready formation of hems of different width. Fig. 2 is a similar view of the device with a stocking thereon turned partly inside out or in the position which it assumes when first placed in position and the end drawn down over the turner. Fig. 3 is a similar view with the extreme end of the stocking doubled back upon itself until the edge meets the fold at the top of the device and the stocking is ready to be removed for subsequent trimming and sewing.

Like characters of reference represent the same parts throughout the drawings.

The operative or effective portions of the device are mounted upon an upright or standard 1 which may be supported from any suitable base and embody two frames, which in the device illustrated, are wire frames 2, each tapering downwardly and held in parallelism by horizontal base portions adjustably mounted in the upper end of the standard 1 and held in adjusted position by a set screw 2^b. Adjustment of the frames 2 toward and from each other provides for the accommodation of stockings of different size inasmuch as it is desirable that the stocking being handled shall be stretched somewhat when drawn down over the outer sides of the frames.

Below the turning frames 2 the standard 1 is provided with a vertically adjustable gage for determining the length of the turned portion of the stocking and this gage in the device adopted for illustrating the invention is formed by laterally projecting arms 3 mounted in a block 3^a adjustably held in position on the standard by a set screw 3^b. The turning frames 2 before referred to are provided with smooth turning edges at the top and roughened or serrated surfaces indicated at 2^a preferably arranged along the upright edges of the frame, and therefore at an angle to the turning edges. The roughened or serrated surfaces are usually formed by relatively fine downwardly directed teeth which will offer resistance to the upward sliding movement of the turned portion of the stocking passing around the same, but at the same time will not prevent the same from being withdrawn after the turning operation and formation of the hem fold have been completed.

In manipulating a stocking or tubular garment for the formation of the hem fold with a device such as illustrated and above described, the top of the stocking leg is grasped between the thumb and fingers of the two hands with the stocking hanging between the frames 2, 2; the top is stretched laterally until the portions held by the hands are on the outer sides of the frames; then the top or edge of the stocking is drawn downwardly until it reaches the stops 3, 3 and is in the position shown in Fig. 2, 4^b in this figure representing in dotted lines the position of the stocking leg which hangs freely between the frames, 4 indicating the portion of the stocking which is turned inside out, and 4^a the raw edge of the stocking top curled up into a "roll," such as it commonly assumes in knitted goods.

With the stocking in the position shown in Fig. 2 and with the edge still held by the fingers and thumbs, the said edge is doubled back and carried upwardly until it reaches or extends slightly beyond the fold at the top of the turning frames 2, when it will be substantially as represented in Fig. 3 of the drawings.

The final doubling or folding of the end of the stocking back upon itself to the position shown in Fig. 3 is liable to be accompanied by more or less displacement of the underlying portion of the stocking around the frame because the fabric encounters more resistance between its own surfaces than between itself and the folding frame with the result that the inner layer around the frame has a tendency to slip upwardly or gather so that the hem when removed from the frame will be irregular and wrinkled or at best the width of the hem of successively manipulated stockings will not be uniform. By the provision of the serrated or roughened surfaces, however, this difficulty is practically overcome and the tendency of the inner layer of the garment or the stockings surrounding the frame slipping upwardly on the frame is substantially overcome.

In the preferred construction the serrated or roughened surfaces are formed on all four edges of the turning frame with which construction it is found that the teeth or serrations may be made with their edges smooth and not liable to catch and draw out individual threads from the fabric.

After the folding operations and with the stocking top in the position shown in Fig. 3, it is a simple matter to remove the stocking from the folding device by grasping the folded sides, as for example, the front and rear sides, respectively, as viewed in Fig. 3, then stretching the said sides outwardly and drawing the same upwardly.

While the form of the turner illustrated is that which is preferred, it is obvious that both the form of the device and the formation of the resisting surfaces may be considerably varied without departing from the present invention.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United States, is:

1. In a garment turner, a turning support comprising a pair of parallel, laterally adjustable frames, each consisting of a turning edge, two depending sides, a series of teeth on each of the sides, and a laterally extending arm whereby each of the frames is adjustably secured to a common support.

2. A garment turner for turning and facilitating the folding of hems upon tubular fabrics or garments, embodying a laterally adjustable frame having diverging sides with serrated surfaces, for holding the garment while folding a hem.

3. A garment turning appliance, embodying a turning frame having a smooth turning edge and roughened fabric engaging surfaces extending at an angle to said edge for resisting the sliding movement of the turned portion of the garment off of the surfaces during the reverse folding of the hem portion of the fabric.

4. A garment turning appliance embodying a turning frame having parallel members each provided with a smooth turning edge and oppositely disposed roughened fabric engaging edges arranged at an angle to the turning edges for resisting the sliding movement of the turned portion of the garment off of the fabric engaging edges during the reverse folding of the hem portion of the fabric.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."