

J. E. EARLE.

Folding-Guides for Sewing-Machines.

No. 139,378.

Patented May 27, 1873.

Fig. 1

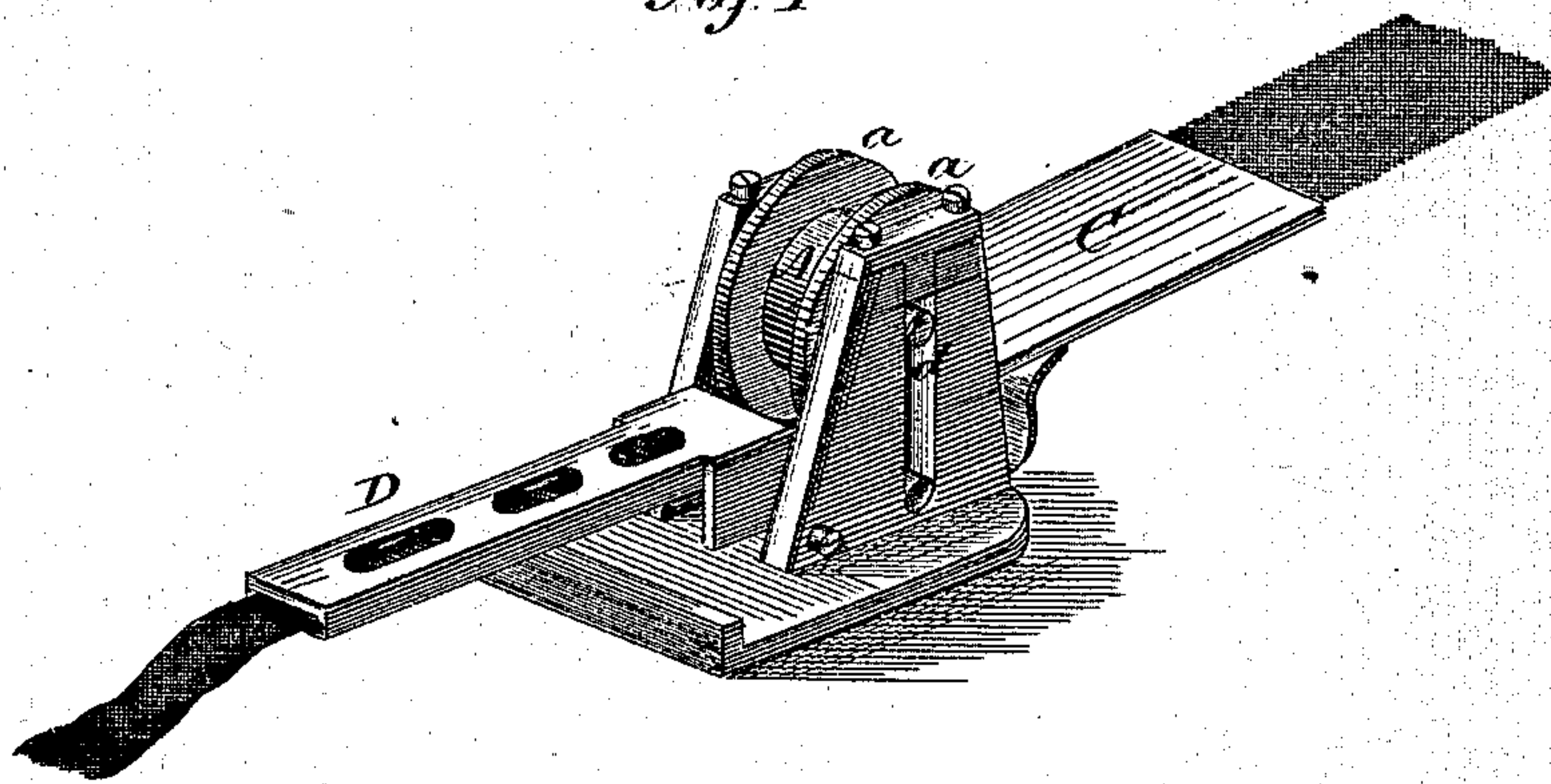
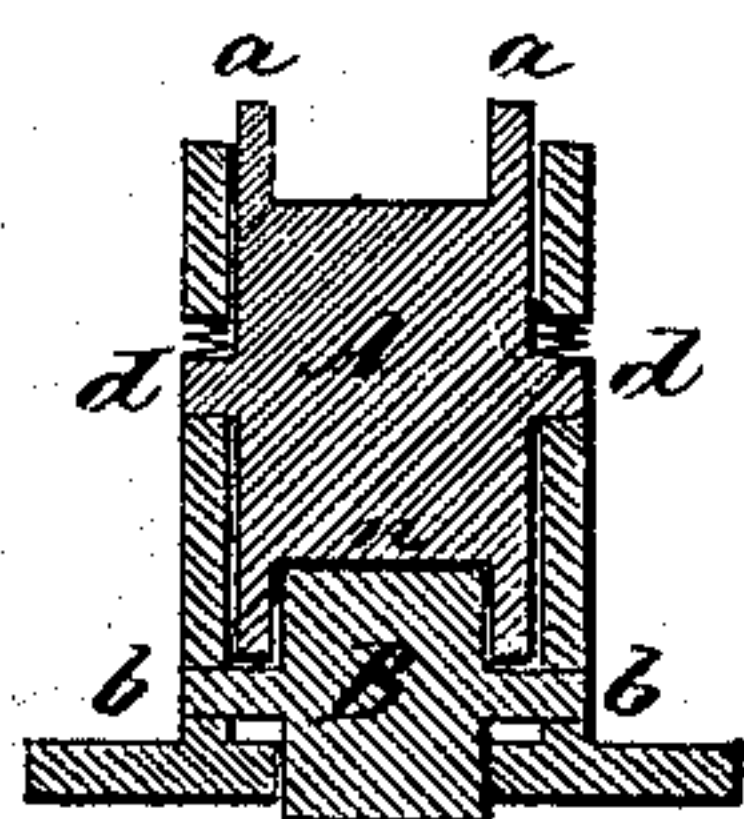


Fig. 2



Witnesses.

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JOHN E. EARLE, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO THE ELM CITY COMPANY, OF SAME PLACE.

IMPROVEMENT IN FOLDING-GUIDES FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. **139,378**, dated May 27, 1873; application filed March 7, 1873.

To all whom it may concern:

Be it known that I, JOHN E. EARLE, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Folding-Guide for Sewing-Machines; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent in—

Figure 1 a perspective view, and in Fig. 2 a vertical central section.

This invention relates to a device or attachment to sewing-machines, designed to form a folded band preparatory to stitching the same. By a folded band I mean a strip of material having one or both edges turned under and stitched upon the surface of another material; and the invention consists in a flanged roll, combined with another roll or surface lying between the flanges of the said roll, so that the material to be folded passes between the said flanged roll and the said surface, the said flanges turning down the edge or edges at right angles to the surface, defining the edge of the fold, thence to be conducted to the stitching mechanism, where the edge or edges are completely turned beneath the band without the intervention of the gradual-turning device or tube usually employed.

A is the principal roll, having formed upon the outer edge a flange, *a*, the distance between these flanges being equal to the width of the finished folded band desired to be made; different lengths of rolls will therefore be required for different widths; and, if desirable, the roll may be made adjustable as to its length. This roll is supported in bearings *d*, and, preferably, with a spring pressing upon the bearing, as denoted in Fig. 2. Beneath this roll A I arrange a second roll, B, upon bearings *b*, this roll being slightly narrower than the space between the flanges of the roll A, so as to lie between the said flanges, and in close proximity to the surface of the roll A.

The material to be folded is cut into strips somewhat wider than the fold to be made, and is conducted to the roll in any convenient manner, preferably by a flat tube, C, so that if both edges are "raw" it will run between the rolls A and B, projecting at each side, and

drawn through between the rolls, the flanges *a* will turn the edges of the strip upon both sides at right angles, as denoted at *n* in solid black, Fig. 2. The fold thus defined, the strip is carried beneath the presser-foot, the edges turned under by hand at the start, it being understood that the rolls are arranged as near to the needle and presser-foot as they conveniently may be, and the needle passes through the material, taking both edges and securing the fold. The fold defined by the rolls is completed by the feed and presser-foot of the machine; but in order to place the rolls at a little distance from the presser-foot, I arrange a flat tube, D, to lead from the rolls directly to the presser-foot. This tube D is of the width of the fold to be made, and as the partially-folded material leaves the rolls it passes directly into this flat tube, and there the fold is completed and conducted to the presser-foot.

This device is designed with special reference to machines employing two needles, so that both edges of the fold are stitched at the same time.

The roll B is not essential, as a flat surface of the same proportionate width will produce very good results.

In some cases one edge only is required to be turned; in such case the flange upon the opposite side will serve as a guide; or a roll, with a single flange, with a stationary guide for the opposite edge, may be employed.

I claim as my invention—

1. A folding-guide for sewing-machines, consisting of the flanged roll A, and a rolling or other surface, between which and the said roll, by means of the flanges *a*, the edge or edges of the fabric passing between are turned at at right angles to the surface to define the width of the finished fold, and the guide-tube C, for the purpose of properly presenting the material to the roll, substantially as set forth.

2. In combination with the flanged roll A, and a rolling or other surface between which and the said roll the fabric passes, as before described, the conductor D, constructed and arranged relatively to the said roll, substantially as set forth.

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Witnesses:

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