

(No Model.)

E. M. PHELPS.

BUTTON HOLE PIECE FOR BOOTS OR SHOES.

No. 413,607.

Patented Oct. 22, 1889.

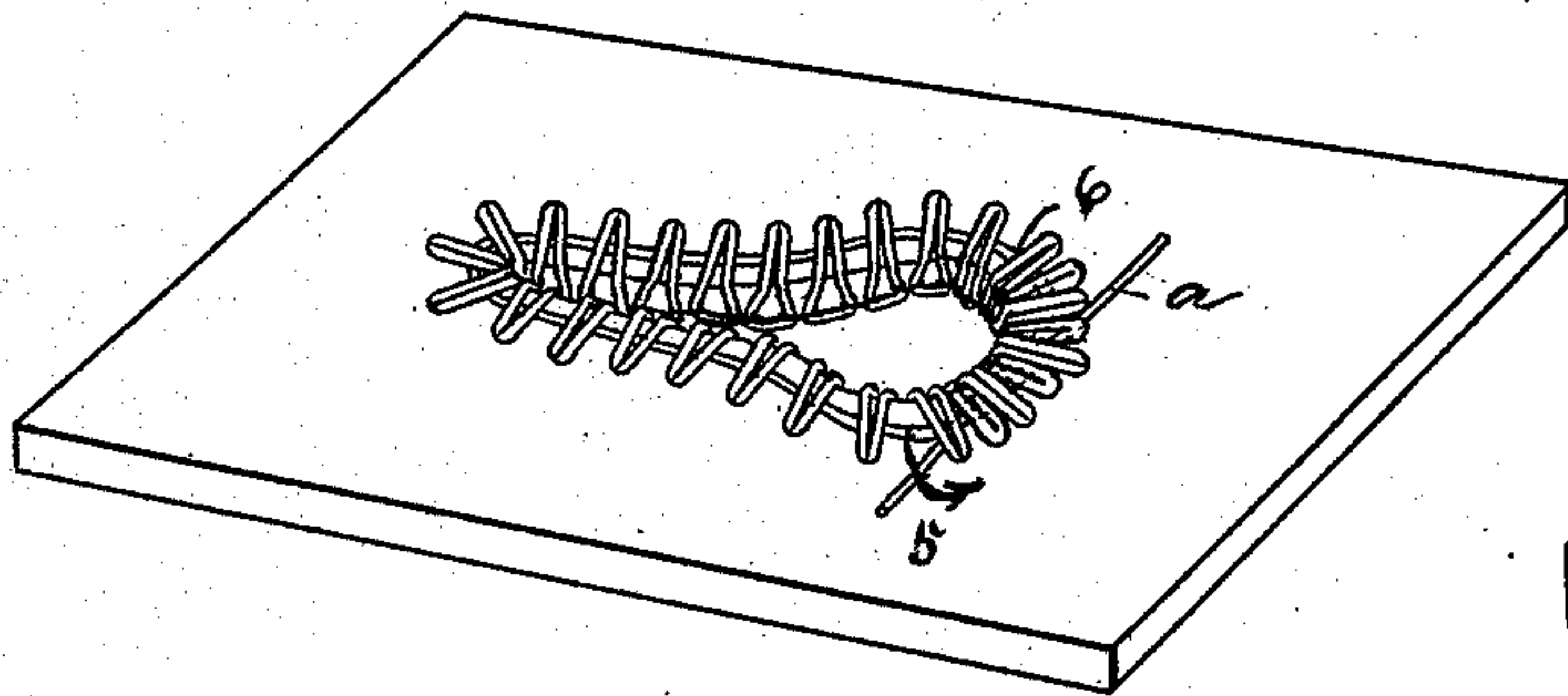


Fig. 1.

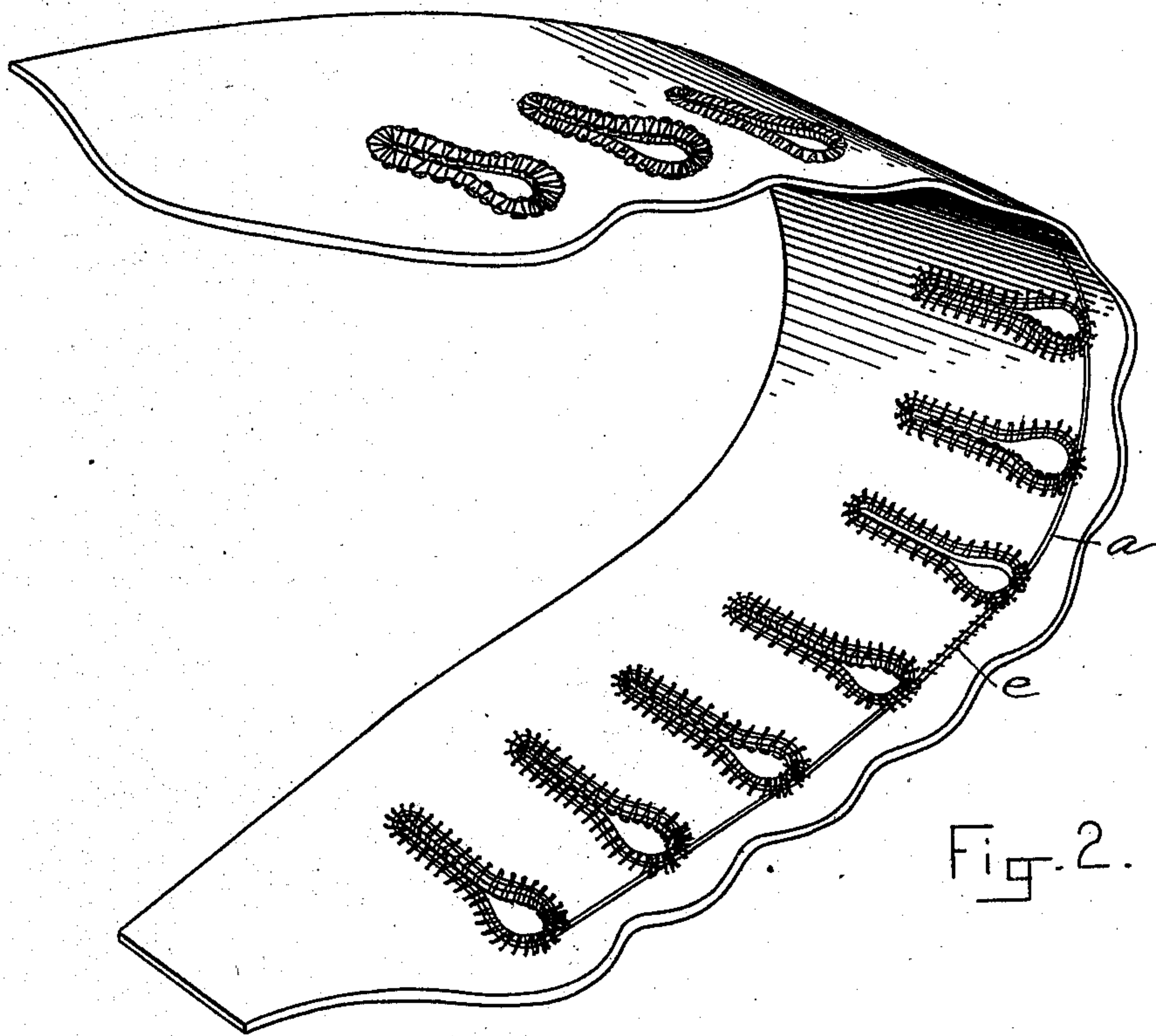


Fig. 2.

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UNITED STATES PATENT OFFICE.

EUGENE M. PHELPS, OF LYNN, MASSACHUSETTS.

BUTTON-HOLE PIECE FOR BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 413,607, dated October 22, 1889.

Application filed May 28, 1888. Serial No. 275,314. (No model.)

To all whom it may concern:

Be it known that I, EUGENE M. PHELPS, of Lynn, in the county of Essex and Commonwealth of Massachusetts, have invented certain Improvements in Button-Holes for Boots, Shoes, and Articles of Wearing-Apparel, of which the following, taken in connection with the accompanying drawings, is a specification.

This improvement relates to button-hole pieces for boots and shoes, and the nature thereof is hereinafter fully described.

Referring to the drawings which accompany and form a part of this specification, Figure 1 is a plan view of a section of material having a button-hole embodying this invention, and is made on an enlarged scale to illustrate detail. Fig. 2 is a perspective view of a button-hole piece commonly used in boots and shoes having a series of button-holes embodying this invention, and is made on a scale somewhat smaller than Fig. 1.

To facilitate the understanding of the utility and object of this invention, it is premised here that in working button-holes it has been customary heretofore to commence at the small end of the button-hole and go round the button-hole to the point of beginning, and thus produce a series of stitches the loops of which go through the material and inclose the edge of the button-hole. These overseaming stitches begin and terminate at the small end of the button-hole, and, although they are generally secured in some manner by bar threads or otherwise to the material, yet it is common for these ends to become loosened and furr up, presenting an unfinished look; and it is the object of this invention in part to provide a button-hole free of all liability to furr up at said inner end, or to show any furring; also, to give strength and durability to the button-hole, particularly at the eye or draw end of the same. It also relates to matters of detail in construction, to be more fully described hereinafter.

To this end I take a piece of material having a button-hole cut therein according to the usual and customary way. The piece represented in Fig. 2 of the accompanying drawings is specifically designed for use in boots and shoes, and is given simply as a representative form. The edges of the material

around each button-hole are inclosed by ordinary thread-stitches, the loops of which pass through the material and over the edge of the button-hole. The stitching is begun at the eye or draw end of the button-hole. Preferably it is begun on one side of the center of the eye, so that the stitching advances first toward the center. It is continued thence round the button-hole to the point of beginning, and thence across the end or arc forming the draw end of the button-hole to a point opposite the starting-point on the other side of the said center, overlapping the ends, and thus forming a double row of stitches along the arc end of the button-hole. Said stitches are preferably formed with continuous thread or threads. Thus the stitching may be formed by commencing at the point indicated by the arrow 5 in Fig. 1 and traversing round the button-hole, in the direction indicated by said arrow, to the point of beginning, and thence across the point 6; or the stitching may be begun at the point 6 and extend round the button-hole to the same point and then retrace to the point indicated by arrow 5. Instead of this, the stitching may be commenced and terminated at any convenient point in the draw end of the button-hole, and the re-enforcing or second line of stitches may be formed along the end of the button-hole with an independent thread, the essential feature of this modification being to re-enforce and strengthen that portion of the arc or end of the button-hole to which strain is applied by the button-shank, and, secondly, to arrange the stitching so that the ends of the thread employed to form the stitches will be in the draw end of the button-hole, so as to be concealed by the button while in use.

The purpose last named is effectually accomplished without regard to the employment of a double or re-enforcing line of stitches, and a button-hole made in such manner—that is, surrounded by a continuous line of stitches commencing and terminating at the draw end of the button-hole—possesses one feature of my invention, and in many classes of work may be sufficiently strong for all purposes; but I prefer in most cases to use the double or re-enforcing line of stitches across the draw end of the button-hole.

In some classes of work it is desirable to

further stay and strengthen the button-hole. To this end the bar-cord *a* is laid around the edge of the button-hole and bound to the material by the said stitching. This bar-cord
 5 is carried around the button-hole, and preferably from the eye or draw end of one to the eye or draw end of the next succeeding button-hole. This distributes the strain of the draw ends, and thus strengthens the whole
 10 piece. It is also stronger when lapped or cross-looped at the draw end of the button-hole, as represented in the drawings. That portion of the stay-cord intermediate the button-holes is tied down to the material by a
 15 line of stitching *e*, which may be worked into or through the material and over the stay-cord by hand or by the ordinary machines for finishing button-hole thrum ends.

In some cases it is desirable to have the
 20 stay-cord confined to the button-hole—that is, to have each button-hole surrounded by a separate piece of stay-cord, which commences and terminates in the stitching of the button-hole.

25 In all cases I prefer to have the ends of the stay-cord overlapped on each other and tied to the material independently, one end by the overworking stitches and the other by the re-enforcing stitches; but when the line of
 30 re-enforcing stitches is not employed both ends of the stay-cord must be bound to the material by the overseaming-threads.

I claim as my invention—

1. A button-hole piece for boots and shoes
 35 in which the ends of the button-hole stitches

are at the eye or draw end of the button-hole, substantially as described.

2. A button-hole piece for boots and shoes in which the ends of the button-hole stitches are at the eye or draw end of the button-hole
 40 and overlap, substantially as described.

3. A button-hole piece for boots and shoes in which the ends of the button-hole stitches are at the eye or draw end of the button-hole and are combined with a stay-cord the ends
 45 of which are also at the eye or draw end of the button-hole and are laid from the said end of one button-hole to that of another, substantially as described.

4. A button-hole piece for boots and shoes
 50 in which the ends of the button-hole stitches are at the eye or draw end of the button-hole and are combined with a stay-cord also overlapping at the eye or draw end of the button-hole, substantially as described. 55

5. A button-hole piece for boots and shoes in which the button-hole stitches are at the eye or draw end of the button-holes and are combined with a stay-cord the ends of which are also at the eye or draw end of the button-
 60 hole and are laid from said draw end of one to that of another and are tied down by a line of stitches, substantially as described.

Signed at Lynn this 10th day of March, 1888.

EUGENE M. PHELPS.

Witnesses:

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 C. B. TUTTLE.