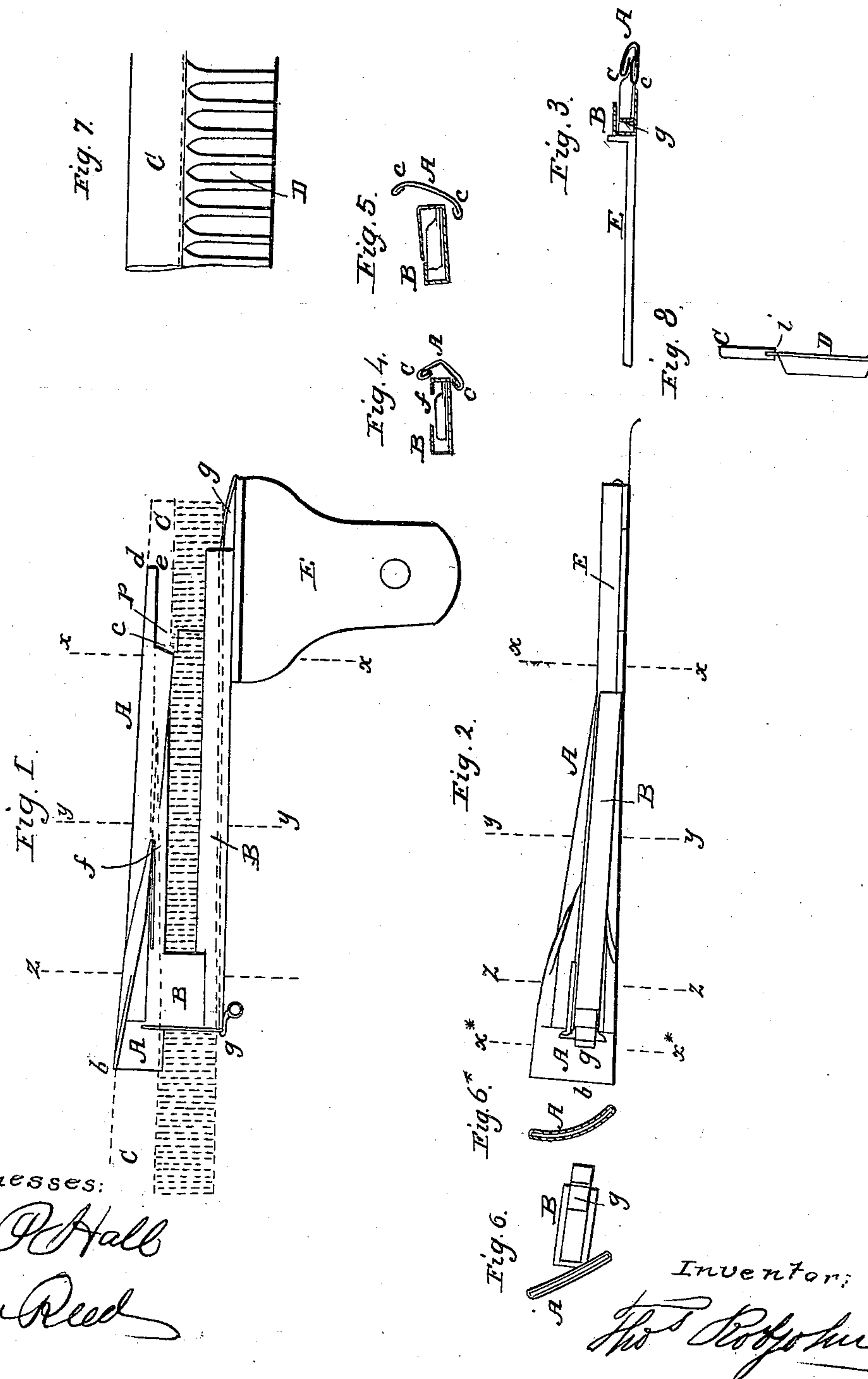


T. ROBJOHN.
Sewing Machine Guide.

No. 42,877.

Patented May 24, 1864.



Witnesses:

Gas O. Hall
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IMPROVEMENT IN SEWING-MACHINE GUIDES.

Specification forming part of Letters Patent No. 42,877, dated May 24, 1864.

To all whom it may concern:

Be it known that I, THOMAS ROBJOHN, of the city, county, and State of New York, have invented a new and useful Improvement in Sewing-Machine Guides; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan of the combination of guides which constitute this invention. Fig. 2 is a side view of the same. Fig. 3 is a transverse section of the same in the plane indicated by the line *x x*, Figs. 1 and 2. Fig. 4 is a transverse section of the same in the plane indicated by the line *y y* in Figs. 1 and 2. Fig. 5 is a transverse section of the same in the plane indicated by the line *z z* in Figs. 1 and 2. Fig. 6 is an end view of the same. Fig. 6* is a transverse section of one guide in the plane indicated by the line *x** in Figs. 1 and 2. Fig. 7 is a face view, on a larger scale than the previously-named figures, of a band-ruffle which is produced by a sewing-machine having the guides applied. Fig. 8 is a transverse section of the same.

Similar letters of reference indicate corresponding parts in the several figures.

This invention consists in a novel combination of two guides, one of which will fold and double a strip of muslin or other fabric along the center of its width and turn in both edges, while the other directs the edge of a fluted frill between the edges of the folded strip to be sewed thereinto and produce a band-ruffle as the strip and frill pass from the said guides under the needle of a sewing-machine.

It also consists in a novel construction of the guide by which the frill is conducted into the band.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A is the guide for turning in the edges of and folding the strip C which forms the band of the ruffle, and B is the guide which guides the frill D into the band. These guides are made of light sheet-brass or other metal. The guide B is attached rigidly to a plate, E, which resembles the gage-plate commonly used, and which is secured to the bed-plate of the sewing-machine in a similar manner, and the guide A is soldered or otherwise rigidly se-

cured to B, the two being arranged side by side in such manner as to deliver the band and frill in a direction parallel with the feed-movement and in proper relation to the line of motion of the needle of the sewing-machine. The folding-guide A has one end, *b*, at which the strip C enters, of the form of a tube, and nearly flat, as shown in Fig. 6, the width of the interior of the said tube being equal to the full width of the strip C. Commencing at a short distance from the above-mentioned end of the said guide, which is toward the left hand in Figs. 1 and 2, one side of the tube is cut away, leaving the guide in the form of a plate, having its edges turned over, and from this point the said plate commences to have its edges turned in a second time, as shown at *c c* in Figs. 5, 4, and 3, and a short distance farther on it commences to be folded in the middle of its width, until, at the opposite end, it has the form shown in Fig. 3, its edges having a complete double turn and its central fold being nearly flat, so that the strip, in passing from the end *b* to the opposite end, *d*, will be folded and have its edges turned in, as shown in Fig. 8, and in blue color in Fig. 3. The strip is shown in blue color in Figs. 3, 4, 5, 6*, so that by a comparison of the said figures with Figs. 1 and 2 the successive stages of the folding operation may be traced. The marginal portions *c c* of the folder, by which the edges of the strip are turned inward, do not extend quite to the needle-hole *n* in the bed-plate of the sewing-machine, but are cut away at some distance therefrom, as shown at *e e* in Fig. 1. The portion which produces the central fold extends some distance beyond the needle-hole *n*, to preserve the form of the fold while the sewing of the frill D into the band is being performed.

The guide B consists of a tube of quadrangular form in its transverse section, and large enough for the free passage of the frill D through it. The frill is made in a fluting-machine, or by other means, before being inserted into the guide, and has the flutes flattened at one edge, as shown at *i*, Fig. 8, to enable the said edge to be received between the folded edges of the strip C. The top of the guide B is made with an opening close to the side which is next the guide A, the said opening facilitating the drawing of the frill into the guide at the commencement of the work. This opening also serves to admit a light spring, *f*, con-

sisting of a strip of metal, the end of which is arranged to press on the flattened edge *i* of the frill and keep it down on the bottom of the guide. On the interior of that side of the guide B which is farthest from the guide A there is applied a light spring, *g*, consisting of a strip of sheet metal, to press against the opposite edge of the frill D and keep its flattened edge *i* in contact with the side of the guide B which is next the guide A, and so conduct the said edge between the folded edges of the band. The last-mentioned side of the said guide B is also open for a short distance from the commencement of the cutting away *e* of the guide A, that the edge of the frill may be delivered between the folded edges of the band before the latter emerge from the marginal portions *e e* of the guide A. The strip and the frill are

both drawn together through their respective guides by the feed-motion of the sewing-machine and carried to the needle, by which and its appurtenances the two are sewed together close to the turned-in edges of the band.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The guide B, constructed and furnished with springs *f g*, substantially as and for the purpose herein specified.

2. The combination of the said guide B and its guides *f g* with the guide A, substantially as herein described, for the production of a ruffle such as is herein specified.

THOS. ROBJOHN.

Witnesses:

JAS. B. HALL,
GEO. W. REED.