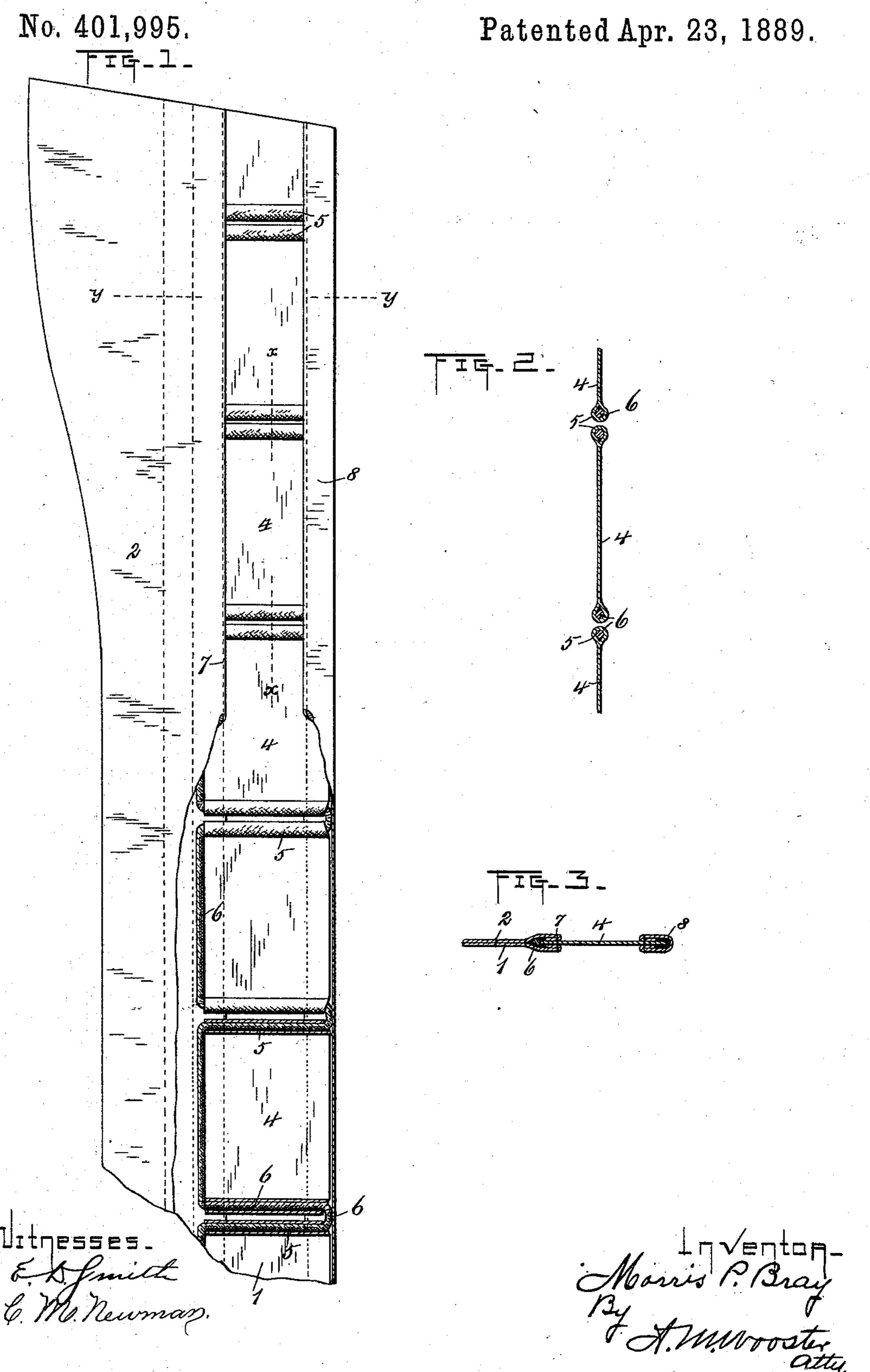
M. P. BRAY.
METHOD OF MAKING BUTTON HOLE STRIPS.



## United States Patent Office.

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## METHOD OF MAKING BUTTON-HOLE STRIPS.

SPECIFICATION forming part of Letters Patent No. 401,995, dated April 23, 1889.

Application filed August 9, 1888. Serial No. 282,334. (No model.)

To all whom it may concern:

Be it known that I, Morris P. Bray, a citizen of the United States, residing at Ansonia, in the county of New Haven and State 5 of Connecticut, have invented certain new and useful Improvements in the Mode of Making Button-Holes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will ena-10 able others skilled in the art to which it ap-

pertains to make and use the same.

My invention has for its object to devise a simple, strong, and inexpensive mode of making button-holes in garments. My novel but-15 ton-holes are adapted to almost any use in connection with clothing, and are especially valuable for corsets, corset-waists, &c., the special requirements being neatness in appearance and strength and a minimum cost 20 of construction. With these ends in view I have devised the simple and novel buttonhole of which the following description, in connection with the accompanying drawings, is a specification, numbers being used to de-25 note the several parts.

Figure 1 is an elevation of a front section of a waist provided with button-holes made in accordance with my novel mode, a portion of the upper ply being removed and the 30 pockets at the edges of the stay-pieces being in section, in order to illustrate more fully the construction of the button-holes; Fig. 2, a section on the line x x; and Fig. 3 is a sec-

tion on the line y y.

1 denotes the inner ply; 2, the outer ply; 4, stay-pieces, having pockets 5 at their edges; 6, a continuous cord which extends through all of the pockets at the edges of the staypieces, whereby the sides of the button-holes 40 are formed; 7, a line of stitching by which | edges of the stay-pieces are stitched between the inner edges of the stay-pieces are secured between the plies, thereby forming the inner edges of the button-holes, and 8 a binding at the outer edges of the stay-pieces, by which they are connected, and which incloses the loop of cord between the stay-pieces, whereby the outer ends of the button-holes are formed.

The pockets at the edges of the stay-pieces,

which are made in continuous strips, may be 50 made in any suitable manner, as by turning over the edges of a strip of textile material and stitching the edges down to form the pockets, or by weaving a wide tape with pockets at its opposite edges, as I have shown 55 in the drawings, this being the least expensive and preferred manner of making them. The strip is then cut crosswise into suitable lengths to form the stay-pieces, as shown in

the drawings.

In making a waist the cord is attached to a suitable needle and passed backward and forward through the pockets at the edges of the stay-pieces, as shown in Fig. 1—that is to say, beginning, for example, where the 65 cord first becomes visible in Fig. 1, it passes down the side of the stay-piece, is then passed from left to right through the pocket. at the lower edge of that stay-piece, then backward from right to left through the 70 upper pocket of the next stay-piece, then down the side and through the bottom pocket of that stay-piece, then through the upper pocket of the next stay-piece, and so on to the end of the series, both ends of the cord 75 being secured in any suitable manner after the stay-pieces have been placed close together. The outer ends of the stay-pieces are then connected by a binding, 8, which is stitched over the outer edges, and also 80 incloses the loops in the cord at the outer edges of the button-holes. This binding may be a tape or a textile strip, with the edges turned under, as shown in the drawings. The opposite edges of the stay-pieces are 85 then passed in between the upper and lower plies, the edges of said plies being preferably turned under, as shown, and then the the plies, as is clearly shown in Figs. 1 and 3. 90

It will be seen that I thus produce buttonholes made without working in the ordinary sense, having woven edges and firmly stitched at their opposite ends, the outer end, where the greatest strain comes, being additionally 95 strengthened by the cord as it passes from one stay-piece to the other. The opposite edges of the button-holes can be made of

any desired thickness by changing the size of the cord. Ordinarily a strong round cord, as shown in the drawings, is used. When a fine light button-hole is required, a smaller and preferably flat cord or a narrow tape

may be used.

From the foregoing it will be apparent that the continuous cord 6 is looped at the front sides of the stay-pieces, so that it passes to around the front ends of the button-holes, or the ends of said holes at the front or outer edge of the button-hole piece, thereby making a stay or bar at the front ends of the button-holes, where they are subjected to the most strain in wear.

Having thus described my invention, I

claim—

1. The method of making button-holes in garments, which consists in forming pockets at the opposite edges of stay-pieces, then passing a cord backward and forward through said pockets, and finally stitching a binding

at one edge of the stay-pieces and stitching the opposite edges to the garment, substan-

tially as described.

2. The method of making button-holes, which consists in forming pockets at the opposite edges or ends of stay-pieces, then passing a continuous cord backward and forward through said pockets and from one 30 stay-piece to another at the front or outer edges thereof, thus looping the cord around the front or outer ends of the button-holes formed by the stay-pieces, then stitching the inner edges of the stay-pieces between the 35 plies of the garment, and stitching a binding over the outer edges of the stay-pieces and over the loops of the cord.

In testimony whereof I affix my signature in

presence of two witnesses.

MORRIS P. BRAY.

Witnesses:

A. N. WOOSTER, BERTHA E. LEE.