

D. W. G. HUMPHREY.

Improvement in Edge-Finish for Button Holes.

No. 125,393.

Patented April 9, 1872.

Fig. 1

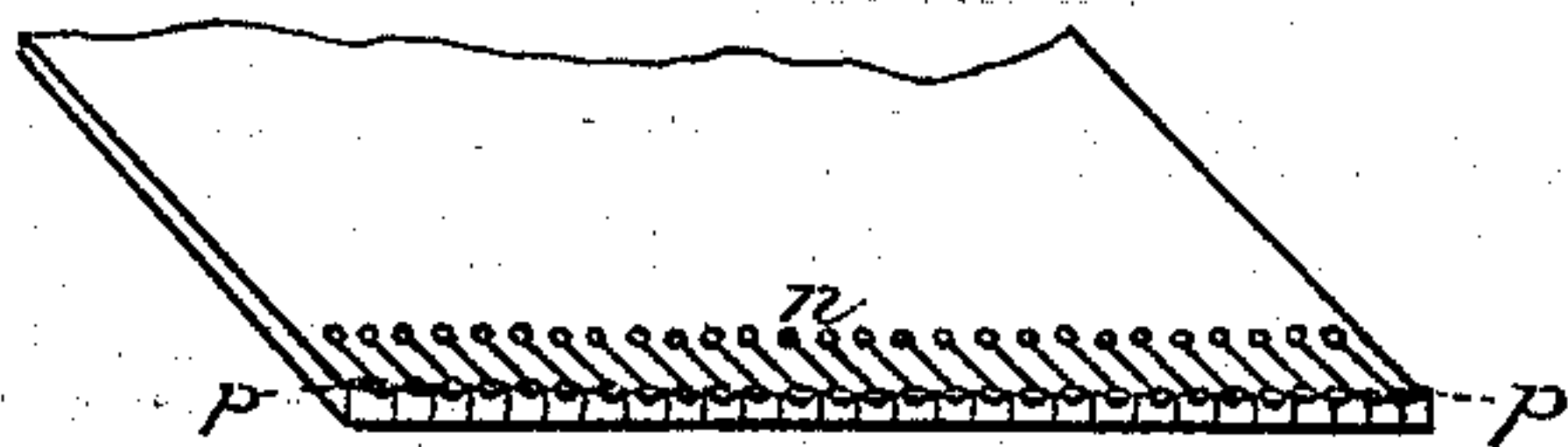


Fig. 2

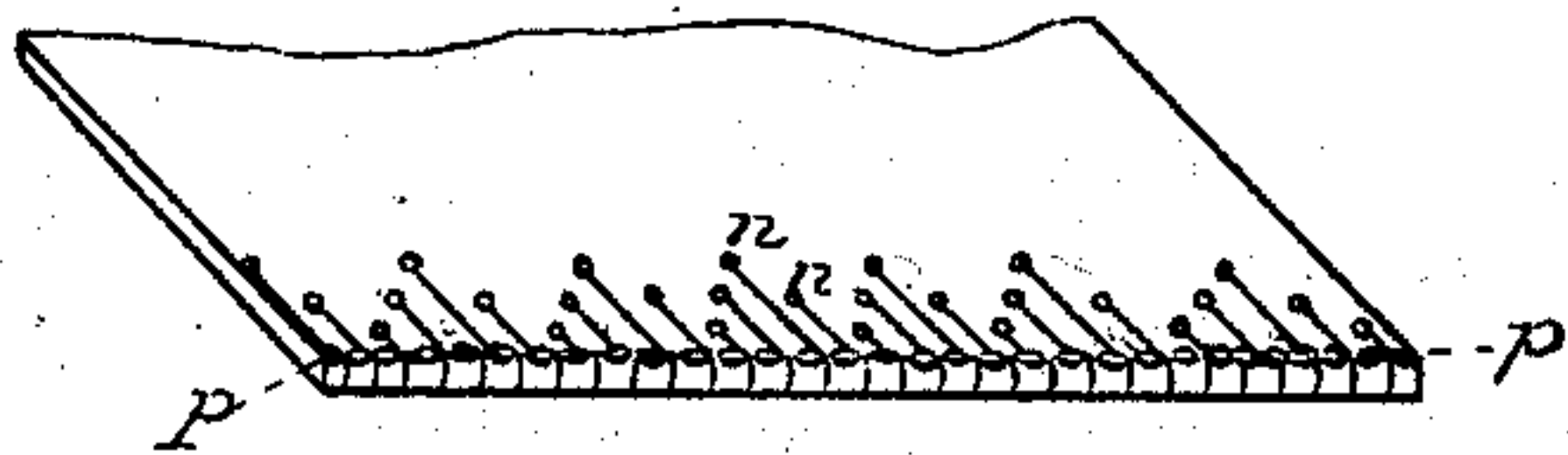
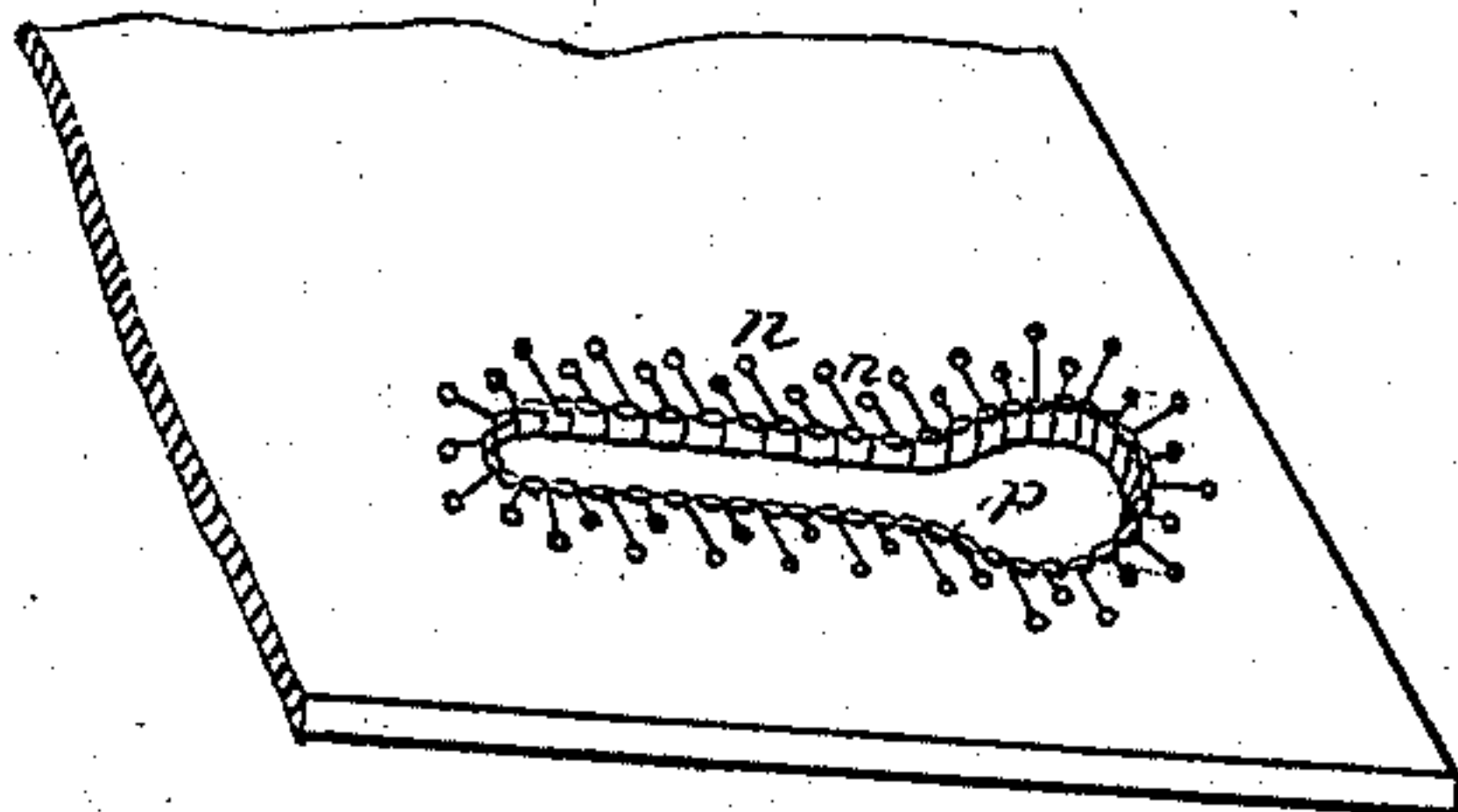


Fig. 3



Witnesses.

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DANIEL W. G. HUMPHREY, OF CHELSEA, ASSIGNOR TO EUGENE HUMPHREY,
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IMPROVEMENT IN EDGE-FINISH FOR BUTTON-HOLES.

Specification forming part of Letters Patent No. 125,393, dated April 9, 1872.

I, DANIEL W. G. HUMPHREY, of Chelsea, in the county of Suffolk and Commonwealth of Massachusetts, have invented certain Improvements in Edge-Finish or Button-Hole Stitching, of which the following is a specification, reference being had to the accompanying drawing.

The object of my invention is to prevent cutting away or separating the edge from the body of the goods by the needle when piercing the goods stitched, and thus to secure a stronger and more durable stitch; and also to admit of using a coarser needle in setting a fine stitch, and thus to avoid in a great degree the liability to spring the needle in stitching.

Figure 1 of the drawing referred to represents the common mode of taking an over-edge stitch in the goods. Figs. 2 and 3 represent two of the modes of inserting the stitch in the goods according to my improvement.

My improvement and invention consist in inserting that portion of an over-edge stitch which is formed when the needle passes through the goods in such a manner, by means of a stitching mechanism so constructed as to vary the points of insertion of the needle in the fabric, that the points of insertion or punctures made by the needle in the goods will form two or more parallel lines, or an undulating or serrated line of holes, *n n*, Figs. 2 and 3, at varying distances from the edge of the goods, without regard to the manner in which the loops or threads which form the stitch are interlaced with each other. The perforations of the nee-

dle, when thus made, will be further apart than when made in a single direct line, and consequently there will be more strength of material left between them to resist the tendency to separate the edge stitched from the body of the fabric, caused by the repeated punctures of the needle and drawing up of the stitches, while the stitch will be drawn up and set on the edge of the goods in one compact line, *p p*, coincident with such edge. A fine "pearl" or finish will be thus secured on the edge, while avoiding the usual liability of destroying the strength and durability of the work by cutting away or separating the goods with the needle, or in drawing up the stitch, which exists when the inside of the stitch through the goods is also formed in one compact direct line.

I do not claim as my invention stitching fabrics with undulating, zigzag, or devious lines of stitches, except in the case of over-edge stitching, when, as already described, the inserted part of the stitch is made in variable lines in the fabric, while that part which is carried over the edge is drawn up and set to conform to the line of such edge.

I claim—

An edge-finish, consisting of a series of over-edge stitches inserted at varying distances from such edge, substantially as shown and described.

DANIEL W. G. HUMPHREY.

Witnesses:

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E. F. HALL.