R. THOMPSON.

Button-Hole Guide-Clamp.

No. 159,288. Patented Feb. 2, 1875.

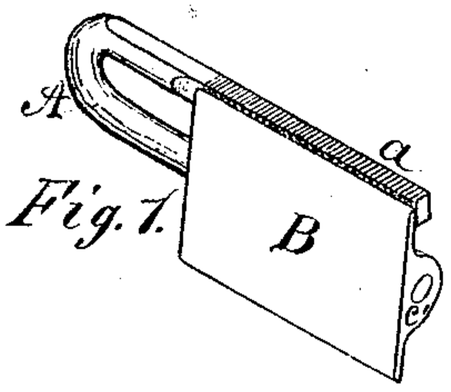

Fig. 1.

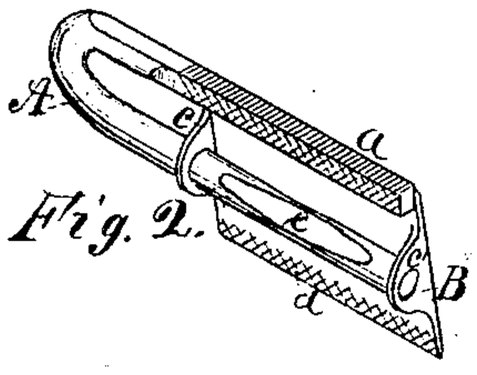

Fig. 2.

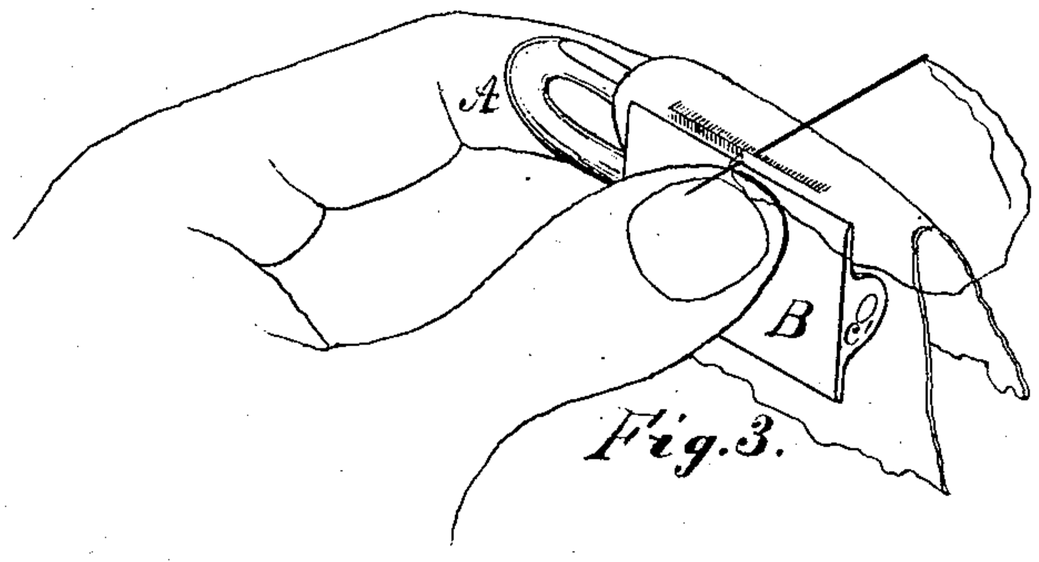

Fig. 3.

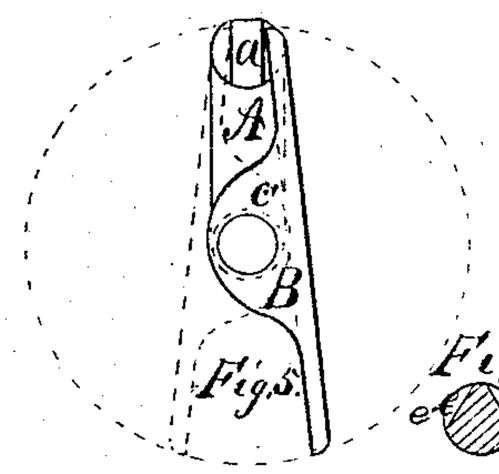

Fig. 5.

Fig. 6.

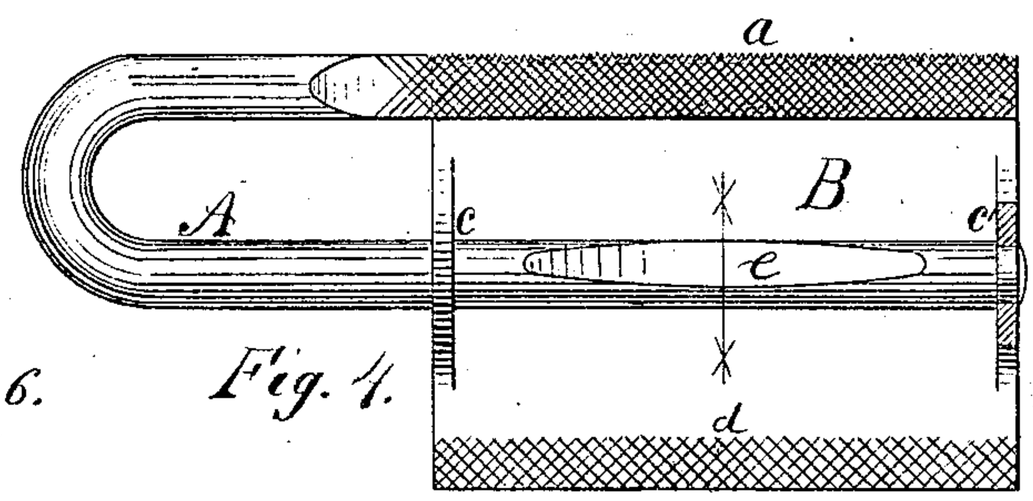

Fig. 4.

Witnesses;

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UNITED STATES PATENT OFFICE.

ROSEWELL THOMPSON, OF BRIDGEPORT, CONNECTICUT.

IMPROVEMENT IN BUTTON-HOLE GUIDE-CLAMPS.

Specification forming part of Letters Patent No. **159,288**, dated February 2, 1875; application filed December 14, 1874.

To all whom it may concern:

Be it known that I, ROSEWELL THOMPSON, of Bridgeport, in the county of Fairfield and State of Connecticut, have invented a new and Improved Guide for Working Button-Holes; and I do hereby declare the following to be a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification.

The object of my invention is to provide a useful and convenient guide for the use of persons unskilled in the art of working button-holes with neatness and regularity; and my improvement consists in constructing the same with simplicity and durability, and at the same time in such a manner as to be easily and conveniently adjusted for use by the operator.

In the accompanying drawings, Figs. 1 and 2 are perspective views of my improved guide. Fig. 3 is also a perspective view of the guide, showing the manner of holding the same by the operator when adjusted for use. Fig. 4 is an enlarged view of the guide, made in order to clearly show the general construction of the same. Fig. 5 is an enlarged end view of the guide; and Fig. 6 is an enlarged cross-sectional view of the wire on the line *x x*, Fig. 4.

I will now proceed to describe the construction of my improved guide with reference to the accompanying drawings.

Similar letters of reference indicate corresponding parts.

A is a piece of stout wire about four inches long, bent at the center so as to form a shape similar to a letter **U**, the arms being parallel to each other, as clearly shown in Fig. 4. *a* is the double jaw, constructed by flattening one of the arms of the wire A on each side, as shown in the enlarged end view, Fig. 5, said flattened surfaces extending nearly the length of the arm and running parallel to each other, as shown in Figs. 1 and 2. B is a double swinging jaw, constructed with bearings *c c'* at each end, with holes in the same to fit the unflattened arm of the wire A, but so as to swing freely upon the same, in the manner shown in Fig. 5. Said swinging jaw is secured to its proper position on the arm by making one of the bearing-holes, *c'*, a little smaller than the diameter of the wire, and milling the end of the arm to fit the smaller bearing, said milled portion being left with a square shoulder for the inside face of the bearing, and also left a little longer than the thickness of said bearing in order to rivet the surplus end over the outside of the bearing, in the manner shown in the sectional view of the bearing *c'*, Fig. 4, but so as to allow the same to swing freely upon the arm, as before described. *e* is a flattened portion of the arm between the bearings *c c'*, and is designed to give more room and convenience in holding the cloth over the wire with the forefinger when adjusted for use by the operator. Said flattened surfaces are made on each side of the arm, and inclined with respect to each other in the manner shown in the enlarged sectional view of the arm, Fig. 6. The stationary jaw *a* is made with a series of **V**-shaped grooves across the top side, as shown in the enlarged drawing, Fig. 4, said grooves being made at such a distance from each other as the stitches in button-holes of usual good workmanship, and are designed as a guide for the operator in placing the needle at a proper distance and position when taking each successive stitch, so as to insure evenness and regularity in the several stitches made with respect to each other. The flattened surfaces of the jaw *a* have a series of raised cutting-edges made upon the same, similar to those made upon the surface of a double-cut file, as shown in the perspective view of the guide, Fig. 2, and the enlarged drawing, Fig. 4. Similar raised cutting-edges are also made upon those portions of the swinging jaw B which come in contact with the stationary jaw *a*, as shown at *d*, Figs 2 and 4, said raised edges upon both jaws being designed to effectually prevent the slipping of the cloth from its proper position while being clamped between the same for the purpose of working a button-hole.

In adjusting the guide for use, the cloth, which has previously been cut in a proper place for a button-hole is placed between the swinging and stationary jaws, at such a distance from the edge of the slit as is desired by the operator to make the stitches in working the button-hole, and firmly held in that

position by the thumb and forefinger of the left hand, in the manner shown in Fig. 3 of the accompanying drawings. The operator then places the point of the needle in the groove on the top edge of the stationary jaw, which happens to coincide with the end of the slit, and thrusts it through the cloth with the right hand, when the first stitch is taken in the usual manner of working a button-hole. The next groove is then used to take the next stitch in the same manner as described for the first stitch, and so repeating the operation in taking the several stitches until one side of the button-hole is finished. The operator then changes the guide to the unworked side of the slit by using the opposite side of the stationary and swinging jaws, and proceeds to work that side of the slit in precisely the same manner as before described.

Button-holes worked with the assistance of this guide excel in beauty and regularity any which are worked by hand by the most skillful and experienced operator. Thus, with only two complete pieces of metal, I construct a very durable, convenient, and effective guide for the use of persons unskilled in the art of working button-holes with neatness and regularity.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

In a button-hole guide-clamp, the combination of the U-shaped wire A and the double swinging jaw B, secured to one of the arms of the wire in the manner described, both constructed substantially as and for the purpose specified.

ROSEWELL THOMPSON.

Witnesses:

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ORLANDO P. KINGMAN.