

No. 870,988.

PATENTED NOV. 12, 1907.

L. S. NEWCOMB.
BUTTONHOLE STRIP.
APPLICATION FILED NOV. 3, 1906.

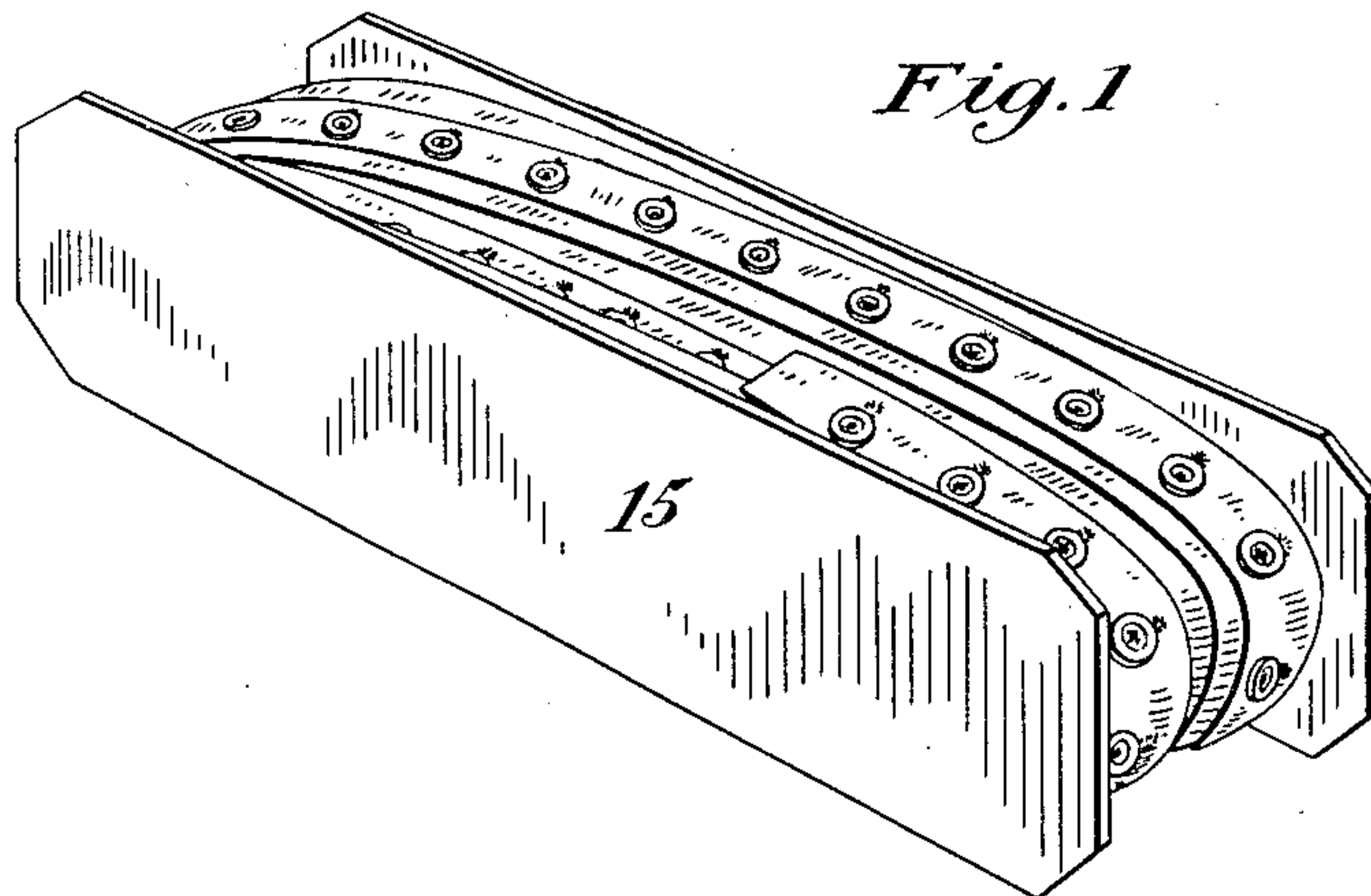


Fig. 2

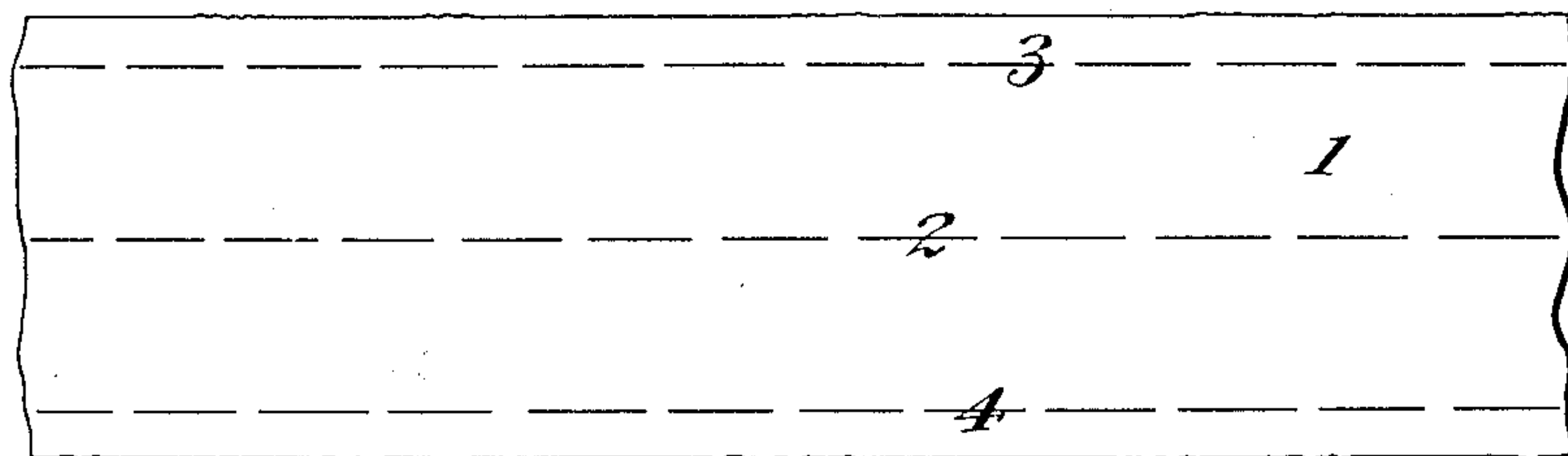


Fig. 3

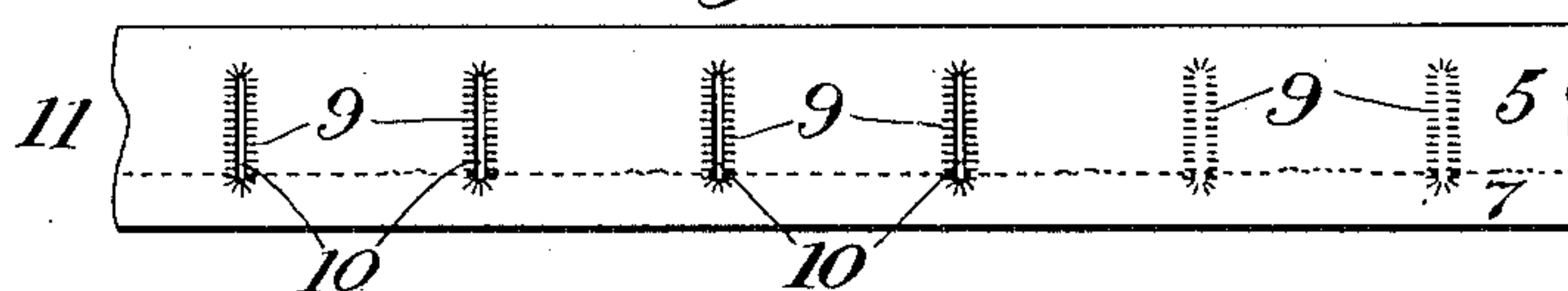


Fig. 5

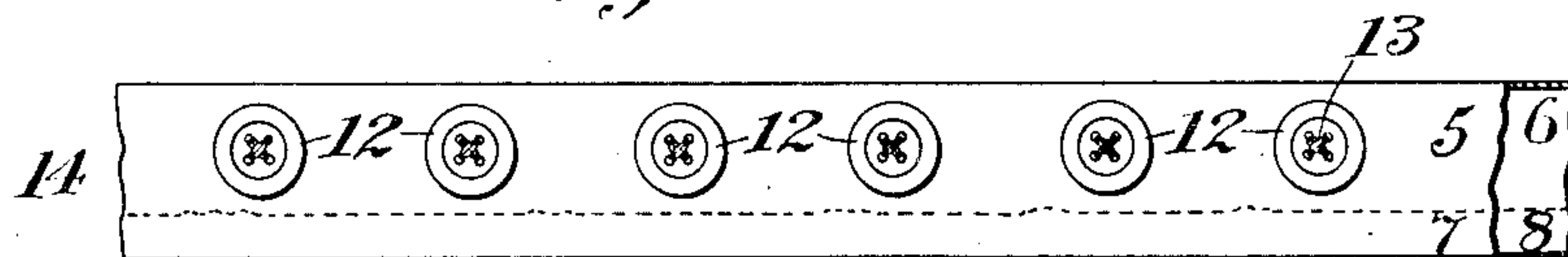
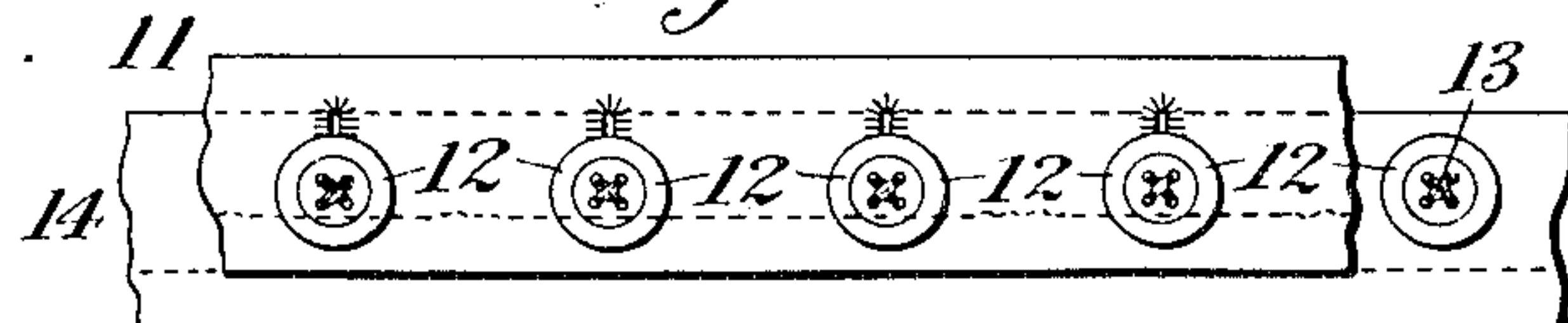


Fig. 6



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UNITED STATES PATENT OFFICE.

LOUISE S. NEWCOMB, OF NEW YORK, N. Y.

BUTTONHOLE-STRIP.

No. 870,988.

Specification of Letters Patent.

Patented Nov. 12, 1907.

Application filed November 3, 1906. Serial No. 341,827.

To all whom it may concern:

Be it known that I, LOUISE S. NEWCOMB, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have

invented certain new and useful Improvements in Ready-Made Buttonhole and Button Strips, of which the following is a specification.

The principal object of this invention is to provide a ready-made button-hole and button strip, and particularly a ready-made continuous button-hole and button strip, consisting of two separate strips buttoned together, one containing button-holes and the other buttons, which button-strip can be permanently connected with and made a part of a garment, as by sewing the outer edges of the button-strip to opposing edges of a garment, with a minimum expenditure of time and effort.

In the drawings accompanying this specification and forming part of the present application I have illustrated a single style of finished combined button-hole and button strip, although it is to be understood that various other styles may be made in accordance with my invention. Figure 1 is a perspective view of a continuous combined button-hole and button strip in the form of a fabric-roll, the finished combined button-hole and button strip being wound upon a suitable reel. Fig. 2 is a plan of a short length of the fabric from which the button-hole strip or the button strip is made, before the folding of the fabric, and shows the fold-lines. Fig. 3 is a similar view of said strip after it is fully folded, and having finished stitched and cut button-holes at one end thereof, and uncut, with loops of button-hole stitching, at the other end. Fig. 4 is a transverse section of the same. Fig. 5 is a view, similar to Fig. 3, of a finished button strip, and Fig. 6 is a similar view of the finished button-hole strip and the finished button strip buttoned together and thus combined to form a finished combined button-hole and button strip.

Similar characters designate like parts in all the figures of the drawing.

1 designates a short length of a strip or band of fabric, which may be of any desired color, material, weight, texture, pattern, etc., to correspond to the material to which it is to be secured when formed into a strip of ready-made button-holes or a ready-made button strip, to either of which uses it is applicable. In this strip 2, 3 and 4 indicate longitudinal fold-lines on which the strip of fabric may be folded to form a plurality of plies of material. When folded as shown in Figs. 3 and 4, the strip consists of two main plies 5 and 6 of the full width of the finished strip, and two narrow plies 7 and 8 turned in at one edge of the finished strip between the free edges of the main plies.

9 designates loops, preferably spaced at regular in-

tervals, of button-hole stitching. On account of the great difference in cost between hand and machine button-hole stitching these loops should in all cases be formed by machine stitching. When so made the cost of labor will be very low, and it will be possible to form the button-hole strip so that it can be sold at such a price as to permit the use of the combined button-hole and button strip to advantage even on the cheapest kinds of apparel. The loops 9 in Fig. 3 are shown as disposed transversely of the strip and in parallelism with one another and also as extending through the inner edges of the narrow plies 7 and 8. When so formed it will be evident that they not only hold together the two main plies 5 and 6, but also permanently connect the narrow plies 7 and 8 to the main plies. In the case of strips in which the button-holes run lengthwise of the strip the button-hole stitching will not of course fasten the narrow plies to the main plies, but it has been found in practice that the folding of these plies is sufficient to retain them in position, and that no additional line of stitching is required for this purpose.

The next operation on the folded strip of fabric shown in Fig. 3 is that which finishes the button-holes and at the same time finishes the button-hole strip. This operation is the cutting or punching the button-hole between the parallel rows of button-hole stitching of each loop. This is done by a simple cutter in a manner which is well understood in the art. The finished button-hole so formed is designated 10, and the finished button-hole strip is designated 11.

It will be noted that the plies of the fabric at one edge of the finished button-hole strip produce an extra thickness at such edge which is not found at the other edge. This is partially compensated for by the loops of button-hole stitching, which are always raised above both sides of the respective main plies 5 and 6 of the fabric. In the construction shown this results in an extra thickness of the finished button-hole strip crosswise thereof from a point beginning near the two-ply edge of the finished strip and extending into the portion which is the thickness of four plies. This thickening resulting from the stitching is approximately equal to the extra thickness at the four-ply edge of the finished button-hole strip 11, and is sufficient to permit the winding of such strip evenly on a reel. This is especially true when the button-hole loops extend crosswise of the strip, as in Fig. 3.

The button-strip is or may be formed from a strip such as 1, as before stated. It is also folded on fold-lines located as are those illustrated at 2, 3 and 4 in Fig. 2. The strip should be machine-folded, as in the case of the fabric forming the button-hole strip, in order to reduce the cost of manufacture. This strip preferably, as shown in Fig. 5, is in every respect identical with the strip shown in Fig. 3, so far as the dimensions

and positions of the plies are concerned, and these plies are indicated by the same reference characters, 5, 6, 7 and 8. This folding of the fabric of the original strip therefore produces at one edge of the button strip an extra thickness not found at the other edge and which is identical with the extra thickening found at one edge of the button-hole strip. This thickening is compensated for in the button strip by the buttons themselves, which, as shown in Figs. 5 and 6, are located preferably centrally of the main plies on the strip and are disposed at the same intervals as the button-holes of the button-hole strip, 11. These buttons are of any suitable kind and size, and are indicated at 12. They are sewed in the usual manner, by a button-sewing machine, to the main plies 5 and 6, to which they are connected by the stitching 13 which permanently connects the buttons and said plies. The thickening resulting from the sewing on of these buttons is always equal to or greater than the extra thickness of the four plies at one edge of the finished strip, and as in the case of the finished button-hole strip permits the winding of the finished button strip evenly on a reel.

After the separate finished button-hole and button strips have been formed, as just described, they are connected by buttoning together, as shown in Fig. 6, in the positions they occupy when sewed to a garment. It will be noticed that when so connected the thickened portion, that is, the four-ply portion, of the finished button-hole strip is at one edge of the combined strip and the thickened or four-ply portion of the button strip is at the opposite edge of the combined strip, while the buttons and the stitched button-holes, which are secured to or pass through the thinner two-ply por-

tions of the button-hole strip and the button strip, are at substantially the center of the finished combined button-hole and button strip. Thus the thickness of the combined strip at the two opposite edges thereof practically balances the thickness at the center of the combined strip when the finished button-hole strip 11 and the finished button strip 14 are buttoned together, and the combined finished button-hole and button strip may therefore be wound evenly on any suitable holder. A holder suitable for the purpose is shown in Fig. 1, the holder there shown being a relatively long and flat reel of cardboard or other cheap material, onto which the finished strip may be wound, as shown, and from which it may be unwound and cut into sections of any desired length, and thus sold either in sections or as a complete fabric-roll of finished combined button-holes and buttons.

What I claim is:

As a new article of manufacture, a continuous ready-made button-hole strip, consisting of a continuous strip of fabric formed from a single piece of material folded longitudinally to form two plies at the free edge of the strip and four plies at the fastening edge thereof, and a continuous series of separated long, narrow loops of button-hole stitching passing through the two plies of the fabric near one edge of the strip and through all four plies of the fabric near the other edge of the strip and located wholly in said strip of fabric.

Signed at New York, in the county of New York, and State of New York, this 30th day of October, A. D. 1906.

LOUISE S. NEWCOMB.

Witnesses:

C. S. CHAMPION,
EDGAR A. FELLOWS.