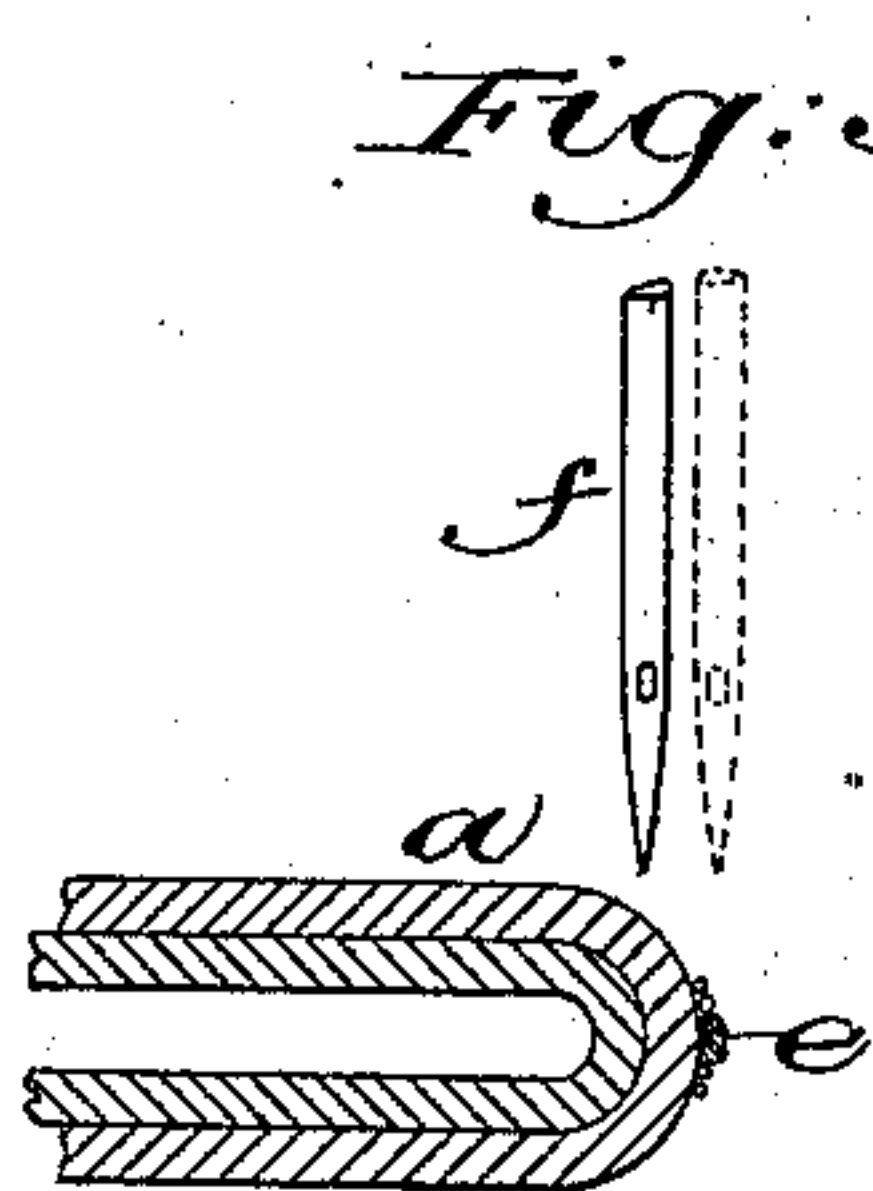
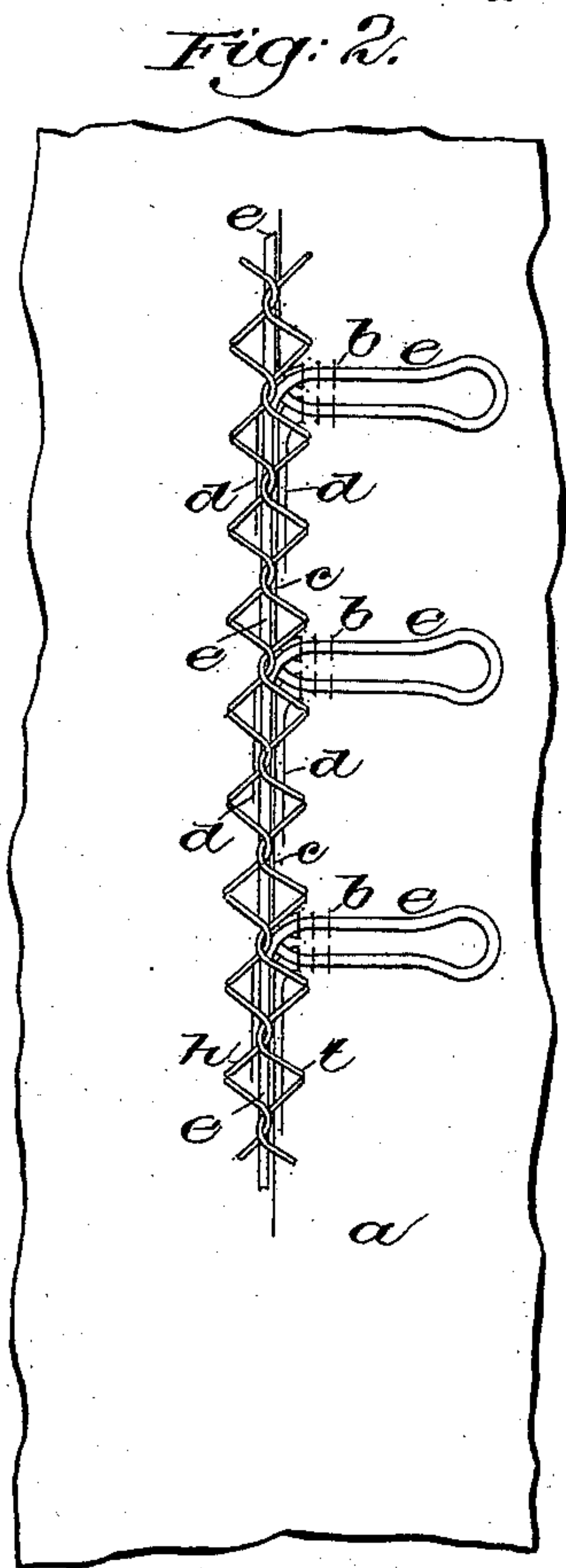
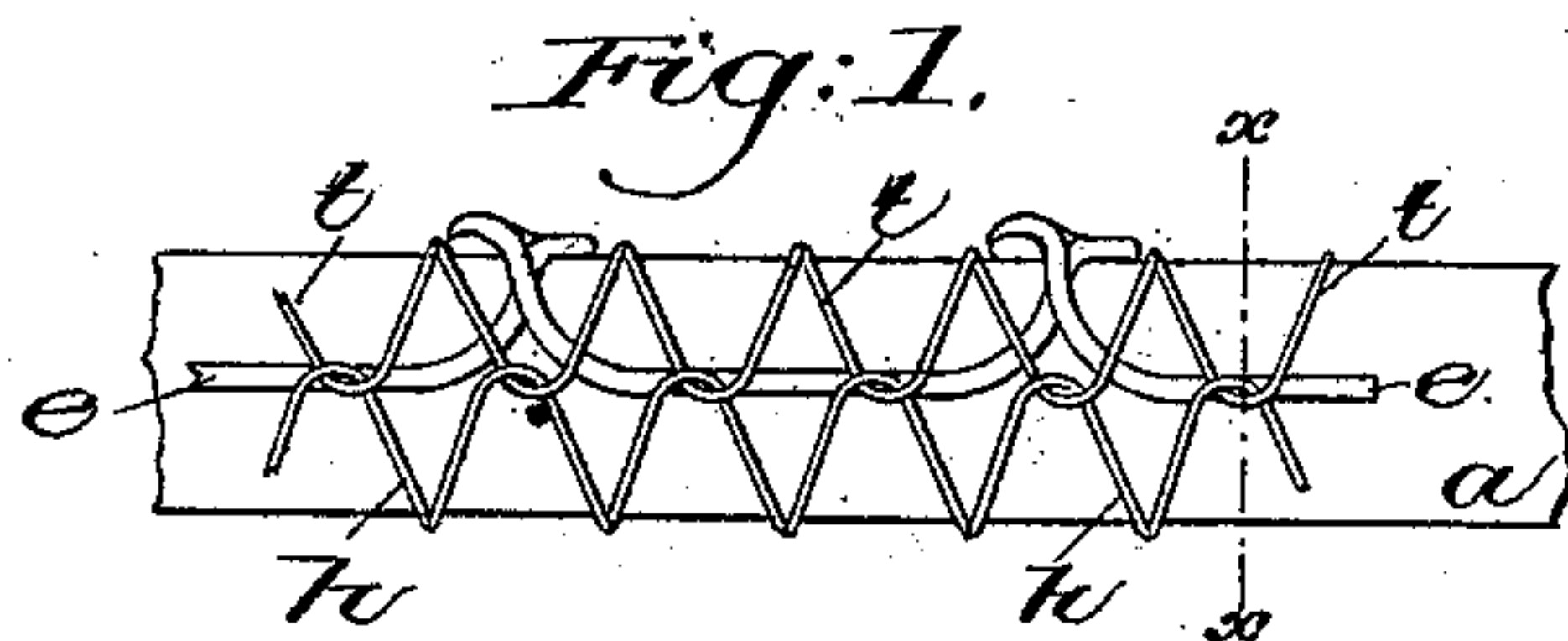


(No Model.)

J. REECE.  
BUTTON HOLE PIECE.

No. 373,153.

Patented Nov. 15, 1887.



Witnesses.  
Fred. S. Greenleaf  
Fred. L. Emery.

Inventor.  
John Reece.  
by Lemuel Meggs attys.

# UNITED STATES PATENT OFFICE.

JOHN REECE, OF BOSTON, MASSACHUSETTS.

## BUTTON-HOLE PIECE.

SPECIFICATION forming part of Letters Patent No. 373,153, dated November 15, 1887.

Application filed September 13, 1887. Serial No. 249,556. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN REECE, of Boston, county of Suffolk, and State of Massachusetts, have invented an Improvement in Button-Hole Pieces, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object to improve the manufacture of button-hole pieces, especially as to the manner of securing the stay-cord and "thrums" between the small or inner ends of adjacent button-holes, this present invention being an improvement on that described in United States Letters Patent No. 368,619, granted to me on the 23d day of August, 1887, the button-hole piece herein shown having the stay-cord and thrums bound down or blind-stitched to its under side by two threads rather than by one, as in the said patent, the threads used not, however, appearing at the face side of the material.

My invention consists, essentially, in a button-hole piece having its stay-cord and thrums bound down or blind-stitched to the material at its under side by a stitch composed of two threads, neither of which show at the face side of the material.

Figure 1 shows a portion of a button-piece folded upon itself in the direction of the length of the stay-cord connecting the ends of adjacent button-holes. Fig. 2 shows the under side of the material laid out flat after the stay-cord and thrums have been stitched down; and Fig. 3 is a section in the line *x*, Fig. 1, to show the path traversed by the needle, the latter being shown in its two different positions by full and dotted lines, only a portion of the stitches and stay-cord being shown.

The button-hole piece *a*, of any usual material and shape—preferably, however, of leather—is provided with a series of button-holes, which are overstitched, as at *b*, at their edges in any usual or suitable overstitching-machine, but two or three such over stitches being shown in Fig. 2, a stay-

cord, as *e*, being used in usual manner about the button-holes under the overstitching and from one to the next button-hole.

After the removal of the overstitched button-hole piece from the machine the ends of the needle-thread, as *d*, are drawn through to the under side of the material, the said ends being called "thrums," the under thread used in the overstitching being usually left lying along by the side of the stay-cord, as at *c*, between adjacent button-holes. In this condition the button-hole piece is folded in the direction of its length in the line of the stay-cord, as in Fig. 1, so as to leave the stay-cord on the convexed edge of the folded material, as shown in Figs. 1 and 3, and then the folded or bent material is laid upon the bed of another sewing-machine, when it is subjected to the action of an eye-pointed needle, as *f*, it having a thread, as *t*, which, when the said needle occupies the full-line position, Fig. 3, will descend and penetrate the material back from its folded or bent edge, the needle at such time, however, entering and emerging from the same side of the material; but at its next descent, when in the dotted-line position, the needle passes the material at its folded or bent edge, a loop of the thread *t* of the said needle at each descent being entered by a second or under thread, as *h*, carried, preferably, by a shuttle, as in the machine described in my application, Serial No. 248,827, filed September 5, 1887.

Viewing Fig. 3, it will be seen that the needle at one descent enters the material at one side of the stay-cord and thrums laid parallel to it, and at the next descent at the other side of the said stay-cord.

By putting equal tension on the threads *t* and *h* the needle-thread *t*, as it rises after having descended over the edge and outside the stay-cord and having had its loop entered by the needle-thread, draws the loop of under thread, *h*, up with it for about one-half the thickness of the folded material, as shown in Fig. 1.

To facilitate and insure the correct operation of the needle with relation to the folded

or bent edge of the material, the said edge will in practice be guided by a guide having a concaved face, as in my said application.

I claim—

- 5 The herein-described button-hole piece, it having its stay-cord and thrums bound to the under side of the material by two threads, as *t h*, neither of which appears at the face of the material, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN REECE.

Witnesses:

G. W. GREGORY,

B. DEWAR.