J. A. HOUSE. Method of Stitching Button-Holes, Eyelets, &c. No. 225,381. Patented Mar. 9, 1880.

Fig 1

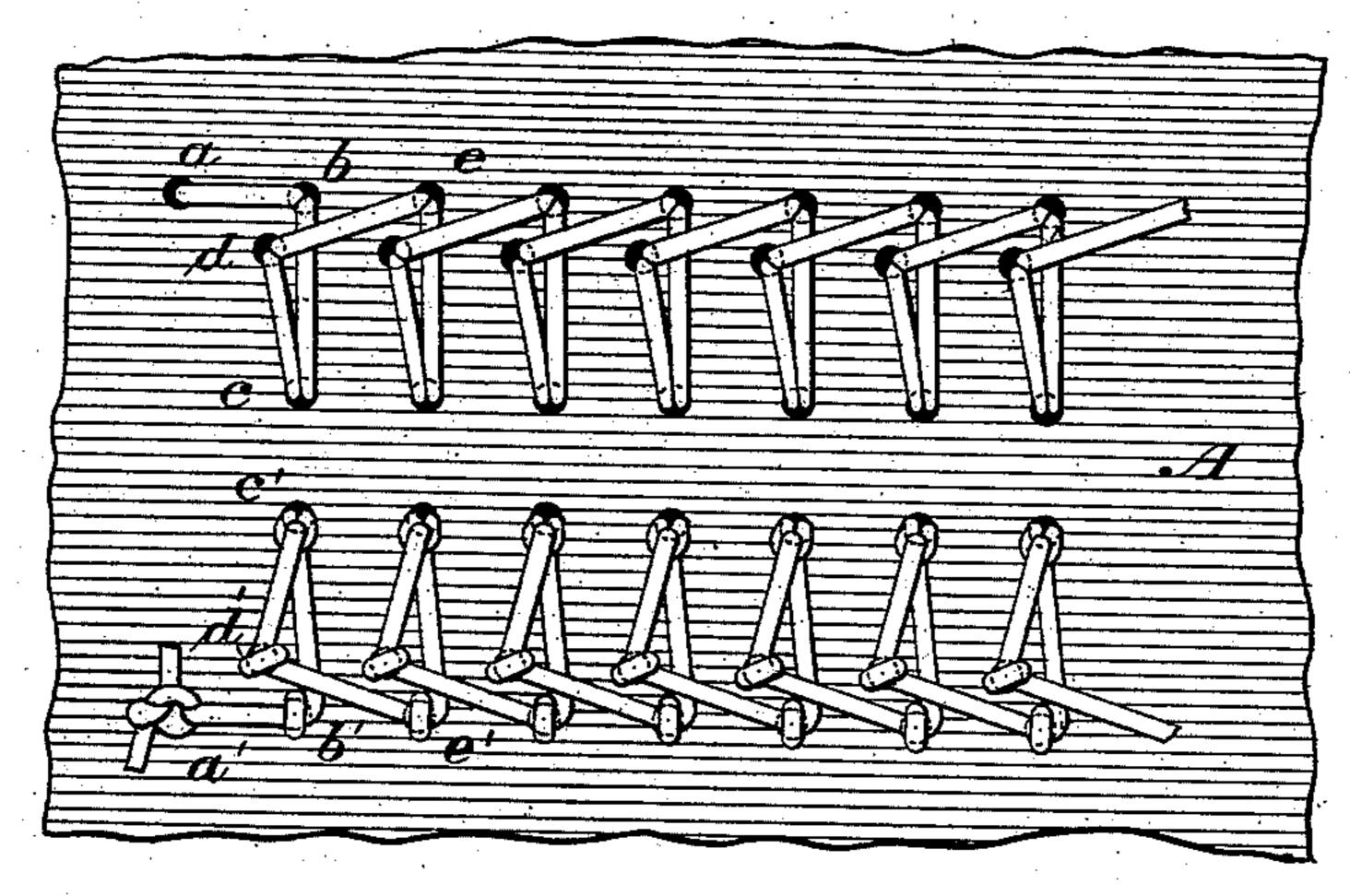
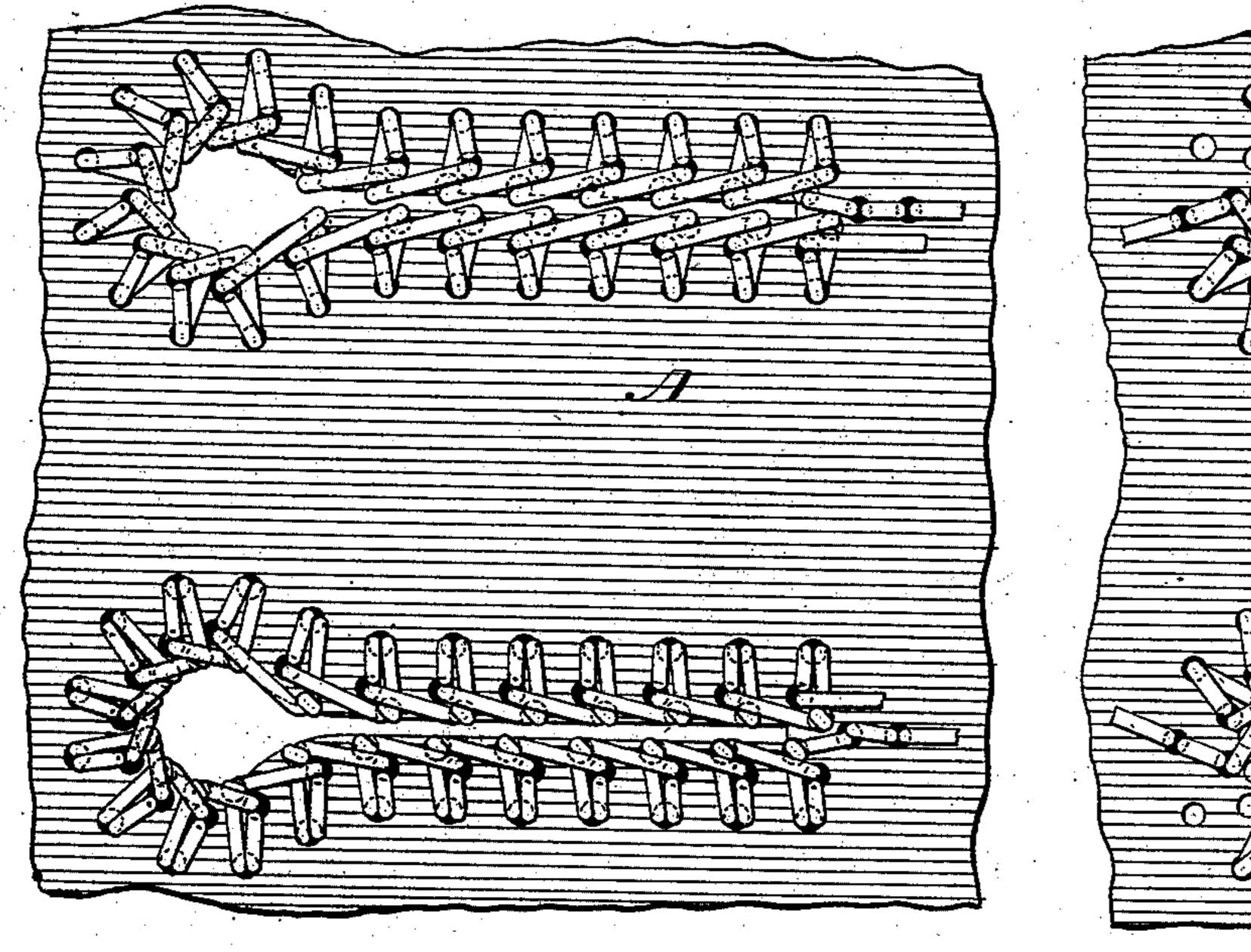


Fig. 2.

Fig. 3.



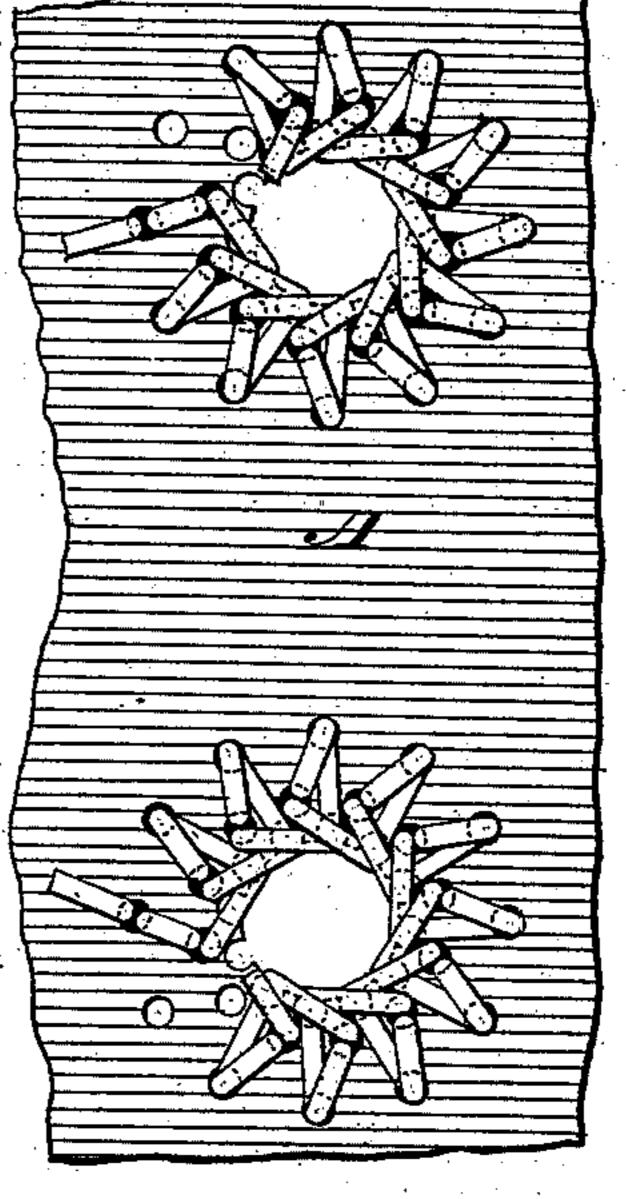
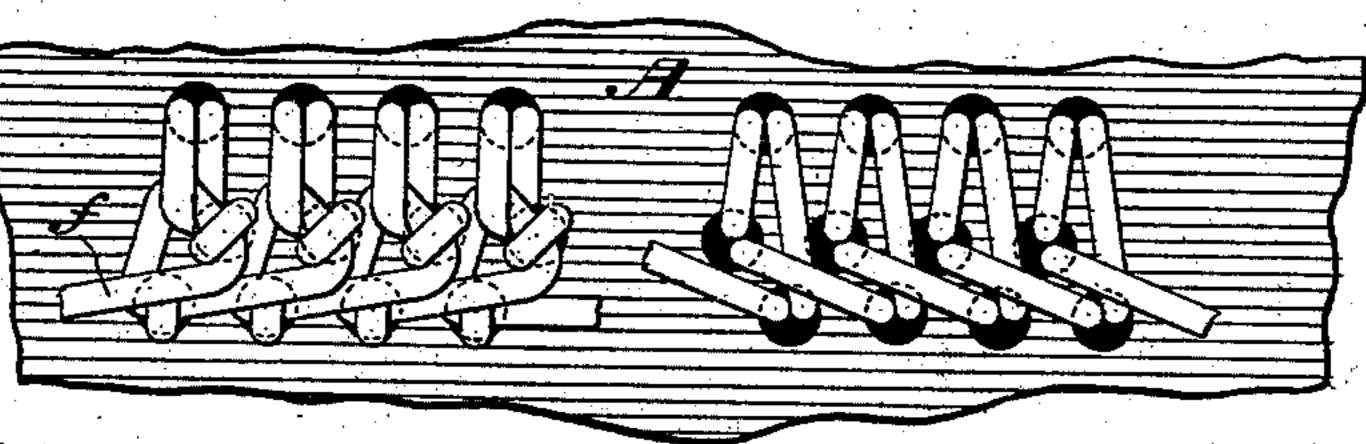


Fig 4.



WITNESSES

Mm a Skinkly

INVENTOR

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United States Patent Office.

JAMES A. HOUSE, OF BRIDGEPORT, CONNECTICUT.

METHOD OF STITCHING BUTTON-HOLES, EYELETS, &c.

SPECIFICATION forming part of Letters Patent No. 225,381, dated March 9, 1880.

Application filed October 4, 1879.

To all whom it may concern:

Be it known that I, James Alford House, of Bridgeport, in the county of Fairfield and State of Connecticut, have invented a certain new and useful Improvement in the Method of Stitching Button-Holes, Eyelets, &c., of which the following is a specification.

My invention relates to a method of working button-holes and eyelets, and of overseaming or edge-stitching analogous thereto, the stitching being of the kind technically termed "pearl-stitching." The pearl-stitch is formed by two threads and simultaneously on the opposite sides of the material.

My improvement in the art or method of stitching or working button - holes, eyelets, margins, edges, seams, &c., will hereinafter fully be described, and then specifically designated by the claim.

I prefer to employ mechanism in all respects essentially similar to that for which Letters Patent of the United States were granted me July 23, 1878, No. 206,239, except that the cams or pattern-wheels are made much larger than therein shown, and are appropriately shaped and adapted to the work to be done. In my said patented machine the cams had sixteen (16) variations, and so provided for that number of changes only during the formation of the stitched figure, while in this instance one hundred and forty-four (144) changes are made by as many cam-surfaces or variations in the patterns.

In the accompanying drawings, Figure 1 is 35 a view, on an enlarged scale, of a piece of goods in which two rows of stitches are formed, one row having been stitched from one side of the material, and the other from the opposite side, after the material was turned to bring up-4° permost the surface before underneath. In this way is afforded a view of both sides of [the work—the equivalent, for the purposes of illustration, of a representation of the top and bottom of one row. Fig. 2 is a similar view | 45 for representing the work on the opposite sides of a button-hole. Fig. 3 is a similar view of an eyelet, and Fig. 4 a similar view, showing the difference in the appearance of opposite sides by varying the tension on the threads, 50 the loop of slack thread being drawn through the material by the tension on the other thread.

The stitching, viewed from either side, re-

sembles quite closely the ordinary hand-worked button-hole stitch, in which, however, there is but one thread, of course. I employ two 55 threads, and work the pearl-stitch on both sides by the interlocking top and bottom threads, as will be clearly apparent from the drawings.

In operation, the thread starting at a, at or 60 near the button-hole edge or margin of the material, is next presented by the needle at b, also near the edge, then goes laterally inward or away from the margin to c, and is next passed toward the edge to d, back of b, 65and in rear of that portion of the thread between b and c, and which portion of the thread is next crossed diagonally by presenting the thread at e near the edge. The double pearlstitch is formed, it will be understood, by the 70 interlooping of the two threads by the co-operation of the needle and bobbin. The needlethread continues to be properly presented by the needle as the work is suitably fed to form other stitches, in the manner described, and 75 as represented by the drawings.

By making the starting or false stitch a the thread is held in position, and by stitching back to d and then to e the long stitch from b to e is bound down or partially locked. The 80 under side or bobbin-thread part of the stitching is from a' to b', next to e', then to d', and to e', and so on.

In Figs. 1, 2, and 3 of the drawings stitching is represented as formed when the tension 85 is about uniform on the two threads, and the work is about the same in appearance on both sides. By increasing the tension on one thread the stitching on the opposite sides may be made to present quite a different appearance— 90 in fact, the stitching by one thread (as that lettered f, Fig. 4) may be straight, or nearly so—that is, be wholly outside or upon the surface of the goods.

For button-holes, eyelets, and fancy stitching of material to be cut or punctured, the stitching is first done and the goods then cut or perforated. For overseaming, such as on the edges of corsets, the seam is stitched at or near the edge, and the goods trimmed afterward. The work is done without turning the material around; but obviously the stitch would be the same were the material turned.

The material A may be of any suitable kind,

and different-colored threads are used in some instances to give an increased ornamental appearance, as well as to suit the differences in color of the opposite sides of faced or lined goods and garments which are designed to be worn either side out.

I claim as of my own invention—

The method described of working buttonholes or fabric-edges with the pearl-stitch, to consisting in passing the needle-thread from b, near the edge, inward to c, then to d, near

the edge and back of b, and thence across to e, while interlocking with the other thread passing from b' to c', d', and e', substantially as described and shown.

In testimony whereof I have hereunto subscribed my name.

JAMES ALFORD HOUSE.

Witnesses:

FREDK. L. HEARSON, CHARLES H. DEMOND.