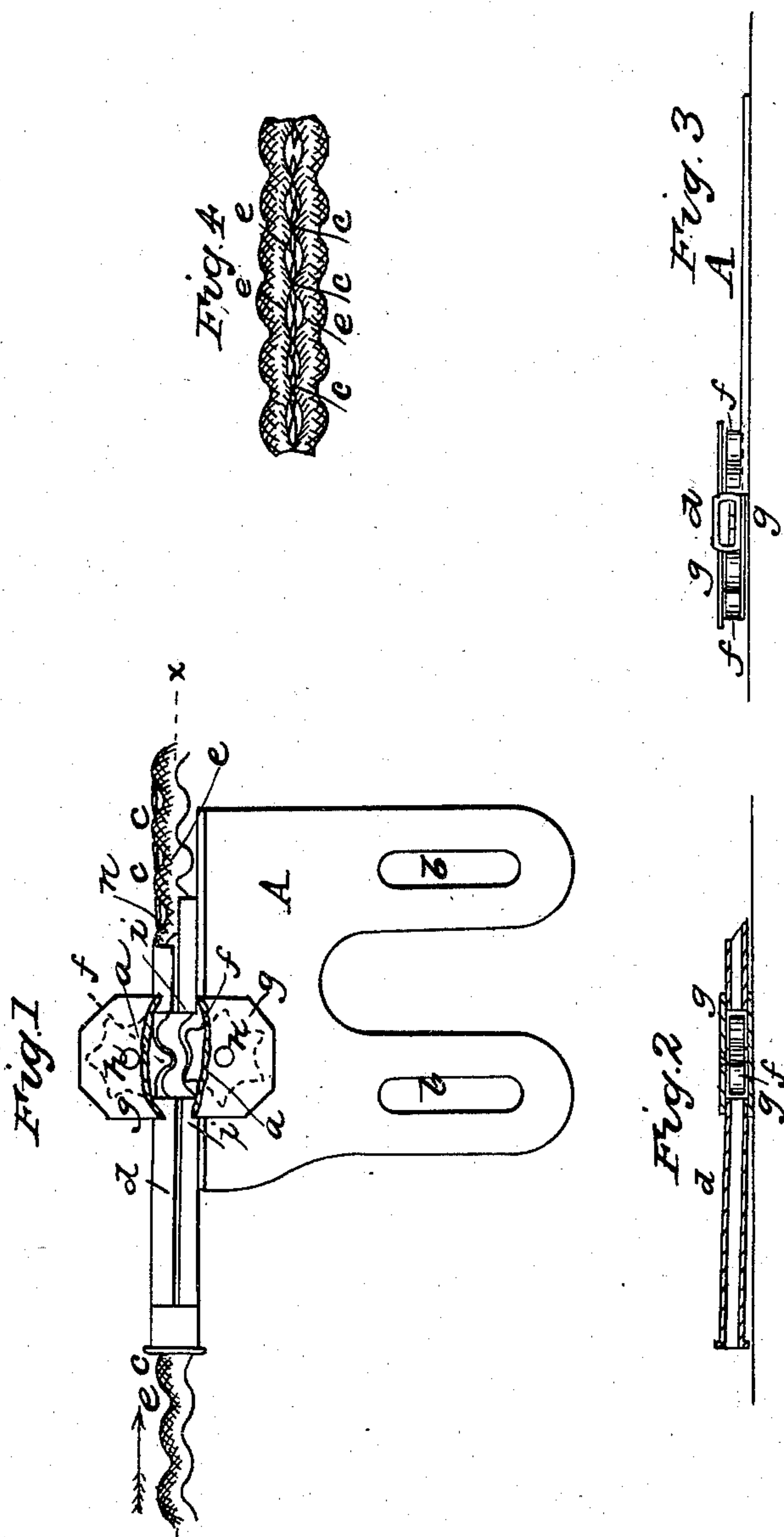


T. ROBJOHN.
Sewing Machine Braid Guide.

No. 54,602.

Patented May 8, 1866.



Witnesses
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IMPROVEMENT IN SEWING-MACHINE BRAID-GUIDES.

Specification forming part of Letters Patent No. 54,602, dated May 8, 1866; antedated April 27, 1866.

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 Improved Guide for Sewing-Machines; 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 view of the guide having a portion of the exterior broken away at *a a* to show the interior. Fig. 2 is a longitudinal vertical section of the same in the plane indicated by the line *x x* in Fig. 1. Fig. 3 is a view of that end of the same at which the work enters. Fig. 4 is a face view of a piece of the work to be performed by the aid of the guide.

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

This invention consists in a guide to be used in the manufacture of dress-trimmings of the character shown in Fig. 4 of the drawings, from what is known as "serpentine braid," by sewing together two pieces of such braid in a sewing-machine. In the manufacture of such trimmings it is necessary to keep the two pieces of braid even with each other, that the salient curves *c c* of one edge of one piece may exactly meet the salient curves of one edge of the other piece, and the re-entering curves *e e* of the one be exactly opposite the re-entering curves of the other. This is accomplished in my guide by means of a pair of toothed and recessed wheels, between which the two pieces, laid one upon another, pass on their way through a straight guiding-tube of flat form.

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

A is a flat plate in which are two slots, *b b*, for the passage of set-screws, which secure it to the bed or work plate of a sewing-machine, the said slots being formed and arranged to permit the adjustment of the said plate at right angles to the direction of the feed movement. To one edge of this plate there is rigidly attached the flat tube *d*, of a width and depth just sufficient to allow two pieces of serpentine braid, laid one upon another, to pass freely through it, and at a suitable part of its length the said tube is interrupted for a suitable distance, as shown at *i* in Fig. 1, to permit the entrance of the two wheels *f f*, the planes of which correspond with the plane of

the said plate, and the axles *h h* of which are secured in two parallel plates, *g g*, rigidly secured to the plate *A* and tube *d*. The upper one of these plates is broken away at *a a* in Fig. 1 to show the wheels. The said wheels have teeth which correspond in form with the re-entering curves of the edges of the serpentine braid (shown in red color in Fig. 1) and intervening recesses which correspond in form with the salient curves of the said edges, and the said wheels are arranged at such distance apart that when the teeth of one meet or come opposite the recesses of the other in their revolution there will be just room for the edges of the braid to pass between them, as illustrated in Fig. 1.

The guide thus constructed is so arranged upon the sewing-machine relatively to the needle that the salient points of the corresponding edges of two pieces of braid laid one upon another and moved through the tube by the feed-motion of the sewing-machine will emerge from the tube *d* in such a line that the needle *n*, Fig. 1, will pass through them. The sewing-machine to which the said guide is applied may be of any known or suitable kind, making either the lock, the double-looped, or the chain stitch.

In the operation of sewing together the two pieces of braid they pass, laid one upon the other, through the tube *d* and between the wheels *f f*; and as there is only just room for the braid to pass between the said wheels, it keeps the teeth and recesses of the said wheels in proper relation to each other, while the said teeth and recesses keep the two pieces of braid with the salient and re-entering curves of their edges, respectively, directly over or matching with each other, so that as they emerge from the tube and pass the line of motion of the needle the salient points of the corresponding edges of the two pieces are sewed together. The two pieces, having been thus sewed together, on being unfolded present the appearance shown in Fig. 4.

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

The combination of the toothed and recessed guide-wheels *f f*, in combination with the guide-tube *d* or its equivalent, substantially as and for the purpose herein specified.

Witnesses:

THOS. ROBJOHN.

J. W. COOMBS,
A. LE CLERC.